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Via Electronic and US Mail

November 25, 2015

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

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

Dear Mr. Gowers:

Cornerstone Engineering Group, LLC, on behalf of Ford Motor Company (Ford), completed the annual sampling event for groundwater, mine water, and surface water at the above referenced Site. The sampling was performed during the period from August 4 through August 25, 2015, with the measurement of water levels at available monitoring wells completed prior to sampling on August 3, 2015. This letter report presents the results of the annual sampling program.

Sampling Locations

Sampling was performed at groundwater monitoring wells, mine structures, and surface water locations as shown in the tabulations below.

Overburden Groundwater Monitoring Wells:

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

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Bedrock Groundwater Monitoring Wells:

OB-1	RW-1(131-141)	RW-5	RW-10A(51-61)
OB-2	RW-2(279-289)	RW-6A	RW-10A(75-85)
OB-3	RW-2(452-462)	RW-6	RW-10(120-130)
OB-4	RW-3(77-87)	RW-7	RW-10(185-195)
OB-5	RW-3DS(155-160)	RW-8A(47-57)	RW-11(236-241)
OB-6	RW-3DD(175-180)	RW-8(163-173)	RW-11(262-267)
OB-7	RW-4A(62-72)	RW-8(204-214)	RW-12(55-65)
OB-12	RW-4A(113-123)	RW-9A(25-35)	RW-12(130-140)
OB-13	RW-4(333-343)	RW-9A(85-95)	RW-13(71-91)
SC-1	RW-4(393-403)	RW-9(139-149)	RW-13(100-120)
SC-2	RW-5A	RW-9(206-216)	RW-13(150-170)
RW-1(64-74)			

Surface Water Sampling Locations:

SR 3-Seep-2	SW-PMB - 01	SW-MRB-00	SW-PAB-01A
SR 3 Pond	SW-3	PMP Pond	SW-PAB-01
SR 3-Seep-1	SW-MRB-03	Cannon Seep	SW-11
SW-NOB -02	SW-MRB-02	SW-PAB-03	SW-PAB-00
SW-PAB -04	SW-MRB-01	SW-PAB-02	SW-NOB-01
SW-PMB - 02			

Mine Structure Sampling Locations:

PMS-50	PMS-230	CMS-100	CMS-275
PMS-180	CMS-50	CMS-160	

PMS – Peters Mine Air Shaft
CMS – Cannon Mine Shaft

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

Sample Collection and Analyses

Groundwater samples were collected using the low-flow sampling methodology, consistent with previously approved and implemented practices, and field sampling data sheets are attached for reference (Attachment B). As documented during previous

sampling events, several of the bedrock wells exhibit poor recharge rates resulting in very low purge rates and in some cases, inadequate volume for the collection of the full suite of parameters. To maximize sample volume, optimized purge rates established during prior sampling events were used. Also, per approval from USEPA, some locations required the collection of samples over a 24 hour period for collection of sufficient volume, and/or the volume collected was dedicated to a prioritized list of analytes. Details regarding purge rates, sampling times and the locations at which inadequate sample volume prohibited the analysis for the full suite of parameters, and which parameters were analyzed, are provided in Table 3. Field data sheets are in Attachment B.

Groundwater and surface water samples were sent under chain of custody to Test America Laboratories for analysis of Target Analyte List (TAL) inorganic compounds, Target Compound List (TCL) organic compounds (plus tentatively identified compounds (TICs)) and wet chemistry. Samples were not analyzed for pesticides based on prior approval from the USEPA dated April 2, 2007. The samples were analyzed at the laboratory using the following SW-846 methodology:

- Volatile Organics + 15 TICs – USEPA Method 8260B
- Semi-Volatile Organics + 15 TICs – USEPA Method 8270C
- Metals (total and dissolved)– USEPA Methods 6010B/7470A
- PCBs – USEPA Methods 8082
- Alkalinity, total (as CaCO3) – USEPA Method SM20 2320B
- Chloride – USEPA Methods 300/9056
- Sulfate – USEPA Methods 300/9056

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

Laboratory results for the sample delivery groups (SDGs) generated during this sampling event were validated (level 4 validation) by Cadena Inc. Copies of the laboratory and data validation reports are provided in Attachments C and D, respectively.

Additionally, USEPA split samples collected from monitoring well locations OB-19, OB-20A, OB-06, RW-06, RW-6A and SC-01 for analysis of the same parameters referenced above and the USEPA data report is provided in Attachment E, for reference. USEPA field sample ID SC-11 is a blind duplicate of sample ID SC-01, as verified with the USEPA.

Groundwater Elevation Data

As noted previously, a synoptic round of water levels at the groundwater monitoring wells was conducted on August 3, 2015, prior to sampling. Groundwater elevation data from this round of water level measurements are presented on Figures 2 through 6 (Attachment A, Figures). These figures present groundwater contours as follows:

- Figure 2 – Peters Mine Pit area overburden groundwater
- Figure 3 – Peters Mine Pit area shallow bedrock groundwater
- Figure 4 – O'Connor Disposal Area overburden groundwater
- Figure 5 – Cannon Mine Pit area shallow bedrock groundwater
- Figure 6 – Cannon Mine Pit area deep bedrock groundwater

This groundwater mapping is consistent with the findings of the Site-Related Groundwater Remedial Investigation (RI) as outlined in the RI Report dated January 2015.

Analytical Data

Results of the annual sampling event are summarized in the tables identified below. Analytical data are organized by providing summary tables of detected parameters (i.e., only those locations and parameters for which there were detected constituents), followed by tabulation of the complete data sets (i.e., all locations and parameters). A table of historic and current benzene, arsenic and lead concentrations is also provided for consistency with Table 13 from the Site-Related Groundwater RI Report, prepared by Arcadis, dated January 2015 for ease of comparison of historical and current data for these parameters. Last, the data have been organized by Land Area of Concern (Peters Mine Pit PMP), O'Connor Disposal Area (OCDA), Cannon Mine Pit (CMP)), Sally's Pond area, surface water, mine structures, and quality control data. More specifically, the full suite of tables prepared to summarize the data and following this letter report include:

Table 1 – Monitoring Well Construction Details
Table 2 – Site Wide Water Level Measurements – August 3, 2015
Table 3 – Bedrock Well Purge Rates, Volumes and Sample Collection
Tables 4A – 4G – Field Data Summary Tables
Tables 5A – 5F - Peters Mine Pit (PMP) Groundwater Data
Tables 6A - 6E – O'Connor Disposal Area (OCDA) – Groundwater Data
Tables 7A – 7F - Cannon Mine Pit (CMP) – Groundwater Data
Tables 8A – 8E – Sally's Pond Area (SPA) – Groundwater Data
Tables 9A - 9E – PMP and CMP Air/Mine Shafts – Mine Water Data

Tables 10A – 10E – Surface Water Data -
Tables 11A – 11D – Groundwater/Surface Water Quality Control Sample Data
Table 12 - Data Validation Qualifiers
Tables 13A -13B - Summary of Historical and Current Results for Benzene, 1,4-dioxane, Arsenic and Lead.

Results Summary

The results of the annual sampling event are summarized in the sections that follow organized by Land Area of Concern (AOC), Sally's Pond area, surface water, mine structures, and quality control data. As a consequence of changes/updates to the Target Compound List (TCL) of analytes, this annual sampling event is the first comprehensive monitoring event at the Site in which 1,4-dioxane is reported as a volatile organic compound (VOC), reported concentrations of which, are also discussed below.

Peters Mine Pit AOC - Groundwater

- The only volatile organic compounds (VOCs) detected above their respective New Jersey Groundwater Quality Standards (NJGWQS) are benzene, 1,4-dioxane (interim specific standard), and chloroethane (See Table 5A). The detections of benzene and chloroethane were at generally low levels consistent with historical concentrations. As noted above, this is the first comprehensive monitoring event for which 1,4-dioxane was reported as a volatile organic compound, as a consequence of changes/updates to the Target Compound List (TCL) of analytes. Therefore, there is not an historical data set for 1,4-dioxane for comparison. VOC TICs were also reported at various well locations at low levels, mostly "J" qualified (i.e., estimated values), and similar to historical concentrations. To facilitate review of the VOC data, Figures 7 and 8 (see Attachment A) present the benzene and 1,4-dioxane data superimposed on the overburden and shallow bedrock groundwater contour maps.

- Semi-volatile organic compounds (SVOCs) were detected only sporadically, at low levels, and none were detected above NJGWQS. SVOC TICs were also reported at various well locations at low levels, mostly "J" qualified, and similar to historical concentrations (See Table 5B).

- Total PCBs were originally reported in groundwater at two well locations (RW-4A and RW-5A). Given that PCBs have never been detected as part of previous groundwater sampling events, the reported concentrations were suspected errors and the samples were reanalyzed within holding times. The reanalysis did not

detect PCBs, which is consistent with historical data and confirms that the original results are not representative (see Table 5F).

- Analyses were performed for both total (unfiltered) and dissolved (filtered) metals. The only metals detected above their respective NJGWQS are aluminum, arsenic, iron, manganese, nickel, lead, and sodium. The results for these metals are shown in Table 5C and summarized as follows:

    - Aluminum was detected above its NJGWQS in several bedrock and overburden wells and in total and filtered samples, with fewer detections in filtered samples. Aluminum is naturally occurring and an abundant secondary metal in the soil/groundwater system at the Site.
    - Total arsenic was reported above its NJGWQS in only four samples out of 28. For six additional samples, total arsenic was reported above the NJGWQS, but was qualified as also detected in the associated method blank and therefore considered non detect at the reported concentration (see data validation report, Attachment D). Dissolved arsenic was reported above its NJGWQS in only two samples out of 28, and not otherwise qualified as detected in the associated blank.
    - Iron and manganese were reported above their respective NJGWQS in a number of samples, in both the total and dissolved (filtered samples) forms. Iron and manganese are naturally occurring and prevalent in the aquifers at the Site (both overburden and bedrock).
    - Total lead was reported in two samples above its NJGWQS, and none of the dissolved (filtered) lead concentrations were above the NJGWQS. This indicates that lead, where reported, was primarily associated with particulates in the groundwater samples.
    - Sodium was reported above its NJGWQS in seven of the total of 28 samples and is a commonly occurring secondary metal.

- As shown in Table 5C, of the wet chemistry parameters, only chloride and sulfate were reported above their NJGWQS and in only one sample each out of the total of 28 samples. Again, these are naturally occurring and common analytes.

O'Connor Disposal Area AOC - Groundwater

- The only VOC reported above its respective NJGWQS is 1,4-dioxane (interim specific standard) in only one sample (overburden well OB-17) out of a total of seven. The reported concentration was only slightly above the 10 ug/L interim

specific NJGWQS. VOC TICs were not detected (See Table 6A). Figure 9 presents the 1,4-dioxane data superimposed on the overburden groundwater contour map for this area. Consistent with the historic database, benzene was not detected at any of the OCDA well locations as also shown on Figure 9.

- As shown in Table 6A, consistent with the historic database, no SVOCs were detected in any groundwater sample and only two SVOC TICs were detected at low levels.

- As shown in Table 6A, no PCBs were detected in any of the samples.

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

    - Total aluminum was reported above its NJGWQS in two samples out of the total of seven; however, the dissolved aluminum results were all below the NJGWQS for this naturally occurring secondary metal.
    - Total arsenic was reported above its NJGWQS in three of the seven groundwater samples. Dissolved arsenic was not detected above its NJGWQS in any of the groundwater samples.
    - Iron and manganese were reported above their respective NJGWQS in a number of samples, both total and dissolved results. Iron and manganese are naturally occurring and prevalent in the aquifers (both overburden and bedrock) at this Site.

- As shown in Table 6B, of the wet chemistry parameters, there were no detections above the NJGWQS.

Cannon Mine Pit AOC – Groundwater

- VOCs were not detected above their respective NJGWQS in any of the 12 groundwater samples. VOC TICs were reported at various well locations at low levels, mostly "J" qualified, and similar to historical concentrations (See Table 7A). Only trace levels of benzene and 1,4-dioxane were reported sporadically at very low levels that are "J" qualified and below the interim specific NJGWQS as shown on Table 7A and in Figures 10 and 11.

- As shown in Table 7B, SVOCs were reported only sporadically, at low levels, and only bis(2-ethylhexyl)phthalate was detected above its respective NJGWQS, but was also qualified as detected in the associated method blank and therefore considered non detect at the reported concentration (see data validation report, Attachment D). SVOC TICs were also reported at various well locations at low levels, all were "J" qualified, and similar to historical concentrations.

- As shown in Table 7B, no PCBs were detected in any of the groundwater samples.

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

    - Aluminum was reported nominally above the NJGWQS in only one sample of the total of 12, both for the total and filtered samples, for this common, naturally occurring secondary metal.
    - Arsenic was reported nominally above its NJGWQS in groundwater at five of the 12 bedrock well locations in both the total and dissolved forms and the results at several sample locations were also qualified as detected in the associated method blank and therefore considered non-detect at the reported concentration (see data validation report, Attachment D).
    - Iron and manganese were reported above their respective NJGWQS in a number of samples, both total and dissolved results. Iron and manganese are naturally occurring and prevalent in the aquifers (both overburden and bedrock) at the Site.
    - Sodium was reported above the NJGWQS in up to seven of the 12 groundwater samples, both in the total and dissolved forms.

- As shown in Table 7C, of the wet chemistry parameters, only chloride was detected in one sample above the NJGWQS out of the total of 12 samples.

Sally's Pond Area – Groundwater

- VOCs were not detected above their respective NJGWQS in any of the four samples tested. VOC TICs were reported at two well locations at low levels, and the results were both "J" qualified (See Table 8A).

- As shown in Table 8A, the only SVOC detected is phenol at a low, "J" qualified level, and below its NJGWQS. SVOC TICs were reported at three well locations at low levels, and all results were "J" qualified.

- As shown in Table 8A, no PCBs were detected in any of the samples.

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

    - Aluminum was reported slightly above its NJGWQS in three samples of the total of four, both in the total and dissolved forms. Two of the total aluminum results were qualified as also detected in the associated method blank and therefore considered non-detect at the reported concentration (see data validation report, Attachment D).

    - Arsenic was reported slightly above its NJGWQS in groundwater at three well locations in both the total and filtered results. One of the samples was qualified as detected in the associated method blank and therefore considered non-detect at the reported concentration (see data validation report, Attachment D).

    - Iron was reported above its NJGWQS in groundwater at two well locations, one total and one dissolved result. Iron is naturally occurring and prevalent in the aquifers (both overburden and bedrock) at the Site.

    - Sodium was reported above its NJGWQS in groundwater at three well locations, in the total and filtered samples.

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

Overall the analytical results for the collective August 2015 groundwater analytical results are consistent with historical data, and continue to demonstrate only sporadic, low-level, and localized site-related constituents and various naturally occurring inorganics in groundwater at the Site. As noted above, this annual sampling event is the first comprehensive event in which 1,4-dioxane is reported as a VOC constituent. 1,4-dioxane was reported sporadically in groundwater and surface water generally at low levels and primarily in the area surrounding PMP. Since this is the first comprehensive

data set for 1,4-dioxane, additional monitoring will be conducted as necessary to evaluate the data and prior to making any conclusions.

As previously discussed, additional groundwater, mine water, and surface water monitoring, which will include 1,4-dioxane, will be conducted in the PMP Area and will be included in the proposed work plan for installation of additional monitoring wells in the PMP Area.

Mine Water

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

- As shown in Table 9A and Figure 8, the only VOCs reported in mine water above their respective NJGWQS were in the Peters Mine shaft at the 180' and 230' depth intervals, and the compounds detected (above NJGWQS) include benzene, 1,4-dioxane (above the interim specific standard), and chloroethane. The reported benzene and chloroethane concentrations were generally low and consistent with historical concentrations. As previously noted, there is not an historical database for 1,4-dioxane. VOC TICs were also reported within the 180' and 230' depth intervals in the PMP Air shaft at low levels, mostly "J" qualified, which is similar to historical concentrations.

- As shown in Table 9A and on Figure 11, the only VOC reported at trace concentrations below the NJGWQS (interim specific) in the CMP Shaft is 1,4-dioxane at "J" qualified levels of 0.47J and 0.54J at the 100 and 160 ft. depth interval. Benzene was not detected in any of the four samples.

- As shown in Table 9A, no SVOCs were detected above NJGWQS in the PMP Air Shaft or CMP Shaft mine water. SVOC TICs were also sporadically reported in both mine shafts, and at low, "J" qualified levels.

- As shown in Table 9A, no PCBs were detected in any of the PMP Air Shaft or CMP Shaft mine water samples.

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

- Dissolved arsenic was reported nominally above its NJGWQS in one sample from the 275′ depth interval in the CMP Shaft, and was also qualified as detected in the associated method blank and therefore considered non-detect at the reported concentration (see data validation report, Attachment D).

- Cadmium was reported slightly above its NJGWQS in the 275′ depth interval in the CMP Shaft.

- Total iron was reported above its NJGWQS in all the mine water samples, but only one sample (CMP Shaft 50′ depth interval) for dissolved iron was reported above its NJGWQS indicating that, in the majority of samples, iron is predominantly associated with particulates in the samples.

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

- Lead was reported in the total form above its NJGWQS in two mine water samples from the CMP Shaft and two samples from the PMP Air Shaft, and none of the dissolved lead concentrations were above the NJGWQS indicating lead is predominantly associated with particulates in the samples.

- Sodium was reported above its NJGWQS in each of the CMP Shaft mine water samples.

- Zinc was reported above its NJGWQS in the 160′ and 275′ depth intervals in the CMP Shaft mine water samples and at the 180′ and 230′ depth intervals in the PMP Air Shaft, for both the total (four samples) and dissolved (three samples) forms.

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

Surface Water

- As shown in Figure 1, surface water samples were collected from Park Brook, Peters Mine Brook, North Brook and the SR-3 seeps as part of the 2015 annual monitoring event.
- As shown in Table 10A, of the 18 surface water samples collected, the only VOC reported slightly above its New Jersey Surface Water Quality Standard (NJSWQS) was benzene in two samples (specifically, the SR-3 Seeps 1 and 2), and the values were both "J" qualified. Several other VOCs, including a trace of 1,4-dioxane at Park Brook locations SW-PAB-01A and SW-PAB-02, were reported at low, "J" qualified levels, and are constituents for which there is no quantitative NJSWQS. Consistent with historic data, no VOC TICs were detected in any of the samples. The benzene and 1,4-dioxane data for the surface water samples are shown on Figures 7, 9 and 10, respectively.

- As shown in Table 10A, no SVOCs were detected above the NJSWQS. SVOC TICs were sporadically reported in various surface water sampling locations but at low, "J" qualified levels.

- As shown in Table 10A, no PCBs were detected in any of the surface water samples.

- As shown in Table 10B, arsenic was reported in both the total and dissolved forms above its NJSWQS; however, these results were all low level and "J" qualified values and, in some instances, were further qualified as also detected in the associated method blank and therefore considered non-detect at the reported concentration (see data validation report, Attachment D).

- As also shown in Table 10B, thallium was reported above its NJSWQS at low, "J" qualified levels in both the total and dissolved forms, at three locations along the Park Brook.

- As also shown in Table 10B, chloride was reported in one surface water sample above its NJSWQS.

Overall, the collective surface water data do not indicate any significant impacts from the Site.

Quality Control Samples

Field and trip blanks were collected in accordance with the established protocols for quality assurance purposes. Tables 11A – 11D summarize the Groundwater/Surface Water Quality Control Sample Data and Table 12 summarizes the Data Validation Qualifiers. As shown in Tables 11A-11D, the trip blanks did not indicate any cross contamination of VOCs. Only acetone was detected in the trip blanks at low levels and this is a common laboratory contaminant. The field blanks similarly did not indicate cross contamination and supported the adequate decontamination of sampling equipment between sampling locations.

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

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

Sincerely,

CORNERSTONE ENGINEERING GROUP, LLC

Gary J. DiPippo, Professional Engineer.
NJ Lic. # 24GE02646100
Region Vice President

Enclosure

cc: B. Bussa, Ford
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Table 1
Summary Data for Monitoring Wells

Annual Groundwater, Mine Water, and Surface Water Sampling Event
Ringwood Mines/Landfill Superfund Site

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

Table 1
Summary Data for Monitoring Wells

Annual Groundwater, Mine Water, and Surface Water Sampling Event
Ringwood Mines/Landfill Superfund Site

Well ID	Old Well ID	Month/Year of Installation	Elevation Data		Location Data		Monitoring Well and Boring Data							
			Ground Surface (ft msl)	Top of Protective Casing (ft msl)	Northing (ft)	Easting (ft)	Well Type	Diameter (inches)	Well Material	Open Hole or Screened Interval (ft bgs)	Total Depth (ft bgs)	Bottom Elevation (ft msl)	Depth to Bedrock (ft bgs)	Bedrock Elevation (ft msl)
OB-27		Oct-09	529.60	532.38	842,638	555,994	UC	2	PVC	24.5 to 39.5	39.5	490.1	NE	---
OB-28		Mar-10	483.60	485.91	841,254	556,420	UC	2	PVC	3 to 18	18	465.6	NE	---
OB-29		Dec-11	350.30	349.88	839,517	558,588	UC	2	PVC	18 to 35	35	315.3	NE	---
OB-30A		Apr-12	531.00	533.30	842,334	555,867	UC	2	PVC	8 to 18	18	513	NE	---
OB-30B		Apr-12	531.00	533.50	842,344	555,863	UC	2	PVC	21 to 36	36	495	NE	---
OB-30C		Apr-12	530.60	533.01	842,342	555,871	UC	2	PVC	40 to 50	50	480.6	NE	---
SC-1‡	DB-1	Mar-06	531.03	532.53	842,621	555,819	SB	2	PVC	64.4 to70.9	70.9	435.03	144	387.03
SC-2	MW-1/CMI-S5	Dec-07	561.70	564.13	837,560	554,029	SB	2	PVC	47 to 67	67	494.7	NE	---
RW-1(64-74)	RW-1	Apr-10	548.20	549.38	839,093	553,653	BR	1	PVC/ZIST	64 to 74	74	474	4	544
RW-1(131-141)	RW-1	Apr-10	548.20	549.42	839,093	553,653	BR	1	PVC/ZIST	131 to 141	141	407	4	544
RW-2(279-289)	RW-2	Apr-10	512.60	512.23	837,788	554,659	BR	1	PVC/ZIST	279 to 289	289	224	6	507
RW-2(452-462)	RW-2	Apr-10	512.60	512.19	837,788	554,659	BR	1	PVC/ZIST	452 to 462	462	51	6	507
RW-3(77-87)		Apr-10	527.70	528.15	842,511	556,138	BR	1	PVC/ZIST	77 to 87	87	441	58	470
RW-3DS(155-160)		Mar-10	527.90	529.51	842,509	556,123	BR	1	PVC/ZIST	155 to 160	160	368	62	466
RW-3DD(175-180)		Mar-10	527.90	529.41	842,509	556,123	BR	1	PVC/ZIST	175 to 180	181	347	62	466
RW-4A(62-72)		Apr-10	539.00	541.41	842,669	556,738	BR	1	PVC/ZIST	62 to 72	72	467	30	509
RW-4A(113-123)		Apr-10	539.00	541.60	842,669	556,738	BR	1	PVC/ZIST	113 to 123	123	416	30	509
RW-4(333-343)	RW-4	Apr-10	539.20	540.01	842,661	556,725	BR	1	PVC/ZIST	333 to 343	343	196	54	485
RW-4(393-403)	RW-4	Apr-10	539.20	539.87	842,661	556,725	BR	1	PVC/ZIST	393 to 403	403	136	54	485
RW-5A		Sep-07	530.70	533.26	842,737	555,957	BR	2	PVC	54 to 74	75	456	30	500.7
RW-5	MW-19 BR	Mar-06	530.30	533.48	842,748	555,928	BR	2	PVC	99 to 119	119	411.3	28	502.3
RW-6A		Sep-07	531.81	534.32	842,586	555,835	BR	2	PVC	58 to 78	78.6	453	38	493.81
RW-6	MW-20 BR	Mar-06	531.90	533.96	842,583	555,819	BR	2	PVC	99 to 119	120	411.9	36	495.9
RW-7	MW-21 BR	Mar-06	537.60	539.43	842,793	555,573	BR	2	PVC	99 to 119	120	417.6	22	515.6
RW-8A(47-57)		Apr-10	568.10	569.55	837,499	553,942	BR	1	PVC/ZIST	47 to 57	57	511	3	565.1
RW-8(163-173)	RW-8	Apr-10	569.00	570.01	837,485	553,944	BR	1	PVC/ZIST	163 to 173	173	396	3	566.0
RW-8(204-214)	RW-8	Apr-10	569.00	570.01	837,485	553,944	BR	1	PVC/ZIST	204 to 214	214	355	3	566.0
RW-9A(25-35)		Apr-10	560.10	561.82	837,543	554,173	BR	1	PVC/ZIST	25 to 35	35	525	8	552.1
RW-9A(85-95)		Apr-10	560.10	561.73	837,543	554,173	BR	1	PVC/ZIST	85 to 95	95	465	8	552.1
RW-9(139-149)	RW-9	Apr-10	560.40	561.81	837,532	554,181	BR	1	PVC/ZIST	139 to 149	149	411	12	548.4
RW-9(206-216)	RW-9	Apr-10	560.40	561.91	837,532	554,181	BR	1	PVC/ZIST	206 to 216	216	344	12	548.4
RW-10A(51-61)		Apr-10	537.90	539.43	837,266	554,285	BR	1	PVC/ZIST	51 to 61	61	477	4	533.9
RW-10A(75-85)		Apr-10	537.90	539.45	837,266	554,285	BR	1	PVC/ZIST	75 to 85	85	453	4	533.9
RW-10(120-130)	RW-10	Apr-10	539.50	540.78	837,261	554,276	BR	1	PVC/ZIST	120 to 130	130	410	3	536.5

Table 1
Summary Data for Monitoring Wells

Annual Groundwater, Mine Water, and Surface Water Sampling Event
Ringwood Mines/Landfill Superfund Site

Well ID	Old Well ID	Month/Year of Installation	Elevation Data		Location Data		Monitoring Well and Boring Data							
			Ground Surface (ft msl)	Top of Protective Casing (ft msl)	Northing (ft)	Easting (ft)	Well Type	Diameter (inches)	Well Material	Open Hole or Screened Interval (ft bgs)	Total Depth (ft bgs)	Bottom Elevation (ft msl)	Depth to Bedrock (ft bgs)	Bedrock Elevation (ft msl)
RW-10(185-195)	RW-10	Apr-10	539.50	540.76	837,261	554,276	BR	1	PVC/ZIST	185 to 195	195	345	3	536.5
RW-11(236-241)		Mar-10	527.80	529.81	842,825	556,002	BR	1	PVC/ZIST	236 to 241	241	286.8	9	518.8
RW-11(262-267)		Mar-10	527.80	529.80	842,825	556,002	BR	1	PVC/ZIST	262 to 267	267	260.8	9	518.8
RW-12(55-65)		Aug-14	350.50	350.30	839,517	558,588	BR	1	PVC/ZIST	55 to 65	65	286	38	312.5
RW-12(130-140)		Aug-14	350.50	350.26	839,517	558,588	BR	1	PVC/ZIST	130 to 140	140	211	38	312.5
RW-13(71-91)		Aug-14	530.00	532.45	842,359	555,872	BR	2	PVC	71 to 91	91.35	439	58	472.0
RW-13(100-120)		Aug-14	530.60	533.23	842,356	555,862	BR	1	PVC/ZIST	100 to 120	120	411	58	472.6
RW-13(150-170)		Aug-14	530.60	533.30	842,356	555,862	BR	1	PVC/ZIST	150 to 170	170	360.6	58	472.6

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

TABLE 2
ANNUAL SAMPLING EVENT WATER LEVELS
AUGUST 3, 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

WELL ID	DATE	TIME	DTW	DTB
OB-1	8/4/2015	14:00	7.82	33.1
OB-2	8/4/2015	11:05	20.44	42.35
OB-3	8/4/2015	11:45	7.29	23.5
OB-4	8/4/2015	12:30	19.4	60.45
OB-5	8/4/2015	11:20	4.14	63.8
OB-6	8/4/2015	13:55	10.81	34.2
OB-7	8/4/2015	11:10	5.32	43.1
OB-8	8/4/2015	No Longer Exists		
OB-10	8/4/2015	14:35	6.89	21.1
OB-11R	8/4/2015	9:41	17.74	38.55
OB-12	8/4/2015	11:00	13.6	39.75
OB-13	8/4/2015	11:35	19.79	32.15
OB-14A	8/4/2015	10:58	11	16.3
OB-14B	8/4/2015	10:30	13.5	37.35
OB-15B	8/4/2015	9:46	4.35	31.2
OB-16	8/4/2015	10:53	6.5	17.7
OB-17	8/4/2015	10:35	6.29	16.7
OB-18	8/4/2015	10:41	7.39	21.75
OB-19	8/4/2015	10:00	12.92	21.3
OB-20A	8/4/2015	9:14	16.06	20.6
OB-20B	8/4/2015	9:15	15.52	36
OB-21	8/4/2015	9:36	9.07	20.2
OB-22	8/4/2015	10:28	20.73	21.85
OB-23	8/4/2015	11:40	DRY	21.44
OB-24	8/4/2015	10:34	5.69	18.05
OB-25	8/4/2015	11:08	11.3	18.5
OB-26	8/4/2015	No Longer Exists		
OB-27	8/4/2015	9:35	15.05	40.15
OB-28	8/4/2015	10:46	2.21	18.2
OB-39	8/4/2015	14:49	5.79	34.66
SC-1	8/4/2015	9:28	15.28	109
SC-2	8/4/2015	11:07	59.8	69.72
RW-1D (313-141)	8/4/2015	13:50	11.58	141
RW-1S (64-74)	8/4/2015	13:55	11.85	74
RW-2D (452-462)	8/4/2015	11:43	12.83	462
RW-2D (279-289)	8/4/2015	11:39	12.63	289
RW-3 (77-87)	8/4/2015	9:30	14.88	87
RW-3DS (155-165)	8/4/2015	9:24	16.52	165
RW-3DD (175-185)	8/4/2015	9:25	17.02	185
OB-30A	8/4/2015	9:22	20.28	20.65
OB-30B	8/4/2015	9:18	20.49	38.5
OB-30C	8/4/2015	9:01	19.8	52.05
RW-4D (193-403)	8/4/2015	9:36	31.09	403
RW-4S (333-3430	8/4/2015	9:34	31.23	343
RW-4A D (113-123)	8/4/2015	9:39	32.55	123
RW-4A S (62-72)	8/4/2015	9:37	18.12	72
RW-5	8/4/2015	10:02	13.16	>100
RW-5A	8/4/2015	9:55	12.97	75.6
RW-6	8/4/2015	9:16	13.72	122.1
RW-6A	8/4/2015	9:19	14.32	80.25
RW-7	8/4/2015	9:41	5.69	>100
RW-8A (47-57)	8/4/2015	15:45	DRY	57

TABLE 2
ANNUAL SAMPLING EVENT WATER LEVELS
AUGUST 3, 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

WELL ID	DATE	TIME	DTW	DTB
RW-8D (204-214)	8/4/2015	15:46	60.89	214
RW-8S (163-173)	8/4/2015	15:47	61.49	173
RW-9D (206-216)	8/4/2015	15:50	54.71	216
RW-9S (139-149)	8/4/2015	15:52	58.88	149
RW-9A D (85-95)	8/4/2015	15:55	55.37	95
RW-9A S (25-35)	8/4/2015	16:00	22.1	35
RW-10 D (185-195)	8/4/2015	15:45	41.35	195
RW-10 S (120-130)	8/4/2015	15:47	41	130
RW-10A D (75-85)	8/4/2015	15:40	39.33	85
RW-10A S (51-61)	8/4/2015	15:35	38.71	61
RW-11S (236-241)	8/4/2015	9:54	9.63	241
RW-11D (262-267)	8/4/2015	9:53	10.17	267
RW-12 (55-56)	8/4/2015	14:41	6.15	65
RW-12 (130-140)	8/4/2015	14:42	6.08	140
RW-13 (71-91)	8/4/2015	9:45	14.15	91
RW-13 (100-120)	8/4/2015	16:50	7.21	120
RW-13 (150-170)	8/4/2015	16:55	2.24	170
CMS - 50/100/160/175	8/4/2015	13:35	9.79	NA
PMS - 50/180/230	8/4/2015	10:00	8.9	NA

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

Table 3
Summary of Well Performance and Sample Collection
August 2015

Ringwood Mines/Landfill Superfund Site

Well ID	Well Diameter	Date Sampled	Purge Rate (discharge seconds/ recharge seconds)	Volume Purged (ml) Prior to Sample Collection	Analytical Samples Collected	Purge Time (minutes)	Purge Rate (milliliters per minute)
Peters Mine Pit Area							
RW-3(77-87)	1" ZIST	8/6/2015	10 sec/60 sec	1600	Full Suite	20	75
RW-3DS (155-160)	1" ZIST	8/25/2015	10 sec/60 sec	800	Full Suite	11	100
RW-3DD (175-180)	1" ZIST	8/10/2015	10 sec/60 sec	800	Full Suite	15	100
RW-4A(62-72)	1" ZIST	8/10/2015	10 sec/60 sec	1600	Full Suite	34	70
RW-4A(113-123)	1" ZIST	8/24/2015	10 sec/60 sec	1600	Full Suite	24	60
RW-4(333-343)	1" ZIST	8/24/2015	10 sec/60 sec	1600	Full Suite	18	100
RW-4(393-403)	1" ZIST	8/10/2015	15 sec/45 sec	1600	Full Suite	22	75
RW-5A (54-74)	2"	8/24/2015	5sec/10 sec	15000**	Full Suite	55	280
RW-5 (99-119)	2"	8/5/2015	5sec/10 sec	5600**	Full Suite	45	125
RW-6A(58-78)	2"	8/4/2015	5sec/10 sec	6000**	Full Suite	30	200
RW-6(99-119)	2"	8/6/2015	5sec/10 sec	7000**	Full Suite	35	200
RW-7 (99-119)	2"	8/6/2015	5sec/10 sec	7000**	Full Suite	35	200
RW-11S(236-241)	1" ZIST	8/12/2015	10 sec/60 sec	800	Full Suite	13	150
RW-11D(262-267)	1" ZIST	08/25/2015 & 08/26/2015	10 sec/60 sec	800	Full suite	N/A^	100
RW-13(71-91)	6"	8/24/2015	5sec/10 sec	8000**	Full Suite	40	200
RW-13(100-120)	ZIST	08/12/2015 & 08/13/2015	10sec/90 sec	3200	Full Suite	NA	50
RW-13(150-170)	ZIST	8/12/2015	10 sec/60 sec	3200	Full Suite	40	75
OB-11R	2"	8/6/2015	5sec/10 sec	15000	Full Suite	50	300
OB-15B	2"	8/24/2015	5sec/10 sec	8800**	Full Suite	40	220
OB-19	2"	8/5/2015	5sec/10 sec	7800**	Full Suite	35	225
OB-20A	2"	8/5/2015	5sec/10 sec	10500**	Full Suite	35	350
OB-20B	2"	8/5/2015	5sec/10 sec	6750**	Full Suite	30	225
OB-21	2"	8/6/2015	5sec/10 sec	17600**	Full Suite	55	320
OB-25	2"	8/13/2015	5sec/10 sec	3750**	Full Suite	30	125
OB-27	2"	8/6/2015	5sec/10 sec	15000**	Full Suite	50	300
OB-28	2"	8/13/2105	5sec/10 sec	6000**	Full Suite	30	300
PMS-50	2"	8/12/2015	5sec/10 sec	8400**	Full Suite	35	240
PMS-180	2"	8/5/2015	5sec/10 sec	18000**	Full Suite	45	400
PMS-230	2"	8/5/2015	5sec/10 sec	16200**	Full Suite	45	360
SC-1	2"	8/4/2015	5sec/10 sec	6000**	Full Suite	30	200

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

ZIST - Zone Isolation System Technology monitoring well

** - Indicates monitoring well was purged with a bladder pump utilizing low-flow sample procedures

Table 3
Summary of Well Performance and Sample Collection
August 2015

Ringwood Mines/Landfill Superfund Site

Well ID	Well Diameter	Date Sampled	Purge Rate (discharge seconds/ recharge seconds)	Volume Purged (ml) Prior to Sample Collection	Analytical Samples Collected	Purge Time (minutes)	Purge Rate (milliliters per minute)
Cannon Mine Pit Area							
RW-1(64-74)	1" ZIST	NS	Well Dry	NS	None	NS	NS
RW-1(131-141)	1" ZIST	NS	Well Dry	NS	None	NS	NS
RW-2(279-289)	1" ZIST	8/21/2015	10 sec/60 sec	NS	Full Suite	56	100
RW-2(452-462)	1" ZIST	8/25/2013	20 sec/45 sec	1600	VOCs, SVOCs, Metals, Cyanide, Chloride, Sulfate	32	50
RW-8(163-173)	1" ZIST	8/18/2015	15 sec/60 sec	1600	Full Suite	20	150
RW-8(204-214)	1" ZIST	8/19/15 & 8/20/15	15 sec/60 sec	1450	Full Suite	N/A^	50
RW-8A(47-57)	1" ZIST	8/18/2015	Well Dry	Well Dry	None	N/A^	-
RW-9(139-149)	1" ZIST	8/19/2015 & 8/20/2015	Well dry	Well Dry	None	N/A^	-
RW-9(206-216)	1" ZIST	8/20/2015 & 8/21/2015	15 sec/60 sec	1450	VOCs, SVOVs, TAL Metals (Total), Cyanide	N/A^	50
RW-9A(25-35)	1" ZIST	8/20/2015	Well Dry	Well Dry	None	N/A^	-
RW-9A(85-95)	1" ZIST	8/20/2015 & 8/21/2015	10 sec/60 sec	650 ml on 8/20/2015	Full Suite	N/A^	50
RW-10(120-130)	1" ZIST	8/18/2015 & 8/19/2015	10 sec/60 sec	1400ml on 8/18/2015	Full Suite	19	90
RW-10(185-195)	1" ZIST	8/18/2015	10 sec/60 sec	1600	Full Suite	12	100
RW-10A(51-61)	1" ZIST	08/18/2015 & 08/19/2015	10 sec/60 sec	1600 on 08/18/2015	Full Suite	37	70
RW-10A(75-85)	1" ZIST	8/18/2015	15 sec/30 sec	1600	Full Suite	29	80
OB-2	6"	8/12/2015	5sec/10 sec	6000**	Full Suite	30	200
OB-3	6"	8/10/2015	5sec/10 sec	6000**	Full Suite	30	200
OB-4	6"	8/10/2015	5sec/10 sec	10800**	Full Suite	45	240
OB-5	6"	8/10/2015	5sec/10 sec	15600**	Full Suite	65	240
OB-6	6"	8/6/2015	5sec/10 sec	13500**	Full Suite	45	300
OB-7	4"	8/24/2015	5sec/10 sec	16500**	Full Suite	55	300
OB-12	2"	8/10/2015	5sec/10 sec	7000**	Full Suite	35	200
OB-13	6"	8/10/2015	5sec/10 sec	6000**	Full Suite	30	200
OB-30A	2"	8/18/2015	Well Dry	NS	None	NS	NS
OB-30B	2"	8/6/2015	5sec/10 sec	12800**	Full Suite	40	320
OB-30C	2"	8/6/2015	5sec/10 sec	6000**	Full Suite	30	200
CMS-50	2"	8/14/2015	5sec/10 sec	6000**	Full Suite	30	200
CMS-100	2"	8/17/2015	5sec/10 sec	9000**	Full Suite	45	200
CMS-160	2"	8/17/2015	5sec/10 sec	17500**	Full Suite	50	350
CMS-275	2"	8/18/2015	5sec/10 sec	24000**	Full Suite	75	320
SC-2	2"	8/12/2015	5sec/10 sec	6000**	Full Suite	30	200

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

ZIST - Zone Isolation System Technology monitoring well

** - Indicates monitoring well was purged with a bladder pump utilizing low-flow sample procedures

NS - Not sampled

Table 3
Summary of Well Performance and Sample Collection
August 2015

Ringwood Mines/Landfill Superfund Site

Well ID	Well Diameter	Date Sampled	Purge Rate (discharge seconds/ recharge seconds)	Volume Purged (ml) Prior to Sample Collection	Analytical Samples Collected	Purge Time (minutes)	Purge Rate (milliliters per minute)
O'Connor Disposal Area							
OB-14A	2"	8/13/2015	5sec/10 sec	6000**	Full Suite	30	200
OB-14B	2"	8/13/2015	5sec/10 sec	8400**	Full Suite	35	240
OB-16	2"	8/13/2015	5sec/10 sec	9600**	Full Suite	40	240
OB-17	2"	8/13/2015	5sec/10 sec	6000**	Full Suite	30	200
OB-18	2"	8/13/2015	5sec/10 sec	10800**	Full Suite	45	240
OB-24	2"	8/13/2015	5sec/10 sec	6000**	Full Suite	30	200
OB-22	2"	8/18/2015	Well Dry	NS	None	NS	NS
OB-23	2"	8/18/2015	Well Dry	NS	None	NS	NS
Sally's Pond Area							
OB-10	2"	8/14/2015	5sec/10 sec	9600**	Full Suite	40	240
OB-29	2"	8/12/2015	5sec/10 sec	10800**	Full Suite	45	240
RW-12 (55-65)	1" ZIST	8/17/2015	15 sec/60 sec	1600	Full Suite	60	50
RW-12 (130-140)	1" ZIST	8/12/2015	5sec/10 sec	6000**	Full Suite	12	100

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

ZIST - Zone Isolation System Technology monitoring well

** - Indicates monitoring well was purged with a bladder pump utilizing low-flow sample procedures

NS - Not sampled

Table 4A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2015)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Temperature (C°)	Conductivity (mmhos/cm)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-1	5 - 31'	9/26/2006	4.70	143.5	5.59	14.42	0.059	4.98
		4/6/2007	2.00	109.3	6.12	7.02	0.075	8.87
		4/30/2008	2.70	196.9	5.57	9.04	0.033	7.52
		9/8/2008	0.50	364.3	5.66	14.51	0.083	6.00
		7/2/2009	1.10	309.3	5.60	12.57	0.051	5.84
		10/22/2009	0.37	124.4	5.52	13.08	0.054	4.66
		5/26/2010	1.21	211.6	5.69	10.63	0.036	6.67
		5/17/2011	6.30	39.0	6.82	10.27	0.169	3.12
		4/26/2012	3.20	237.0	5.73	9.37	0.048	5.93
		11/5/2013	NS	NS	NS	NS	NS	NS
		8/10/2015	NS	NS	NS	NS	NS	NS
OB-2	8 - 42'	10/2/2006	2.30	161.6	5.91	11.22	0.110	6.28
		4/6/2007	1.00	60.2	6.08	10.12	0.120	6.28
		4/28/2008	0.00	18.5	5.95	9.82	0.990	9.36
		9/17/2008	1.32	152.9	5.13	14.31	0.129	8.41
		6/30/2009	0.65	183.1	5.91	10.20	0.099	7.47
		10/20/2009	0.00	181.0	5.99	12.75	0.096	7.81
		5/25/2010	1.52	153.1	5.77	12.93	0.065	8.53
		5/16/2011	1.46	152.1	5.81	10.83	0.145	6.19
		4/19/2012	0.00	276.0	5.65	13.07	0.157	7.42
		11/18/2013	0.00	223.0	5.96	12.57	0.188	4.66
		9/15/2014	0.00	205.0	5.46	13.24	0.172	6.14
		8/12/2015	16.40	224.9	6.05	14.70	0.124	7.00
OB-3	9 - 24'	9/28/2006	18.20	172.3	5.76	13.55	0.088	6.05
		4/3/2007	2.50	163.0	5.81	7.76	0.096	8.60
		4/28/2008	21.00	170.1	5.97	9.11	0.072	6.47
		9/9/2008	9.86	236.2	5.63	13.69	0.252	4.08
		6/30/2009	0.40	115.0	6.21	10.43	0.110	4.09
		10/20/2009	22.00	-79.7	6.31	13.42	0.077	0.31
		5/25/2010	30.00	61.0	6.34	11.11	0.072	2.36
		5/18/2011	36.70	158.0	6.17	11.59	0.188	4.78
		4/13/2012	2.60	202.0	6.65	9.65	0.145	8.64
		11/5/2013	25.50	95.0	6.74	12.29	0.140	3.27
		9/8/2014	3.80	96.0	6.64	13.57	0.177	4.23
		8/10/2015	28.60	84.1	6.37	13.80	0.749	5.13
OB-4	28 - 61'	9/29/2006	7.90	-23.8	6.49	13.37	0.877	0.13
		4/6/2007	6.00	-142.2	7.18	12.06	0.966	0.29
		4/28/2008	0.00	-52.0	6.49	12.40	0.689	0.25
		9/10/2008	2.14	-32.4	6.87	13.79	0.377	0.25
		7/1/2009	9.56	-80.0	6.73	12.66	0.338	0.06
		10/20/2009	11.40	-25.7	6.81	14.61	0.305	0.44
		5/26/2010	5.35	-41.9	5.77	13.81	0.790	0.19
		5/17/2011	0.00	70.0	5.24	12.28	0.961	1.12
		4/27/2012	16.20	-59.0	6.65	11.80	0.902	1.25
		11/13/2013	2.10	-115.0	6.72	12.72	1.170	1.01
		9/15/2014	0.00	-99.0	6.92	18.35	1.020	0.65
		8/10/2015	0.00	-83.0	6.71	13.72	1.050	3.70

Table 4A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2015)

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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Temperature (C°)	Conductivity (mmhos/cm)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-5	18 - 63'	10/2/2006	6.20	-65.4	6.47	14.02	0.914	0.13
		4/4/2007	23.00	-69.3	6.47	9.42	0.966	0.30
		4/28/2008	2.80	-87.5	6.64	10.33	0.918	0.26
		9/9/2008	0.80	-53.2	6.37	13.39	1.006	0.38
		7/1/2009	18.70	-112.1	7.01	10.83	0.557	0.09
		10/21/2009	16.20	-91.0	6.87	11.84	0.479	0.55
		5/26/2010	5.25	-170.6	6.70	13.75	0.659	0.18
		5/17/2011	0.00	-175.0	7.17	10.95	0.998	0.32
		4/19/2012	0.00	-177.0	7.40	15.76	0.861	2.12
		11/11/2013	10.20	-172.0	7.32	12.39	0.705	2.28
		9/8/2014	12.10	-119.0	7.08	15.10	0.864	0.50
		8/10/2015	0.00	-136.0	6.72	13.20	0.798	5.00
OB-6	10 - 36'	9/26/2006	9.00	-3.0	6.11	18.00	0.460	0.22
		4/5/2007	4.00	66.5	6.60	6.47	0.376	0.22
		5/1/2008	0.92	-23.8	6.46	8.85	0.386	0.35
		9/8/2008	1.10	163.0	4.07	19.16	0.559	0.37
		7/1/2009	0.54	-18.5	6.44	15.68	0.289	0.28
		10/19/2009	NR	NR	NR	NR	NR	NR
		11/15/2013	2.90	98.0	6.37	14.13	0.204	1.08
		9/8/2014	0.00	60.0	6.49	14.23	0.219	1.07
		8/6/2015	16.60	23.0	6.32	13.02	0.231	0.00
OB-7	14 - 42'	9/28/2006	9.20	-72.5	6.79	13.31	0.652	0.13
		4/5/2007	19.00	2.1	6.80	8.76	0.591	0.83
		4/29/2008	23.00	-68.4	6.82	9.69	0.675	0.62
		9/10/2008	2.49	-30.6	6.96	12.74	0.500	0.32
		7/1/2009	4.11	-17.8	6.56	11.90	0.480	0.31
		10/21/2009	7.82	-111.8	7.18	12.42	0.406	0.19
		5/25/2010	14.80	-66.2	6.74	12.41	0.349	0.24
		5/17/2011	8.90	-101.0	6.99	10.38	0.585	1.93
		4/19/2012	0.00	-50.0	7.16	11.90	0.625	1.50
		11/12/2013	25.20	-40.0	6.97	11.23	0.668	1.67
		9/5/2014	24.60	-39.0	6.98	13.30	0.622	6.65
		8/24/2015	17.80	-26.0	6.91	12.82	0.539	0.00
OB-10	10 - 20'	10/2/2006	0.00	-38.5	6.62	14.97	0.158	0.19
		4/3/2007	3.00	9.7	6.58	4.90	0.097	0.25
		4/29/2008	1.70	192.8	5.01	10.88	0.120	3.72
		9/10/2008	0.22	603.0	5.39	17.82	0.126	0.84
		7/1/2009	6.61	-36.1	6.45	15.73	0.120	0.27
		10/21/2009	4.01	57.1	6.15	11.96	0.096	0.53
		5/26/2010	0.62	170.1	6.40	11.71	0.099	2.39
		5/17/2011	38.40	205.0	6.10	10.53	0.141	3.17
		4/20/2012	0.00	114.0	6.68	13.66	0.131	3.02
		11/14/2013	1.40	175.0	6.47	13.61	0.130	6.99
		9/9/2014	0.00	224.0	6.34	11.59	0.140	6.91
		8/14/2015	6.50	136.0	6.28	13.10	0.108	2.26

Table 4A
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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Temperature (C°)	Conductivity (mmhos/cm)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-11R	25 - 40'	6/11/2010	35.80	-92.5	6.63	11.51	0.340	0.29
		5/18/2011	56.30	60.0	5.57	10.27	0.570	0.60
		4/26/2012	2.00	-109.0	6.64	10.10	0.489	1.21
		11/8/2013	36.00	-99.0	6.73	10.82	0.570	0.30
		9/11/2014	0.00	-104.0	6.66	13.30	0.538	1.87
		4/21/2015	17.80	-99.0	6.56	10.07	0.583	0.00
		6/1/2015	12.40	-111.0	6.56	10.37	0.520	16.14
		8/6/2015	13.80	-100.0	6.94	12.28	0.536	2.55
OB-12	9 - 40'	9/28/2006	1.20	210.4	5.61	13.03	0.084	6.00
		4/3/2007	0.20	186.5	5.41	8.30	0.086	8.40
		4/28/2008	NR	36.8	5.58	8.69	0.072	6.59
		9/9/2008	0.00	194.2	5.77	11.87	0.065	6.95
		6/30/2009	1.79	161.1	5.84	11.22	0.064	4.97
		10/20/2009	0.00	189.9	5.62	12.79	0.073	1.79
		5/25/2010	0.42	209.6	5.31	11.53	0.052	4.98
		5/17/2011	30.00	192.9	5.39	10.68	0.052	4.20
		4/19/2012	0.00	278.0	5.85	11.36	0.087	5.45
		11/18/2013	0.20	203.0	5.89	14.49	0.107	9.78
		9/15/2014	0.00	424.0	5.94	10.63	0.107	5.10
		8/10/2015	65.70	239.6	5.73	11.60	0.917	5.73
OB-13	8 - 60'	10/3/2006	2.60	136.0	5.86	12.24	0.103	6.76
		4/3/2007	0.70	195.4	5.55	10.83	0.079	9.22
		4/28/2008	0.40	184.6	5.93	9.67	0.065	9.61
		9/10/2008	0.10	403.5	5.99	11.99	0.152	7.04
		7/1/2009	0.00	204.0	5.70	11.30	0.063	8.71
		10/21/2009	0.00	60.6	6.10	11.53	0.850	6.48
		5/25/2010	2.38	225.7	5.69	10.90	0.044	8.92
		5/17/2011	0.00	249.0	5.50	10.58	0.072	10.78
		4/20/2012	0.00	142.0	6.30	11.49	0.104	10.07
		11/13/2013	5.00	-73.0	5.57	11.46	0.111	1.55
		9/8/2014	1.50	138.0	6.21	13.65	0.089	2.20
		8/10/2015	40.48	146.4	5.99	11.60	0.75	2.92
OB-14A	4 - 14'	9/27/2006	4.82	-62.0	6.35	16.23	0.962	0.69
		4/9/2007	5.00	-98.3	6.30	12.90	0.938	0.41
		4/30/2008	8.80	-79.6	6.21	13.96	0.964	0.35
		9/11/2008	1.39	-20.3	5.64	15.27	0.860	0.89
		7/6/2009	1.10	-27.3	5.49	13.97	0.715	0.44
		10/23/2009	10.55	-20.3	6.13	13.80	0.676	0.73
		5/28/2010	0.93	78.5	6.10	12.59	0.693	0.35
		5/19/2011	63.70	-71.0	6.35	12.33	0.781	5.34
		4/18/2012	0.50	-55.0	6.86	14.30	0.610	1.98
		11/6/2013	0.00	2.0	6.76	13.14	0.891	2.02
		9/11/2014	0.00	-76.0	6.26	14.36	0.805	1.14
		8/13/2015	14.70	-58.0	6.08	17.00	0.701	0.05
OB-14B	25 - 35'	9/27/2006	1.80	-30.8	6.75	14.83	0.871	0.23
		4/9/2007	3.00	-12.9	6.69	14.00	0.954	0.28
		4/30/2008	14.70	6.8	6.76	14.01	0.852	0.24
		9/11/2008	12.30	-4.6	6.30	14.29	0.807	0.37
		7/6/2009	15.90	44.2	6.65	14.59	0.762	0.45
		10/20/2009	1.20	16.4	6.93	13.16	0.646	0.24
		5/28/2010	1.78	-17.9	6.62	13.61	0.709	0.31
		5/19/2011	29.10	-7.0	6.69	13.97	0.911	0.47
		4/18/2012	9.70	-30.0	7.07	13.45	0.950	1.20
		11/6/2013	16.80	-2.0	7.14	12.69	0.803	0.70
		9/11/2014	21.20	-83.0	6.81	14.13	0.797	0.97
		8/13/2015	0.00	-99.0	6.85	13.25	0.739	1.13

Table 4A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2015)

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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Temperature (C°)	Conductivity (mmhos/cm)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-15B	25 - 35'	10/3/2006	38.90	34.8	8.21	13.03	0.199	0.16
		4/12/2007	147.00	171.1	7.87	5.38	0.212	0.32
		5/2/2008	11.00	32.1	7.89	9.91	0.186	0.28
		9/16/2008	6.10	157.6	7.60	16.03	0.171	0.92
		7/2/2009	13.30	-53.3	7.03	15.77	0.158	0.12
		10/26/2009	13.80	NR	7.82	13.48	0.135	1.86
		6/3/2010	3.95	76.6	6.18	20.12	0.158	0.63
		5/23/2011	2.00	77.0	7.65	13.59	0.204	1.53
		4/24/2012	0.00	135.0	7.38	14.84	0.196	0.88
		11/20/2013	44.50	90.0	7.62	9.57	0.171	2.06
		9/5/2014	29.10	-8.0	7.93	14.66	0.202	0.91
		8/24/2015	44.80	-13.9	8.09	14.80	0.173	0.01
OB-16	5 - 15'	9/27/2006	0.80	-44.7	6.59	15.02	0.955	0.82
		4/10/2007	2.80	-20.6	6.63	8.65	0.985	0.32
		5/1/2008	0.00	-66.1	6.39	10.50	0.914	0.21
		9/11/2008	4.27	-41.6	6.21	15.43	0.960	0.38
		7/8/2009	1.07	-33.4	6.69	13.21	0.795	0.47
		10/23/2009	1.67	-39.8	6.36	12.87	0.762	0.92
		5/27/2010	6.85	-92.7	6.46	12.07	0.768	0.16
		5/19/2011	15.80	77.0	5.39	12.02	0.997	0.73
		4/17/2012	25.70	-66.0	6.87	14.80	1.020	1.76
		11/6/2013	0.00	-64.0	6.79	13.42	1.000	2.40
		9/10/2014	0.00	-87.0	6.66	14.70	0.944	1.30
		8/13/2015	11.30	-61.0	6.45	16.00	0.915	1.56
OB-17	3 - 13'	9/27/2006	6.20	18.2	6.39	15.01	0.612	0.66
		4/10/2007	9.00	114.1	6.44	6.45	0.656	0.50
		5/1/2008	0.80	45.4	6.19	9.44	0.575	0.57
		9/11/2008	1.64	368.6	6.01	15.92	0.181	1.04
		7/8/2009	10.00	17.0	6.52	12.81	0.571	0.61
		10/23/2009	12.30	37.3	6.49	12.59	0.564	0.33
		5/27/2010	7.45	4.8	6.37	11.18	0.521	0.18
		5/19/2011	0.00	35.0	6.12	11.85	0.192	0.91
		4/17/2012	21.70	-12.0	6.76	10.20	0.797	1.56
		11/6/2013	15.30	89.0	6.54	11.59	0.739	1.70
		9/3/2014	90.00	-26.0	6.91	16.30	0.777	1.83
		8/13/2015	45.00	-8.0	6.42	15.45	0.647	0.00
OB-18	10 - 20'	9/26/2006	0.36	57.6	6.74	14.45	0.262	2.99
		4/10/2007	1.00	150.3	6.88	6.65	0.357	2.39
		5/1/2008	0.41	53.2	6.67	8.90	0.296	1.70
		9/11/2008	3.59	195.4	5.31	13.87	0.276	2.48
		7/8/2009	17.70	216.7	6.65	11.84	0.241	0.65
		10/23/2009	3.57	38.3	6.94	12.30	0.244	3.24
		5/27/2010	3.53	106.2	6.94	10.19	0.231	2.45
		5/16/2011	0.00	204.0	5.84	8.69	0.605	0.92
		4/17/2012	0.20	87.0	7.13	10.84	0.365	2.21
		11/6/2013	0.00	170.0	6.80	13.92	0.356	1.98
		9/3/2014	1.90	192.0	6.71	12.32	0.352	0.59
		8/13/2015	22.80	118.0	6.72	11.68	0.33	0.66

Table 4A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2015)

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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Temperature (C°)	Conductivity (mmhos/cm)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-19	5 - 20'	10/3/2006	10.10	-61.3	6.36	14.32	0.254	0.13
		4/9/2007	2.00	-40.7	6.22	6.23	0.160	0.18
		10/15/2007	NR	-52.7	6.60	NR	NR	6.22
		4/29/2008	0.00	-66.2	6.05	9.30	0.100	0.19
		9/12/2008	6.32	-16.5	5.91	14.15	0.193	0.28
		7/7/2009	12.00	-58.2	5.63	11.60	0.215	0.27
		10/27/2009	2.70	-87.1	6.35	12.43	0.157	0.19
		6/11/2010	5.85	-62.7	6.27	10.67	0.100	0.18
		5/20/2011	0.00	-23.0	6.16	10.70	0.190	1.67
		5/25/2012	0.00	-50.0	6.23	10.14	0.161	0.80
		11/11/2013	49.80	-38.0	6.34	12.25	0.127	2.58
		9/4/2014	1.70	-89.0	5.81	14.48	0.217	3.44
		8/5/2015	11.40	-86.0	6.37	17.10	0.138	6.00
OB-20A	5 - 20'	10/4/2006	98.70	28.9	5.61	14.65	0.388	0.17
		4/3/2007	21.00	-86.9	6.27	11.61	0.467	0.30
		10/11/2007	NR	-75.1	6.50	NR	NR	1.20
		4/29/2008	34.00	-44.2	6.26	6.64	0.221	0.33
		9/15/2008	32.10	20.1	4.93	13.49	0.234	3.05
		7/9/2009	9.90	-13.0	6.00	10.19	0.200	0.26
		10/28/2009	79.50	-24.4	5.96	12.96	0.217	0.73
		6/2/2010	5.74	-87.0	6.16	11.82	0.244	0.23
		5/18/2011	19.70	110.0	5.09	8.19	0.227	0.60
		4/27/2012	32.70	-26.0	6.15	10.22	0.208	0.78
		11/8/2013	41.00	-82.0	6.35	11.74	0.285	0.38
		9/5/2014	49.80	-141.0	5.78	12.98	0.299	0.85
		4/21/2015	12.80	-40.0	6.25	10.30	0.26	0.00
		6/1/205	5.00	-10.0	6.38	11.00	0.213	0.55
		8/5/2015	80.40	-83.0	6.30	11.47	0.251	0.00
OB-20B	24 - 34'	10/4/2006	197.00	-57.0	6.35	11.95	0.530	0.14
		4/5/2007	36.00	-50.4	6.27	10.28	0.527	0.20
		10/11/2007	NR	-51.7	6.34	NR	NR	0.35
		4/29/2008	20.00	-42.7	6.14	8.94	0.299	0.27
		9/15/2008	22.90	89.6	4.03	11.00	0.374	0.00
		7/9/2009	12.90	19.7	6.21	9.93	0.304	0.28
		10/28/2009	12.90	19.7	6.21	9.93	0.304	0.28
		6/2/2010	10.40	-29.4	6.93	12.40	0.215	0.43
		5/18/2011	28.20	-63.0	6.45	9.45	0.355	1.42
		4/27/2012	11.90	-42.0	6.46	13.30	0.385	1.04
		11/8/2013	20.70	-65.0	6.16	11.22	0.520	4.11
		9/5/2014	24.60	-71.0	6.38	13.54	0.436	4.47
		4/21/2015	25.10	-41.0	6.15	11.70	0.555	0.00
		6/1/2015	27.90	-51.0	6.10	10.05	0.484	0.00
		8/5/2015	25.30	-67.0	5.64	12.50	0.478	0.00
OB-21	6 - 21'	10/5/2006	74.70	132.9	5.96	15.66	0.123	0.64
		4/9/2007	816.00	32.6	6.42	7.38	0.101	5.83
		10/15/2007	NR	239.8	5.19	NR	NR	3.15
		4/29/2008	60.00	48.1	6.17	8.95	0.088	5.43
		9/12/2008	160.00	485.0	5.68	12.74	0.107	6.65
		7/7/2009	173.00	147.4	5.58	11.96	0.08	5.62
		10/27/2009	29.00	-12.8	6.46	12.30	0.082	3.43
		6/1/2010	205.00	219.3	5.92	12.60	0.008	4.17
		5/18/2011	39.95	244.0	6.01	11.25	0.110	8.49
		4/24/2012	52.40	238.0	5.72	9.37	0.113	1.99
		11/7/2013	49.80	201.0	6.48	12.67	0.124	1.14
		9/4/2014	NR	195.0	8.14	14.50	0.121	2.48
		4/20/2015	108.00	201.0	5.94	9.42	0.105	0.00
		8/6/2015	202.00	76.0	6.28	12.54	0.113	2.51

Table 4A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2015)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Temperature (C°)	Conductivity (mmhos/cm)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-22	10 - 20'	11/29/2006	NR	-129.0	6.30	11.82	0.423	5.10
		4/4/2007	NR	32.6	6.42	7.94	0.313	5.83
		5/1/2008	63.00	225.3	5.99	9.87	0.345	8.57
		9/12/2008	NR	NR	NR	NR	NR	NR
		7/8/2009	222.00	347.4	6.12	15.12	0.266	4.47
		10/26/2009	NR	NR	NR	NR	NR	NR
		5/28/2010	21.50	203.3	5.83	13.50	0.237	6.41
		5/19/2011	98.00	98.2	6.38	16.69	0.536	4.99
		11/5/2013	NS	NS	NS	NS	NS	NS
		9/5/2014	NS	NS	NS	NS	NS	NS
		8/18/2015	NS	Ns	NS	NS	NS	NS
OB-23	10 - 20'	11/28/2006	8.24	-62.7	6.44	14.70	1.118	0.27
		4/12/2007	NR	NR	NR	NR	NR	NR
		5/2/2008	8.70	-60.0	6.62	12.75	2.4	0.46
		9/12/2008	NR	NR	NR	NR	NR	NR
		7/8/2009	19.80	-35.3	6.34	14.92	0.969	1.02
		10/26/2009	NR	NR	NR	NR	NR	NR
		5/28/2010	4.57	-25.7	5.69	14.43	0.897	0.42
		5/19/2011	0.00	-85.0	6.28	12.70	1.18	0.69
		11/5/2013	NS	NS	NS	NS	NS	NS
		9/5/2014	NS	NS	NS	NS	NS	NS
		8/18/2015	NS	NS	NS	NS	NS	NS
OB-24	5 - 15'	11/28/2006	3.97	143.5	7.09	11.64	0.701	0.25
		4/11/2007	5.10	90.0	7.24	7.76	0.840	0.25
		4/30/2008	5.30	45.5	7.07	9.08	0.780	0.27
		9/11/2008	33.90	244.4	5.28	15.49	0.738	0.87
		7/8/2009	9.80	401.4	6.57	13.32	0.588	0.35
		10/26/2009	6.40	117.4	6.91	14.03	0.574	0.4
		5/28/2010	5.75	131.5	6.92	10.95	0.477	0.27
		5/19/2011	30.90	85.0	7.05	11.73	0.774	0.99
		4/18/2012	26.60	175.0	7.39	9.63	0.812	1.07
		11/6/2013	20.00	189.0	7.37	12.33	0.773	0.69
		9/3/2014	0.00	128.0	7.61	13.45	0.82	10.40
		8/13/2015	27.20	-35.0	7.27	13.85	0.688	3.55
OB-25	10 - 20'	11/28/2006	3.97	143.5	7.09	11.64	0.701	0.25
		4/12/2007	NR	NR	NR	NR	NR	NR
		4/29/2008	550.00	204.3	7.13	8.70	0.623	10.49
		9/18/2008	300.00	119.7	6.75	16.67	0.587	7.42
		7/6/2009	284.00	411.8	6.26	14.43	0.484	7.20
		10/26/2009	450.00	201.7	6.91	13.04	0.387	6.25
		6/1/2010	797.00	166.5	6.60	13.69	0.539	4.27
		5/20/2011	0.00	170.0	6.95	13.94	0.505	8.09
		4/20/2012	24.10	135.0	7.39	12.10	0.652	6.84
		11/11/2013	0.00	74.0	6.96	6.97	0.422	3.17
		9/9/2014	44.10	182.0	6.68	16.17	0.563	2.20
		8/6/2015	0.00	117.0	6.87	14.57	0.449	4.32
OB-26	9 - 24'	5/9/2008	9.00	167.0	5.45	8.82	0.065	6.03
		9/16/2008	9.96	305.7	5.49	15.99	0.135	3.86
		7/2/2009	8.70	146.4	6.12	14.09	0.079	1.77
		10/27/2009	16.40	156.9	5.57	14.60	0.066	2.28
		5/26/2010	10.30	232.4	4.63	12.90	0.052	3.95
		5/17/2011	0.00	192.0	5.96	11.01	0.077	8.12
		11/5/2013	NS	NS	NS	NS	NS	NS
		9/5/2014	NS	NS	NS	NS	NS	NS
		8/18/2015	NS	NS	NS	NS	NS	NS

Table 4A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2015)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Temperature (C°)	Conductivity (mmhos/cm)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-27	24.5 - 39.5'	6/2/2010	4.39	-75.9	6.29	11.51	0.300	0.31
		5/18/2011	40.20	-106.0	6.76	11.46	0.368	0.79
		4/25/2012	48.90	41.0	5.32	10.33	0.379	0.28
		11/11/2013	23.10	-94.0	6.38	11.12	0.440	0.37
		9/10/2014	44.70	-102.0	6.66	21.73	0.307	0.68
		4/21/2015	107.00	-82.0	6.50	11.11	0.440	0.00
		6/1/2015	27.20	-97.0	6.53	10.34	0.391	2.65
		8/6/2015	23.00	-87.0	6.93	13.48	0.362	0.65
OB-28	3 - 18'	5/27/2010	4.39	-75.9	6.29	11.51	0.300	0.31
		5/19/2011	20.60	27.0	6.65	11.41	0.939	0.48
		4/17/2012	29.60	91.0	7.02	12.20	1.010	1.14
		11/6/2013	39.10	75.0	6.88	12.69	1.030	2.10
		9/10/2014	46.50	28.0	6.76	14.81	0.918	2.44
		8/13/2015	43.00	33.0	6.69	13.07	0.892	0.00
OB-29	18 - 35'	5/11/2012	46.50	123.0	6.77	12.82	0.157	1.30
		11/14/2013	49.30	161.0	6.52	12.43	0.135	7.59
		9/9/2014	47.60	228.0	5.95	12.85	0.132	3.81
		8/12/2015	29.40	37.0	6.49	12.53	0.111	9.50
OB-30A	8 - 18'	5/10/2012	0.00	49.0	6.64	11.21	0.391	8.37
		11/5/2013	NS	NS	NS	NS	NS	NS
		9/5/2014	NS	NS	NS	NS	NS	NS
		8/18/2015	NS	NS	NS	NS	NS	NS
OB-30B	21 - 36'	5/11/2012	0.00	86.0	6.57	11.72	0.390	1.03
		11/7/2013	0.00	103.0	6.28	12.49	0.313	1.59
		9/4/2014	31.40	66.0	6.44	15.48	0.326	3.56
		8/6/2015	50.30	234.0	5.26	11.34	0.283	0.00
OB-30C	40 - 50'	5/9/2012	38.90	-27.0	8.07	13.38	0.425	0.89
		11/7/2013	49.80	79.0	9.03	12.15	0.410	2.22
		9/4/2014	30.20	125.0	8.20	15.76	0.386	3.71
		8/6/2015	0.00	-130.0	8.52	12.26	0.366	8.51
SC-1	64.4 - 70.9'	10/5/2006	0.40	-313.3	7.45	13.30	0.759	0.06
		4/11/2007	11.70	-18.7	5.97	8.62	0.304	0.26
		10/16/2007	NR	-42.3	6.05	NR	NR	0.26
		4/30/2008	0.00	-74.2	5.99	6.18	0.215	0.10
		9/6/2008	3.40	-73.7	5.23	10.88	0.235	1.05
		7/9/2009	14.10	49.1	5.97	14.03	0.198	0.42
		10/28/2009	20.80	-53.8	5.22	14.39	0.154	0.53
		6/2/2010	69.10	59.2	6.82	12.19	0.674	0.13
		5/18/2011	0.00	-43.0	6.33	9.93	0.176	2.07
		4/27/2012	0.00	-29.0	6.30	10.27	0.445	1.47
		11/11/2013	36.10	25.0	6.24	11.14	0.387	2.30
		9/5/2014	0.00	-45.0	5.82	14.30	0.213	1.27
		4/22/2015	23.50	-15.0	5.95	9.75	0.471	0.00
		6/2/2015	92.40	-17.0	5.71	8.86	0.41	14.89
		8/4/2015	30.30	-31.0	5.83	17.07	0.394	0.31
SC-2	47 - 67'	5/5/2008	46.00	-20.7	6.36	20.03	0.600	0.84
		9/17/2008	16.00	-9.1	5.96	15.92	0.553	1.95
		6/30/2009	32.80	166.1	6.17	16.34	0.519	0.73
		10/20/2009	26.40	-108.2	6.50	13.63	0.317	0.49
		5/25/2010	6.10	132.9	6.27	15.79	0.321	0.62
		5/16/2011	59.20	237.0	6.05	14.00	0.571	3.25
		4/19/2012	0.00	155.0	6.69	13.92	0.465	1.14
		11/15/2013	25.90	53.0	6.34	12.44	0.508	0.69
		9/15/2014	0.00	318.0	6.51	14.57	0.476	1.22
		8/12/2015	23.60	136.7	6.47	13.90	0.474	0.79

Table 4A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2015)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Temperature (C°)	Conductivity (mmhos/cm)	DO (mg/L)
Well ID	Sample Depth	Sample Date						

Notes:
ORP (mV) = Oxidation Reduction Potential measured in millivolts
pH = Measured in Standard Units
Spec Cond (mmhos/cm) = Specific Conductivity measure in millimhos per centimeter
DO (mg/L) = Dissolved Oxygen measured in milligrams per Liter
NR = No Parameters were recorded.
NTU = Nephelometric Turbidity Units
NS = Not Sampled
SU = Standard Units

Geochemical parameters reported at time of sampling.

Table 4B
Summary of Historical Groundwater Geochemical Data: Bedrock (2006 - 2015)

Ringwood Mines/Landfill Superfund Site

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

Table 4B
Summary of Historical Groundwater Geochemical Data: Bedrock (2006 - 2015)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-2	442-479'	4/17/2007	9.00	76.4	6.73	1942	37.02	0.13
		5/5/2008	24.00	-61.6	6.61	2.639	22.10	2.14
		7/14/2009	0.32	98.8	5.64	2.494	11.32	0.71
		10/28/2009	5.03	-55.9	6.93	2.272	13.85	1.06
		6/29/2010	NR	NR	NR	NR	NR	NR
		8/25/2015	0.00	-33.0	11.28	3.110	19.43	9.89
RW-2	452-462'	6/3/2011	NR	NR	NR	NR	NR	NR
		5/16/2012	0.00	-23.0	11.37	2.050	23.21	13.71
		11/19/2013	1.10	-92.0	11.34	2.970	11.58	4.10
		9/26/2014	2.20	107.0	11.37	2.050	22.81	11.06
RW-3	62-98'	9/29/2006	0.80	29.0	7.35	0.457	12.74	38.30
		4/5/2007	200.00	-3.5	7.30	397	10.58	0.31
		4/30/2008	32.00	-112.2	7.23	0.404	11.77	0.49
		9/8/2008	4.80	9.4	7.26	0.358	13.55	0.60
		7/6/2009	16.50	38.7	6.82	0.282	13.59	0.50
		10/19/2009	5.80	-34.8	7.27	0.243	11.60	0.37
		6/28/2010	14.60	28.7	6.78	0.249	12.89	0.48
RW-3	77-87'	5/25/2011	0.00	148.0	5.51	0.222	21.88	1.83
		4/27/2012	0.00	-64.0	7.18	0.346	12.31	1.51
		11/11/2013	0.00	-27.0	10.28	0.302	11.52	17.00
		9/15/2014	0.00	65.0	10.53	0.393	18.47	13.62
		8/6/2015	0.00	-26.0	5.89	0.384	16.79	2.40
RW-3D	140-165'	6/9/2010	29.20	-107.9	7.32	0.335	13.01	2.38
		5/24/2011	5.00	-152.0	7.36	0.471	14.86	1.13
		11/12/2013	0.00	-56.0	10.69	1.860	7.28	24.40
RW-3D	170-181'	6/9/2010	50.80	-122.6	7.43	0.332	12.56	0.85
		5/24/2011	5.00	-165.0	7.29	0.476	15.25	1.00
RW-3DD	175-180'	4/30/2012	0.00	-297.0	12.02	1.450	13.16	0.75
		11/12/2013	0.00	-18.0	8.27	0.457	8.30	25.24
		9/12/2014	0.00	127.0	7.55	0.339	14.66	16.63
		8/10/2015	11.20	-150.0	10.58	0.283	19.40	13.45
RW-3DS	155-160'	4/30/2012	0.00	-84.0	12.01	2.340	16.89	13.21
		11/12/2013	0.00	-56.0	10.69	1.860	7.28	24.40
		9/11/2014	0.00	69.0	10.29	1.330	17.00	14.32
		8/25/2015	8.00	-84.0	10.40	1.640	19.65	1.61
RW-4A	62-77'	6/25/2010	0.28	83.2	6.89	0.102	11.27	6.53
RW-4A	62-72'	5/25/2011	0.00	169.0	5.98	0.175	17.95	NR
		4/25/2012	0.00	20.0	9.69	0.157	13.69	15.05
		11/18/2013	2.40	147.0	6.72	0.105	9.30	7.35
		9/10/2014	0.00	118.0	7.78	0.119	19.35	10.70
		8/10/2015	1.35	51.0	7.40	0.094	18.52	14.75
RW-4A	113-123'	6/25/2010	0.67	175.3	9.12	0.187	11.23	2.11
		5/25/2011	0.00	177.0	6.28	0.230	13.52	NR
		4/25/2012	0.00	68.0	8.07	0.160	12.20	14.82
		11/8/2013	1.50	145.0	6.86	0.146	7.22	12.78
		9/10/2014	0.00	177.0	7.36	0.134	18.03	10.96
		8/24/2015	0.00	194.0	6.75	0.126	15.04	11.11
RW-4	57-77'	10/2/2006	825.00	177.0	6.60	0.232	12.64	36.40
		4/6/2007	NR	44.8	7.01	112	5.29	1.61
		4/28/2008	10.00	122.0	6.65	0.114	12.87	3.47
		9/15/2008	16.00	-1.4	6.76	0.123	14.78	4.23
		6/30/2009	26.20	394.7	6.65	0.087	12.91	1.87
		10/21/2009	24.00	41.7	6.52	0.088	12.05	4.84
RW-4	108-128'	10/2/2006	3.41	217.2	6.82	0.289	12.37	57.10
		4/9/2007	NA	133.1	7.02	139	10.62	4.50
		4/29/2008	6.80	189.7	7.01	0.144	10.85	6.31
		9/16/2008	NR	121.6	6.50	0.145	11.31	5.85
		6/30/2009	20.50	145.8	6.60	0.096	12.96	3.46
		10/22/2009	16.00	68.9	6.68	0.099	11.74	4.89

Table 4B
Summary of Historical Groundwater Geochemical Data: Bedrock (2006 - 2015)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-4	328-348'	10/3/2006	19.00	206.6	6.74	0.263	11.99	84
		4/9/2007	NR	142.8	6.75	119	10.96	5.09
		4/29/2008	NR	135.7	6.71	0.123	10.9	7.90
		9/9/2008	NR	160.6	6.91	0.137	14.19	7.08
		7/2/2009	22.90	267.8	6.61	0.097	12.66	6.13
		10/23/2009	12.00	90.9	6.87	0.096	10.32	5.30
RW-4	333-343'	6/7/2011	0.00	39.0	11.34	1.310	18.87	3.25
		4/25/2012	0.00	-32.0	12.22	1.200	12.89	15.19
		11/11/2013	10.10	101.0	12.08	0.300	10.72	12.23
		9/9/2014	36.50	30.0	12.22	0.767	16.13	13.20
		8/24/2015	0.00	-15.0	11.40	0.532	16.1	10.90
RW-4	388-408'	10/3/2006	18.50	270.9	6.79	0.265	12.72	87.30
		4/9/2007	6.30	142.4	6.77	119	10.20	5.31
		4/29/2008	14.00	226.6	6.52	0.125	11.47	28.44
		9/10/2008	7.90	172.9	5.88	0.122	11.63	6.93
		7/2/2009	30.20	338.9	6.35	0.091	13.14	7.19
		10/23/2009	14.00	16.4	6.83	0.092	10.81	5.55
		6/25/2010	0.84	143.4	9.16	0.160	11.27	2.88
RW-4	393-403'	5/25/2011	NR	NR	NR	NR	NR	NR
		4/26/2012	0.00	207.0	6.89	0.244	10.64	14.96
		11/11/2013	0.00	50.0	11.07	0.160	10.60	17.08
		9/10/2014	0.00	200.0	8.11	0.245	15.88	12.94
		8/10/2015	26.80	124.0	8.25	0.356	18.20	14.48
RW-5	40-51'	9/26/2006	77.90	-99.0	7.15	0.261	10.20	41.50
		4/13/2007	59.30	-108.7	7.25	500.000	5.57	1.94
		7/7/2009	NR	-71.4	6.76	NR	NR	0.20
RW-5	64-75'	9/28/2006	73.90	238.9	6.77	0.464	12.41	0.34
		4/12/2007	41.50	-56.6	7.88	254	7.55	7.26
RW-5	100-120'	10/4/2006	22.90	292.3	7.22	0.774	11.25	65.60
		9/28/2006	-5.70	376.6	6.51	0.147	19.73	66.00
		4/12/2007	20.60	-88.9	7.10	518	11.04	0.21
		10/15/2007	NR	-92.3	7.08	NR	NR	4.66
		5/2/2008	6.80	-86.6	6.67	0.741	9.20	0.39
		7/7/2009	1.30	-71.4	6.76	0.390	11.00	0.20
		9/17/2008	3.28	-82.1	6.45	0.615	12.96	1.47
		10/27/2009	8.80	-96.7	6.77	0.414	11.66	1.09
		6/1/2010	1.96	-97.3	7.60	0.375	12.06	0.59
RW-5	99-119'	5/20/2011	0.00	-153.0	7.32	0.815	9.05	0.67
		4/26/2012	0.00	-172.0	8.01	0.444	9.39	2.91
		11/14/2013	14.70	-74.0	10.14	0.429	10.66	7.97
		9/4/2014	41.00	-139.0	10.92	0.651	16.62	8.16
		8/5/2015	46.20	-283.0	10.62	0.472	15.75	5.10
RW-5A	58-78'	10/15/2007	NR	178.9	7.79	NR	NR	3.87
		4/29/2008	0.20	-23.3	10.94	0.778	10.25	0.22
		9/12/2008	8.90	73.5	5.37	0.457	NA	0.96
		7/7/2009	12.40	-219.2	8.24	0.775	11.09	0.06
		10/28/2009	0.00	-167.2	8.89	0.564	11.41	0.24
		6/1/2010	3.05	48.5	8.45	0.995	12.29	0.23
RW-5A	54-74'	5/18/2011	52.40	-139.0	7.81	0.406	11.05	1.06
		4/25/2012	30.20	106.0	5.10	0.528	11.24	0.63
		11/18/2013	48.90	14.0	6.05	0.890	11.01	2.09
		9/10/2014	21.70	-19.0	6.39	0.789	15.88	0.99
		8/24/2015	36.80	-24.0	6.12	0.589	11.89	0.00
RW-6	10-20'	5/2/2008	4.00	-98.9	6.62	0.755	9.11	0.22
RW-6	53-64'	9/27/2006	7.60	-70.5	6.09	0.381	16.38	39.00
		4/2/2007	6.40	-64.8	6.41	615	12.96	1.21
RW-6	70-81'	9/27/2006	4.00	-48.8	6.24	0.665	13.28	1.80
		4/3/2007	0.90	-60.5	6.41	652	11.47	0.32

Table 4B
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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-6	100-120'	10/9/2006	20.00	-36.0	6.55	666	11.32	6.56
		4/6/2007	NR	-61.2	6.46	616	9.19	0.44
		10/10/2007	NR	-27.6	6.17	NR	NR	0.76
		9/15/2008	3.00	-57.5	6.13	0.585	11.91	8.95
		7/9/2009	2.71	-6.9	6.40	0.491	10.71	0.37
		10/28/2009	1.56	-112.3	6.70	0.422	10.68	0.38
		6/2/2010	6.91	-48.0	6.91	0.400	12.26	0.43
RW-6	99-119'	5/18/2011	0.00	-82.0	6.63	0.554	10.30	2.37
		4/27/2012	20.70	-10.0	6.98	0.438	10.70	0.80
		11/18/2013	0.30	-72.0	6.44	0.564	11.73	8.30
		4/22/2015	5.30	-82.0	6.56	0.531	14.64	0.00
		6/2/2015	9.70	-65.0	6.38	0.486	9.17	0.00
		8/6/2015	17.90	-92.0	5.61	0.542	12.12	0.00
RW-6A	54-74'	10/16/2007	NR	-27.9	6.36	NR	NR	3.24
		5/2/2008	3.11	-30.4	6.31	0.559	9.80	0.23
		9/15/2008	2.52	37.9	5.96	0.411	12.33	0.12
		7/9/2009	7.64	-14.1	6.62	0.446	10.69	0.44
		10/28/2009	1.00	-109.6	6.63	0.387	10.29	0.19
		6/2/2010	2.66	-39.9	6.21	0.485	11.23	0.21
RW-6A	58-78'	5/18/2011	0.00	27.0	5.70	0.520	9.71	1.60
		4/27/2012	0.00	-51.0	6.56	0.517	11.05	1.87
		11/8/2013	0.00	-44.0	6.24	0.634	10.88	5.21
		9/5/2014	43.20	-53.0	6.56	0.582	12.45	3.39
		4/21/2015	4.60	-33.0	6.23	0.677	10.55	0.00
		6/1/2015	0.00	-48.0	6.24	0.583	10.68	0.00
		8/4/2015	34.30	-43.0	5.69	0.619	17.01	0.35
RW-7	34-45'	9/26/2006	24.60	189.8	6.46	0.135	13.36	6.38
		4/3/2007	55.00	334.0	4.43	115	12.21	4.45
RW-7	49-60'	9/26/2006	23.10	224.5	6.33	0.126	14.12	7.35
		4/4/2007	7.30	73.0	6.75	138	8.34	4.55
RW-7	80-100'	9/28/2006	1.10	217.6	6.62	0.136	13.43	74.00
		4/3/2007	5.70	150.0	6.66	118	11.52	5.69
RW-7	100-120'	9/28/2006	NR	376.6	6.51	NR	NR	66.00
		4/4/2007	1.90	218.6	6.78	132	8.66	5.12
		10/15/2007	NR	174.5	6.90	NR	NR	8.45
		5/5/2008	7.14	155.3	6.71	0.116	10.17	5.87
		9/12/2008	29.30	167.9	6.22	0.115	12.25	5.83
		7/7/2009	4.00	293.1	6.37	0.096	11.99	5.97
		10/27/2009	10.00	188.9	6.69	0.850	11.96	7.08
		6/1/2010	13.70	144.7	6.20	0.089	12.37	6.15
RW-7	99-119'	5/18/2011	0.00	92.0	6.67	0.121	11.99	4.96
		4/24/2012	0.00	182.0	6.54	0.107	13.39	3.26
		11/7/2013	0.00	193.0	7.59	0.133	11.07	7.03
		9/4/2014	0.00	154.0	5.82	0.312	13.11	7.03
		4/20/2015	12.00	197.0	6.22	0.102	10.91	0.00
		8/6/2015	49.80	-15.0	6.70	0.110	13.19	9.63
RW-8A	47-57'	5/2/2012	NR	NR	NR	NR	NR	NR
		8/18/2015	NR	NR	NR	NR	NR	NR
RW-8	42-62'	7/7/2009	3.11	108.4	5.53	0.166	14.92	3.69
		11/4/2009	0.00	120.5	5.81	0.145	12.98	3.70
RW-8	158-178'	7/7/2009	1.47	-60.1	6.87	0.469	18.29	0.82
		11/4/2009	0.00	-89.8	7.37	0.404	12.61	0.89
		6/23-628/2010	NR	NR	NR	NR	NR	NR
RW-8	163-173'	5/31-6/1/2011	0.00	12.0	6.79	0.320	21.30	1.73
		5/2-5/3/2012	0.00	4.0	9.93	0.621	13.22	15.98
		11/15/2013	0.00	53.0	8.03	0.664	13.51	12.82
		9/22/2014	5.50	-66.0	7.97	0.635	19.34	4.04
		8/18/2015	0.00	-16.0	7.63	0.493	19.89	9.75

Table 4B
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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-8	199-219'	7/7/2009	2.11	-103.8	7.13	0.784	20.48	1.17
		11/4/2009	1.84	-102.5	7.20	0.582	12.91	1.27
		6/23-6/28/2010	NR	NR	NR	NR	NR	NR
RW-8	204-214'	5/31-6/1/2011	NR	NR	NR	NR	NR	NR
		5/2/2012	NR	NR	NR	NR	NR	NR
		11/14-11/15/13	4.70	98.0	8.52	1.240	11.38	12.58
		9/22-9/23/14	18.10	32.0	8.39	0.928	20.44	5.17
		8/19/15 - 8/20/15	NR	NR	NR	NR	NR	NR
RW-9A	25-35'	5/31/2011	NR	NR	NR	NR	NR	NR
		4/20/2012	NR	NR	NR	NR	NR	NR
		8/202015	NR	Nr	NR	Nr	NR	NR
RW-9A	85-95'	6/23/2010	NR	NR	NR	NR	NR	NR
		6/1/2011	NR	NR	NR	NR	NR	NR
		4/20/2012	NR	NR	NR	NR	NR	NR
		9/23-9/24/14	0.00	-34.0	6.84	0.179	24.22	10.02
		8/20/15 - 8/21/15	NR	NR	NR	NR	NR	NR
RW-9	20-40'	7/15/2009	0.23	385.1	6.48	0.153	14.72	8.13
		11/2/2009	0.10	90.4	6.27	0.122	11.82	6.03
RW-9	80-100'	7/15/2009	0.00	107.4	6.64	0.204	18.13	7.73
		11/2/2009	0.28	-62.4	7.22	0.288	13.75	2.51
RW-9	134-154'	7/16/2009	5.90	-97.1	7.63	0.255	13.97	0.49
		11/2/2009	0.32	-68.5	7.32	0.280	12.65	1.98
		5/26/2011	NR	NR	NR	NR	NR	NR
		4/19-4/20/2012	NR	NR	NR	NR	NR	NR
RW-9	139'-149'	8/19/15 - 8/20/15	NR	NR	NR	NR	NR	NR
RW-9	201-221'	7/16/2009	4.11	-83.2	7.27	0.329	20.21	0.57
		11/3/2009	1.28	-93.6	7.41	0.281	11.70	2.79
		6/23-6/28/2010	NR	NR	NR	NR	NR	NR
		5/26/2011	NR	NR	NR	NR	NR	NR
		4/20/2012	NR	NR	NR	NR	NR	NR
		11/19-11/20/2013	0.00	-161.0	8.76	0.970	9.90	6.20
RW-9	206' 216'	8/20/15 - 8/21/15	NR	NR	NR	NR	NR	NR
RW-10	22-42'	7/8/2009	1.42	249.3	5.33	0.164	12.43	7.53
		10/29/2009	0.78	106.0	5.87	0.144	10.61	6.15
RW-10	46-66'	7/9/2009	3.11	169.5	6.06	0.176	10.96	4.90
		10/29/2009	1.46	89.3	5.78	0.144	36.98	6.04
RW-10	70-90'	7/9/2009	6.10	154.9	5.99	0.175	12.02	5.23
		10/29/2009	0.30	78.0	6.00	0.242	12.50	3.25
		11/14/2013	28.60	251.0	7.80	0.910	9.02	5.86
RW-10	115-135'	7/9/2009	5.72	209.6	6.04	0.175	13.25	1.67
		10/29/2009	0.58	47.1	6.15	0.254	12.27	1.82
RW-10	120-130'	6/23-6/25/2010	NR	NR	NR	NR	NR	NR
		5/31-6/1/2011	NR	NR	NR	NR	NR	NR
		4/18-4/19/2012	0.00	-5.0	11.15	0.828	24.29	13.38
		9/17/2014	4.10	102.0	11.77	0.878	18.30	13.12
		8/18/15 - 8/19/15	Nr	Nr	Nr	NR	Nr	NR
RW-10	180-200'	7/9/2009	5.13	-8.0	7.03	0.335	12.73	0.96
		10/30/2009	1.93	-74.9	6.77	0.322	10.51	0.33
RW-10	185-195'	6/23-6/28/2010	1.64	-73.2	6.75	0.320	11.47	0.30
		5/31/2011	0.00	-64.0	11.62	1.150	23.69	1.40
		4/17-5/4/2012	0.0/0.0	2.8	10.88/11.03	0.993/0.522	13.00/15.19	8.20/15.45
		11/13/2013	8.00	-83.0	10.43	0.529	8.25	13.09
		9/17/2014	0.70	84.0	11.47	0.589	17.01	12.69
		8/18/2015	2.50	-41.0	11.13	0.517	16.99	1.61
RW-10A	51-61'	6/2/2011	0.00	36.0	6.72	0.467	18.46	0.76
		9/18/2014	1.80	64.0	7.72	0.531	18.74	10.56
		8/19/15 - 8/20/15	NR	NR	NR	NR	NR	NR

Table 4B
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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-10A	75-85'	6/23-6/28/2010	36.00	72.3	7.40	0.271	11.14	1.07
		6/2/2011	0.00	162.0	6.62	0.324	17.31	1.70
		4/18-5/4/2012	0.0/0.0	195/19	6.16/9.54	0.440/0.419	12.71/14.05	8.90/16.07
		11/14/2013	0.92	28.6	7.80	0.910	9.02	5.86
		9/18/2014	6.10	278.0	7.68	0.369	13.62	13.04
		8/18/2015	0.00	167.0	6.91	0.352	15.91	3.88
RW-11	100-125'	6/7/2010	11.90	143.8	5.55	0.042	16.53	8.76
		5/26/2011	0.00	211.0	5.73	0.053	11.04	8.99
RW-11	142-167'	6/7/2010	6.30	165.8	5.56	0.040	13.97	9.63
		5/26/2011	0.00	210.0	5.61	0.054	10.41	7.70
RW-11	221-246'	6/8/2010	7.97	99.0	6.42	0.124	13.71	7.70
		5/25/2011	0.00	232.0	4.99	0.032	12.81	7.47
RW-11	252-272'	6/8/2010	4.21	94.6	6.43	0.127	14.12	2.74
		5/25/2011	0.00	225.0	5.44	0.054	15.46	6.24
RW-11D	262-267'	5/1/2012	0.00	9.0	11.11	0.911	12.00	5.59
		5/1/2012	0.00	-91.0	12.51	4.860	11.63	6.23
		11/14/2013	15.10	-97.0	11.90	3.550	9.28	7.34
		8/25/15 - 8/26/15	NR	Nr	NR	NR	NR	NR
RW-11S	236-241'	5/1/2012	0.00	-4.0	10.45	0.187	11.96	5.70
		11/13/2013	0.00	20.0	6.67	0.149	9.76	3.24
		9/12/2014	0.00	98.0	7.85	0.107	20.85	9.16
		8/12/2015	0.00	101.0	7.18	0.105	17.75	10.42
RW-12	50-76'	5/10/2012	38.90	-290.0	7.27	0.589	11.40	0.88
	96-116'	5/10/2012	47.30	-164.0	8.06	0.604	12.22	0.67
	125-148'	5/11/2012	35.30	45.0	5.59	0.609	11.86	1.72
RW-12	55-65	9/19/2014	0.00	41.0	13.11	1.770	23.71	3.50
		8/17/2015	0.00	-100.0	11.05	1.480	26.10	1.24
RW-12	130-140	9/19/2014	0.00	58.0	2.12	1.540	14.66	6.55
		8/12/2015	2.89	-78.0	11.50	1.140	20.30	12.51
RW-13	71-91'	11/12/2013	33.00	-54.0	8.23	0.274	6.83	1.20
		8/24/2015	147.20	97.5	7.87	0.625	16.10	0.68
	100-120'	11/13/2013	49.70	-30.0	7.91	0/266	10.24	7.84
		8/12/15 - 8/13/15	NR	Nr	Nr	Nr	NR	NR
	130-150'	11/14/2013	49.20	-136.0	8.20	0.247	10.46	1.45
	150-170'	11/14/2013	27.00	-118.0	8.75	0.241	10.89	1.50
RW-13	100-120'	9/16/2014	0.00	120.0	12.59	3.980	20.56	1.79
RW-13	150-170'	9/16/2014	0.00	48.0	7.10	0.349	21.03	2.35
		8/12/2015	2.10	-65.0	7.73	0.339	21.04	9.00

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

Geochemical parameters reported at time of sampling.

Table 4C
Summary of Historical Mine Water Geochemical Data (2006 - 2015)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
CM AIRSHAFT	50'	5/7/2012	0.00	-82.0	7.06	0.061	14.41	2.86
		9/12/2014	0.00	-103.0	6.68	1.170	12.57	0.48
		8/14/2015	16.10	-52.6	6.46	0.104	16.70	2.23
CM AIRSHAFT	100'	5/7/2012	0.00	-95.0	7.12	1.110	14.82	3.01
		9/18/2014	42.40	-107.0	6.81	0.933	12.55	0.58
		8/17/2015	28.50	-89.0	6.69	0.914	14.49	3.20
CM AIRSHAFT	160'	5/9/2012	0.00	-95.0	7.11	1.000	18.85	1.85
		9/18/2014	43.80	-107.0	6.86	0.884	12.99	0.68
		8/17/2015	37.00	-77.0	6.61	0.940	12.42	2.06
CM AIRSHAFT	275'	5/9/2012	0.00	-116.0	7.23	0.882	22.32	4.01
		9/18/2014	241.00	-103.0	6.77	0.830	13.03	0.58
		8/18/2015	80.10	-83.0	6.68	0.920	14.39	2.50
PM AIRSHAFT	50'	4/23/2012	1.50	197.0	6.53	0.061	11.10	6.03
		9/16/2014	2.30	360.0	5.43	0.057	12.50	7.88
		8/12/2015	23.40	-197.8	6.45	0.659	14.80	2.73
PM AIRSHAFT	180'	8/22/2007	NR	30.7	5.89	NR	NR	3.19
		10/15/2007	NR	-51.2	6.42	NR	NR	4.49
		5/7/2008	1.30	98.8	5.76	0.051	13.27	6.78
		9/18/2008	7.00	-77.3	6.11	0.014	14.56	1.50
		7/10/2009	3.65	30.8	5.99	0.350	14.44	0.37
		10/29/2009	6.50	17.8	5.97	0.048	12.73	0.04
		6/4/2010	0.61	92.1	6.15	0.035	12.78	5.50
		5/24/2011	1.40	-17.0	6.18	0.204	9.06	4.73
		4/23/2012	0.00	207.0	6.47	0.039	10.84	6.25
		9/16/2014	2.90	-345.0	5.99	0.551	12.79	0.87
		8/17/2015	35.00	-95.0	6.27	0.424	17.75	8.03
PM AIRSHAFT	230'	8/22/2007	NR	-35.5	6.10	NR	NR	1.86
		10/15/2007	NR	-58.6	6.36	NR	NR	4.03
		5/7/2008	0.00	-43.6	5.96	1.074	12.94	1.22
		9/18/2008	24.00	-80.6	6.66	0.006	17.35	3.83
		7/10/2009	4.57	30.1	5.62	0.355	14.95	0.45
		10/29/2009	1.02	-86.8	6.08	0.833	12.76	0.35
		6/4/2010	0.27	-87.3	6.08	0.783	12.81	0.25
		5/24/2011	82.20	-69.0	6.19	0.978	9.00	0.33
		4/24/2012	0.00	180.0	6.62	0.065	11.00	9.01
		9/17/2014	0.00	-106.0	6.21	0.970	14.44	0.57
		8/18/2015	0.00	-95.0	6.29	0.941	15.52	2.00

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

Geochemical parameters reported at time of sampling.

Table 4D
Summary of Field Parameters at Sampling Time - Overburden Wells - August 2015

Ringwood Mines/Landfill Superfund Site

Well ID	Sample Date	Sample Time	Sample Method	Minutes elapsed	Rate (ml/pm)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water (feet)	Diss. Oxygen (mg/L)
OB-1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
OB-2	8/12/2015	12:55	Low Flow	30	200	16.4	225	6.05	0.124	14.70	20.70	7.00
OB-3	8/10/2015	11:50	Low Flow	30	200	28.6	84	6.37	0.749	13.80	7.95	5.15
OB-4	8/10/2015	14:30	Low Flow	45	240	0.0	-83	6.71	1.050	13.72	20.42	3.70
OB-5	8/10/2015	10:25	Low Flow	65	240	0.0	-136	6.72	0.798	13.20	5.52	5.00
OB-6	8/6/2015	10:05	Low Flow	45	300	16.6	23	6.32	0.231	13.02	11.68	0.00
OB-7	8/24/2015	12:50	Low Flow	55	300	17.8	-26	6.91	0.529	12.82	6.64	0.00
OB-10	8/14/2015	10:20	Low Flow	40	240	6.5	136	6.28	0.108	13.10	6.93	2.26
OB-11R	8/6/2015	12:00	Low Flow	50	300	13.8	-100	6.94	0.536	12.28	17.93	2.55
OB-12	8/10/2015	14:45	Low Flow	35	200	65.7	236	5.73	0.917	11.60	14.60	5.73
OB-13	8/10/2015	9:45	Low Flow	30	200	40.5	146	5.99	0.749	11.60	21.32	2.92
OB-14A	8/13/2015	10:55	Low Flow	30	200	14.7	-58	6.08	0.701	17.00	11.90	0.03
OB-14B	8/13/2015	10:20	Low Flow	35	240	0.0	-99	6.85	0.739	13.25	14.67	1.13
OB-15B	8/24/2015	11:15	Low Flow	40	220	44.8	-14	8.09	0.173	14.80	4.27	0.01
OB-16	8/13/2015	15:45	Low Flow	40	240	11.3	-61	6.45	0.915	16.00	6.88	1.56
OB-17	8/13/2015	14:05	Low Flow	30	200	45.0	-8	6.45	0.647	15.45	6.33	0.00
OB-18	8/13/2015	14:25	Low Flow	45	240	22.8	118	6.72	0.330	11.68	10.84	0.66
OB-19	8/5/2015	10:40	Low Flow	37	225	11.4	-86	6.37	0.138	17.10	13.13	6.00
OB-20A	8/5/2015	10:35	Low Flow	35	350	80.4	-83	6.3	0.251	11.47	16.76	0.00
OB-20B	8/5/2015	14:10	Low Flow	30	225	25.3	-67	3.64	0.478	12.50	16.70	0.00
OB-21	8/6/2015	10:35	Low Flow	55	320	202.0	76	6.28	0.113	12.54	9.46	7.51
OB-22	NS	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
OB-23	NS	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
OB-24	8/13/2015	9:50	Low Flow	30	200	27.2	-35	7.27	0.688	13.83	8.00	3.55
OB-25	8/13/2015	9:50	Low Flow	30	125	0.0	117	6.87	0.425	14.57	13.25	4.32
OB-26	---	---	NS	---	---	---	---	---	---	---	---	---
OB-27	8/6/2015	15:20	Low Flow	50	300	23.0	-87	6.93	0.362	13.48	16.22	0.65
OB-28	8/13/2015	15:10	Low Flow	30	200	45.0	33	6.65	0.892	13.07	2.40	0.00
OB-29	8/12/2015	15:30	Low Flow	45	240	29.4	37	6.49	0.111	12.53	5.82	9.50
OB-30A	NS	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
OB-30B	8/6/2015	15:10	Low Flow	40	320	50.3	234	5.26	0.282	11.34	21.37	0.00
OB-30C	8/6/2015	15:05	Low Flow	30	200	0.0	-130	8.55	0.366	12.26	20	8.51
SC-1	8/4/2015	10:40	Low Flow	30	200	30.3	-31	5.83	0.394	17.07	15.35	0.31
SC-2	8/12/2015	14:20	Low Flow	30	200	23.6	137	6.47	0.474	15.6	60.28	0.79

Notes:
--- = well was destroyed
°C = degrees Celsius
mg/L = milligrams per liter
mL/pm = milliliters per minute
mmhos/cm = millimhos per centimeter
mV = millivolts
NTU = Nephelometric Turbidity Unit
ORP = oxidation-reduction potential
SU = Standard Units
NS = Not Sampled
NR = Not Recorded

Table 4E
Summary of Field Parameters at Sampling Time - Bedrock Monitoring Wells - August 2015

Ringwood Mines/Landfill Superfund Site

Well ID	Interval (ft bgs)	Sample Date	Sample Time	Sample Method	Minutes elapsed	Rate (ml/pm)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water (feet)	Dissolved Oxygen (mg/L)
RW-1	64 to 74	NS	NS	ZIST	NS	NS	NS	NS	NS	NS	NS	NS	NS
RW-1	131 to 141	NS	NS	ZIST	NS	NS	NS	NS	NS	NS	NS	NS	NS
RW-2	279 to 289	8/21/2015	13:45	ZIST	15	100	0	-233	10.73	1.270	23.27	NM	2.51
RW-2	452 to 462	8/25/2015	13:30	ZIST	19	50	0.0	-33	11.28	3.110	19.43	NM	9.89
RW-3	77 to 87	8/6/2015	14:35	ZIST	20	75	0.0	-26	5.89	0.384	16.79	NM	2.40
RW-3DS	155 to 160	8/25/2015	8:40	ZIST	11	100	8.0	-84	10.40	1.640	19.65	NM	1.61
RW-3DD	175 to 180	8/10/2015	14:25	ZIST	15	100	11.2	-150	10.58	0.283	19.40	NM	13.45
RW-4A	62 to 72	8/10/2015	12:15	ZIST	34	70	1.4	51	7.40	0.094	18.52	NM	14.75
RW-4A	113 to 123	8/24/2015	9:35	ZIST	24	60	0.0	194	6.75	0.126	15.04	NM	11.11
RW-4	333 to 343	8/24/2015	11:25	ZIST	18	100	0.0	-15	11.40	0.532	16.10	NM	10.90
RW-4	393 to 403	8/10/2015	9:40	ZIST	22	75	26.8	124	8.25	0.356	0.76	NM	14.48
RW-5	99 to 119	8/5/2015	14:35	Low-flow	45	125	46.2	-283	10.62	0.472	15.75	13.99	5.10
RW-5A	54 to 74	8/24/2015	10:25	Low-flow	55	280	36.8	-24	6.12	0.589	11.89	19.68	0.00
RW-6	99 to 119	8/6/2015	10:30	Low-flow	35	200	17.9	-92	5.61	0.542	12.12	13.80	0.00
RW-6A	58 to 78	8/4/2015	14:15	Low-flow	30	200	34.3	-43	5.69	0.619	17.01	14.98	0.35
RW-7	99 to 119	8/6/2015	10:05	Low-flow	35	200	49.8	-15	6.70	0.110	13.19	5.70	9.63
RW-8A	47 to 57	NS	DRY	ZIST	NS	NS	NS	NS	NS	NS	NS	NS	NS
RW-8	163 to 173	8/18/2015	14:15	ZIST	20	150	0	-16.0	7.63	0.493	19.89	NM	9.75
RW-8*	204 to 214	8/19/2015 - 8/20/2015	11:30	ZIST	---	---	---	---	---	---	---	NM	---
RW-9A	25 to 35	NS	DRY	ZIST	NS	NS	NS	NS	NS	NS	NS	NS	NS
RW-9A*	85 to 95	8/20/2015 - 8/21/2015	10:45	ZIST	---	---	---	---	---	---	---	NM	---
RW-9	139 to 149	NS	DRY	ZIST	NS	NS	NS	NS	NS	NS	NS	NS	NS
RW-9	206 to 216	8/20/2015 - 8/21/2015	9:25	ZIST	---	---	---	---	---	---	---	NM	---
RW-10A	51 to 61	8/18/2015 - 8/19/2015	9:15	ZIST	37	70	0.0	-22	7.34	0.467	18.14	NM	11.14
RW-10A	75 to 85	8/18/2015	10:20	ZIST	29	80	0.0	167	6.91	0.352	15.91	NM	3.88
RW-10	120 to 130	8/18/2015 - 8/19/2015	9:25	ZIST	37	50	5.5	-51	11.12	0.704	17.10	NM	3.57
RW-10	185 to 195	8/18/2015	11:25	ZIST	12	100	2.5	-41	11.13	0.517	16.99	NM	1.61
RW-11S	236 to 241	8/17/2015	15:13	ZIST	13	150	0.0	101	7.18	0.105	17.75	NM	10.43
RW-11D	262 to 267	8/25/2015 - 08/26/2015	10:30	ZIST	2	100	32.1	-141	12.59	1.200	23.10	NM	2.50
RW-12	55 to 65	8/17/2015	11:10	ZIST	60	50	0.0	-100	11.05	1.480	26.1	NM	1.24
RW-12	130 to 140	8/12/2015	12:49	ZIST	14	100	2.9	-78	11.5	1.140	20.3	NM	12.51
RW-13	71 to 91	8/24/2015	13:35	Low-flow	40	300	142.0	97.5	7.87	0.625	16.1	17.41	0.68
RW-13	100 to 120	8/12/2015 - 8/13/2015	9:15	ZIST	---	---	---	---	---	---	---	NM	---
RW-13	150 to 170	8/12/2015	11:10	ZIST	40	75	2.1	-65	7.73	0.339	21.04	NM	9.00

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

Table 4F
Summary of Field Parameters at Sampling Time - Peters and Cannon Mine Shafts - August 2015

Ringwood Mines/Landfill Superfund Site

Well ID	Sample Depth (ft bgs)	Sample Date	Sample Time	Sample Method	Minutes elapsed	Rate (mL/pm)	Turbidity (NTUs)	ORP (mV)	pH (SU)	Conductivity (mmhos/cm)	Temperature (ºC)	Depth to Water (feet)	Dissolved Oxygen (mg/L)
PMAirShaft	50	8/12/2015	10:05	Low Flow	35	240	23.4	-197	6.45	0.659	14.8	8.92	2.73
	180	8/17/2015	12:05	Low Flow	45	400	35.0	-95	6.27	0.424	17.75	8.98	8.03
	230	8/18/2015	10:50	Low Flow	45	360	0.0	-95	6.29	0.941	15.32	9.02	2
CMShaft	50	8/14/2015	10:25	Low Flow	30	200	16.1	-52	6.46	0.105	16.7	10.00	2.23
	100	8/17/2015	15:10	Low Flow	45	200	28.5	-89	6.69	0.914	10.04	14.49	3.2
	160	8/17/2015	16:45	Low Flow	50	350	37.0	-77	6.61	0.940	12.42	10.01	2.06
	275	8/18/2015	13:15	Low Flow	75	320	80.1	-83	6.68	0.920	14.39	10	2.5

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

Table 4G
Summary of Surface Water Field Parameters - August 2015

Ringwood Mines/Landfill Superfund Site

Surface Location	Date	Time (hrs.)	NTU	Redox	pH	Conductivity (ms/cm)	Temperature (C˚)	D.O. (mg/l)	Stream width (inches)	Flow rate (ft/s)
SR 3-Seep-2	8/19/2015	1115	52.5	-36	6.27	0.264	15.6	3.88	NA	NA
SR 3 Pond	8/19/2015	1145	18.9	-42	6.75	0.178	24.67	1.3	NA	NA
SR 3-Seep-1	8/19/2015	1210	43.8	-48	6.57	0.211	16.86	3.62	NA	NA
SW-NOB -02	8/19/2015	1430	10.1	-38	6.77	0.101	23.11	10.88	8	0.23
SW-PAB -04	8/19/2015	1500	14.4	17	6.95	0.181	22.71	6.19	18	0.14
SW-PMB - 02	8/20/2015	930	8.1	-29	7.7	0.509	20.14	11.18	18	0.18
SW-PMB - 01	8/20/2015	1010	12.2	-38	7.42	0.547	22.3	5.17	12	0.15
SW-3	8/20/2015	1100	18.1	-40	7.21	1.87	21.23	8.78	7	0.18
SW-MRB-03	8/20/2015	1140	20.4	-35	7.16	0.481	23.22	7.3	21	0.13
SW-MRB-02	8/20/2015	1215	44.5	-27	6.34	0.091	23.56	5.47	17	0.05
SW-MRB-01	8/20/2015	1415	49.3	39	5.89	0.095	24.32	6.22	12	0
SW-MRB-00	8/20/2015	1500	43.7	95	5.98	0.06	24.93	4.95	42	0
PMP Pond	8/20/2015	1600	18.8	-6	7.03	0.115	27.61	5.9	NA	NA
Cannon Seep	8/21/2015	**	**	**	**	**	**	**	**	**
SW-PAB-03	8/21/2015	1030	21.3	9	6.26	0.251	19.98	2.68	19	0.2
SW-PAB-02	8/21/2015	1125	28.2	17	7.07	0.172	24.19	3.41	24	0.07
SW-PAB-01A	8/21/2015	1220	23.7	73	7.16	0.171	21.21	8.4	21	0.19
SW-PAB-01	8/21/2015	1245	15.6	82	5.92	0.077	16.24	6.78	28	0.49
SW-11	8/21/2015	1310	10.7	3	7.28	0.081	20.74	10.44	37	0.12
SW-PAB-00	8/21/2015	1350	15.5	14	7.15	0.083	20.62	11.83	25	0.27
SW-NOB-01	8/24/2015	**	**	**	**	**	**	**	**	**

** Dry

TABLE 5A
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-19	OB-20A	OB-20B	OB-25	OB-21	OB-27	OB-30C
1,1-Dichloroethane	ug/l	50	0.32 J			0.26 J			0.38 J	
1,4-Dichlorobenzene	ug/l	75								
1,4-Dioxane	ug/l	10	4.3 J			0.95 J			6.2 J	
2-Butanone (MEK)	ug/l	300								
Acetone	ug/l	6000								
Benzene	ug/l	1	2.9			0.27 J			3	
Carbon disulfide	ug/l	700								
Chlorobenzene	ug/l	50								
Chloroethane	ug/l	5	23	0.39 J		1.8			83	
Chloromethane	ug/l				0.37 J					
cis-1,2-Dichloroethene	ug/l	70	0.37 J						0.39 J	
Cyclohexane	ug/l		1.9 J		0.19 J	0.87 J			1.6 J	
Ethylbenzene	ug/l	700								
Isopropylbenzene	ug/l	700	0.36 J						2.3	
Methyl tert-butyl ether	ug/l									0.28 J
Methylcyclohexane	ug/l		0.50 J			0.54 J			0.98 J	
Methylene Chloride	ug/l	3	0.23 J		0.35 J			0.31 J	0.33 J	
Toluene	ug/l	600								
Xylenes, Total	ug/l	1000								
Tentatively Identified Compounds (TICs)										
1,2,3-Trimethylbenzene - TIC	ug/l					0.26 J			3.4	
1,2,4-Trimethylbenzene - TIC	ug/l									
1,3,5-Trimethylbenzene - TIC	ug/l									
1-Hexanol, 2-ethyl- - TIC	ug/l	200								
1H-Indene, 2,3-dihydro-1,2-dimethyl- - TIC	ug/l								5.4 NJ	
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	ug/l								11 NJ	
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	ug/l		4.8 NJ						5.2 NJ	
1-Propene, 2-methyl- - TIC	ug/l									
2-Butanone, 3,3-dimethyl- - TIC	ug/l									
3-Phenylbut-1-ene - TIC	ug/l		4.7 NJ							
4-Isopropyltoluene - TIC	ug/l									
Benzene, (1-methyl-1-propenyl)-, (E)- - TIC	ug/l								3.8 NJ	
Benzene, (3-methyl-2-butenyl)- - TIC	ug/l								3.4 NJ	
Benzene, 1,2,3,4-tetramethyl- - TIC	ug/l								19 NJ	
Benzene, 1,2,3,5-tetramethyl- - TIC	ug/l									
Benzene, 1,2,4,5-tetramethyl- - TIC	ug/l								8.4 NJ	
Benzene, 1,3-diethyl- - TIC	ug/l								10 NJ	
Benzene, 1,4-diethyl- - TIC	ug/l					3.6 NJ				

TABLE 5A
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-19	OB-20A	OB-20B	OB-25	OB-21	OB-27	OB-30C
Benzene, 1-ethyl-2,4-dimethyl- - TIC	ug/l								7.3 NJ	
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	ug/l					2.8 NJ				
Benzene, 2-ethyl-1,4-dimethyl- - TIC	ug/l									
Benzene, 4-ethyl-1,2-dimethyl- - TIC	ug/l									
Cyclopentane, methyl- - TIC	ug/l		4.0 NJ							
Cysteic acid - TIC	ug/l									
Ethyl acrylate - TIC	ug/l									
Hexane - TIC	ug/l	30	0.36 J			0.21 J				
Indan, 1-methyl- - TIC	ug/l		2.7 NJ						6.0 NJ	
Indane - TIC	ug/l									
Isobutyl alcohol - TIC	ug/l									
Naphthalene - TIC	ug/l	300				1.6 J			5.9	
n-Butylbenzene - TIC	ug/l									
N-Propylbenzene - TIC	ug/l									
Propene, hexafluoro- - TIC	ug/l									
Silanol, dimethyl(1,1,2-trimethylpropyl) - TIC	ug/l						3.2 NJ			
tert-Butyldimethylsilanol - TIC	ug/l									
Tetrahydrofuran - TIC	ug/l	10								
Total Alkanes - TIC	ug/l									
Total Alkanes TIC - TIC	ug/l		0.36 NJ			0.21 NJ				
Unknown - TIC	ug/l								4.6 NJ	
See Table 12 for validation qualifiers.										
Result exceeds NJGWQS (NJAC 7:9C March 2014)										

TABLE 5A
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 3 (77-87)	RW- 3 DS (155-160)	RW- 3 DS (155-160)-Dup-04-082515	RW- 3DD (175-180)	RW- 4 (393-403)	RW- 4A (113-123)	RW- 5	RW- 5A	RW- 6
1,1-Dichloroethane	ug/l	0.26 J	1	1	1.9					0.62 J
1,4-Dichlorobenzene	ug/l									
1,4-Dioxane	ug/l	22	38 J	36 J	20			6.7 J		1.5 J
2-Butanone (MEK)	ug/l				5.5 J					
Acetone	ug/l			3.0 UB	12 J			4.9 UB		
Benzene	ug/l				0.44 J				0.22 J	1.2
Carbon disulfide	ug/l		11	12	3.7					
Chlorobenzene	ug/l									
Chloroethane	ug/l							1.4		3.3
Chloromethane	ug/l									
cis-1,2-Dichloroethene	ug/l				0.22 J					
Cyclohexane	ug/l									0.48 J
Ethylbenzene	ug/l		0.26 J	0.23 J						
Isopropylbenzene	ug/l									
Methyl tert-butyl ether	ug/l									
Methylcyclohexane	ug/l									0.33 J
Methylene Chloride	ug/l									
Toluene	ug/l		0.60 J	0.48 J						
Xylenes, Total	ug/l									
Tentatively Identified Compounds (TICs)										
1,2,3-Trimethylbenzene - TIC	ug/l									
1,2,4-Trimethylbenzene - TIC	ug/l									
1,3,5-Trimethylbenzene - TIC	ug/l									
1-Hexanol, 2-ethyl- - TIC	ug/l									
1H-Indene, 2,3-dihydro-1,2-dimethyl- - TIC	ug/l									
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	ug/l									
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	ug/l									
1-Propene, 2-methyl- - TIC	ug/l		3.3 NJ	5.5 NJ						
2-Butanone, 3,3-dimethyl- - TIC	ug/l									
3-Phenylbut-1-ene - TIC	ug/l									
4-Isopropyltoluene - TIC	ug/l									
Benzene, (1-methyl-1-propenyl)-, (E)- - TIC	ug/l									
Benzene, (3-methyl-2-butenyl)- - TIC	ug/l									
Benzene, 1,2,3,4-tetramethyl- - TIC	ug/l									
Benzene, 1,2,3,5-tetramethyl- - TIC	ug/l									
Benzene, 1,2,4,5-tetramethyl- - TIC	ug/l									
Benzene, 1,3-diethyl- - TIC	ug/l									
Benzene, 1,4-diethyl- - TIC	ug/l									

TABLE 5A
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 3 (77-87)	RW- 3 DS (155-160)	RW- 3 DS (155-160)-Dup-04-082515	RW- 3DD (175-180)	RW- 4 (393-403)	RW- 4A (113-123)	RW- 5	RW- 5A	RW- 6
Benzene, 1-ethyl-2,4-dimethyl- - TIC	ug/l									
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	ug/l									
Benzene, 2-ethyl-1,4-dimethyl- - TIC	ug/l									
Benzene, 4-ethyl-1,2-dimethyl- - TIC	ug/l									
Cyclopentane, methyl- - TIC	ug/l									
Cysteic acid - TIC	ug/l		8.6 NJ							
Ethyl acrylate - TIC	ug/l									
Hexane - TIC	ug/l									
Indan, 1-methyl- - TIC	ug/l									
Indane - TIC	ug/l									
Isobutyl alcohol - TIC	ug/l		38 J	47 J						
Naphthalene - TIC	ug/l									
n-Butylbenzene - TIC	ug/l									
N-Propylbenzene - TIC	ug/l									
Propene, hexafluoro- - TIC	ug/l					22 NJ				
Silanol, dimethyl(1,1,2-trimethylpropyl) - TIC	ug/l									
tert-Butyldimethylsilanol - TIC	ug/l						3.1 NJ			
Tetrahydrofuran - TIC	ug/l				1.1 J					
Total Alkanes - TIC	ug/l									
Total Alkanes TIC - TIC	ug/l									
Unknown - TIC	ug/l									
See Table 12 for validation qualifiers.										
Result exceeds NJGWQS (NJAC 7:9C March 2014)										

TABLE 5A
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 6A	RW-11 S (236-241)	RW-11D (262-267)	RW-13 (71-91)	RW-13 (100-120)	RW-13 (150-170)	SC-1
1,1-Dichloroethane	ug/l	0.42 J						
1,4-Dichlorobenzene	ug/l	0.27 J						
1,4-Dioxane	ug/l	2.7 J	1.1 J	26 J				0.39 J
2-Butanone (MEK)	ug/l			29 J		3.2 J		
Acetone	ug/l			45		41		
Benzene	ug/l	7.7		1.6				1.3
Carbon disulfide	ug/l			63				
Chlorobenzene	ug/l			0.22 J				0.21 J
Chloroethane	ug/l	2						0.53 J
Chloromethane	ug/l							
cis-1,2-Dichloroethene	ug/l							
Cyclohexane	ug/l	4.1 J				0.14 J		2.0 J
Ethylbenzene	ug/l							2
Isopropylbenzene	ug/l	4.6						1.6
Methyl tert-butyl ether	ug/l							
Methylcyclohexane	ug/l	0.74 J						1.1 J
Methylene Chloride	ug/l						0.34 UB	
Toluene	ug/l					0.65 UB		0.61 J
Xylenes, Total	ug/l	12						60
Tentatively Identified Compounds (TICs)								
1,2,3-Trimethylbenzene - TIC	ug/l	13						3.6
1,2,4-Trimethylbenzene - TIC	ug/l							4.7
1,3,5-Trimethylbenzene - TIC	ug/l	2.6						1.1
1-Hexanol, 2-ethyl- - TIC	ug/l					6.7 NJ		
1H-Indene, 2,3-dihydro-1,2-dimethyl- - TIC	ug/l							
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	ug/l							
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	ug/l							
1-Propene, 2-methyl- - TIC	ug/l							
2-Butanone, 3,3-dimethyl- - TIC	ug/l			3.1 NJ				
3-Phenylbut-1-ene - TIC	ug/l	4.3 NJ						
4-Isopropyltoluene - TIC	ug/l							0.26 J
Benzene, (1-methyl-1-propenyl)-, (E)- - TIC	ug/l	4.7 NJ						
Benzene, (3-methyl-2-butenyl)- - TIC	ug/l							
Benzene, 1,2,3,4-tetramethyl- - TIC	ug/l	10 NJ						5.7 NJ
Benzene, 1,2,3,5-tetramethyl- - TIC	ug/l							3.4 NJ
Benzene, 1,2,4,5-tetramethyl- - TIC	ug/l	3.8 NJ						
Benzene, 1,3-diethyl- - TIC	ug/l							
Benzene, 1,4-diethyl- - TIC	ug/l							

TABLE 5A
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 6A	RW-11 S (236-241)	RW-11D (262-267)	RW-13 (71-91)	RW-13 (100-120)	RW-13 (150-170)	SC-1
Benzene, 1-ethyl-2,4-dimethyl- - TIC	ug/l	13 NJ						
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	ug/l	15 NJ						5.8 NJ
Benzene, 2-ethyl-1,4-dimethyl- - TIC	ug/l							4.9 NJ
Benzene, 4-ethyl-1,2-dimethyl- - TIC	ug/l	3.3 NJ						
Cyclopentane, methyl- - TIC	ug/l	10 NJ						3.3 NJ
Cysteic acid - TIC	ug/l							
Ethyl acrylate - TIC	ug/l							0.63 NJ
Hexane - TIC	ug/l							
Indan, 1-methyl- - TIC	ug/l							
Indane - TIC	ug/l	19 NJ						4.5 NJ
Isobutyl alcohol - TIC	ug/l							
Naphthalene - TIC	ug/l	8.1 B						7.5 B
n-Butylbenzene - TIC	ug/l	1.5						0.95 J
N-Propylbenzene - TIC	ug/l	4.8						0.58 J
Propene, hexafluoro- - TIC	ug/l							
Silanol, dimethyl(1,1,2-trimethylpropyl) - TIC	ug/l							
tert-Butyldimethylsilanol - TIC	ug/l							
Tetrahydrofuran - TIC	ug/l				0.98 J			
Total Alkanes - TIC	ug/l	0.00 NJ						0.00 NJ
Total Alkanes TIC - TIC	ug/l							
Unknown - TIC	ug/l							
See Table 12 for validation qualifiers.								
Result exceeds NJGWQS (NJAC 7:9C March 2014)								

TABLE 5B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) and PCBs IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

SVOC Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-15B	OB-20A	OB-20B	OB-21	OB-25	OB-27
2,4-Dinitrophenol	ug/l	40							
Acetophenone	ug/l	700							
Bis(2-chloroethyl)ether	ug/l	7							
Bis(2-ethylhexyl) phthalate	ug/l	3							
Naphthalene	ug/l	300				1.0 J			2.5
Pentachlorophenol	ug/l	0.3					0.10 J		
Phenol	ug/l	2000							
SVOC Tentatively Identified Compounds (TICs)									
(-)-10-Camphorsulfonyl chloride - TIC	ug/l		7.6 NJ						
.alpha.-Pinene - TIC	ug/l								
1,4-Dioxane - TIC	ug/l	10	1.5 J						2.2 J
17-Pentatriacontene - TIC	ug/l								
1-Heptadecene - TIC	ug/l								
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	ug/l								9.0 NJ
1-Methylnaphthalene - TIC	ug/l								2.4
1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	ug/l								
1-Phenyl-1-butene - TIC	ug/l								5.2 NJ
2(3H)-Benzothiazolone - TIC	ug/l								
2-HYDRAZINO-2-IMIDAZOLINE - TIC	ug/l								
2-Mercaptobenzothiazole - TIC	ug/l								
3,5-di-tert-Butyl-4-hydroxybenzaldehyde - TIC	ug/l								
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	ug/l								
3H-Benz[e]indene, 2-methyl- - TIC	ug/l								
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	ug/l								
9,12-Octadecadienoic acid (Z,Z)- - TIC	ug/l								
9-Octadecenoic acid, (E)- - TIC	ug/l								
Allyldimethylphenylsilane - TIC	ug/l								
Benzenamine, N,N-dimethyl-4-nitro- - TIC	ug/l								
Benzene, 1,2,3,4-tetramethyl- - TIC	ug/l								
Benzene, 1,2,3-trimethyl- - TIC	ug/l								
Benzene, 1,2,4,5-tetramethyl- - TIC	ug/l								3.6 NJ
Benzene, 1,4-bis(1-methylethenyl)- - TIC	ug/l								3.4 NJ
Benzene, 4-ethyl-1,2-dimethyl- - TIC	ug/l								

TABLE 5B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) and PCBs IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

SVOC Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-15B	OB-20A	OB-20B	OB-21	OB-25	OB-27
Benzenesulfonamide, N-butyl- - TIC	ug/l								
Benzenesulfonamide, N-cyclohexyl-4-methy - T	ug/l		5.9 NJ		4.2 NJ	4.4 NJ			
Benzoic Acid - TIC	ug/l	30000							
Benzoic acid, 2,4-dimethyl- - TIC	ug/l								
Benzoic acid, 2,5-dimethyl- - TIC	ug/l								
Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	ug/l								
Benzothiazole - TIC	ug/l								
Benzyl Alcohol - TIC	ug/l	2000							
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	ug/l								
Cyclohexanamine, N-cyclohexyl- - TIC	ug/l								
Diethyltoluamide - TIC	ug/l								
Dodecanoic acid - TIC	ug/l								
Ethanol, 1-(2-butoxyethoxy)- - TIC	ug/l								
Ethanol, 2-(2-butoxyethoxy)- - TIC	ug/l								
Furan, tetrahydro-2,5-dipropyl- - TIC	ug/l								
Heptadecane, 2,6,10,15-tetramethyl- - TIC	ug/l								
Heptadecanoic acid - TIC	ug/l								
Hexadecanoic acid, butyl ester - TIC	ug/l								
Indane - TIC	ug/l								4.9 NJ
Naphthalene, 1-ethyl- - TIC	ug/l								4.5 NJ
Naphthalene, 2,7-dimethyl- - TIC	ug/l								4.0 NJ
n-Hexadecanoic acid - TIC	ug/l								
Nonanoic acid - TIC	ug/l								
Octadecanoic acid - TIC	ug/l								
Oleic Acid - TIC	ug/l			3.1 NJ					
p-Benzoquinone - TIC	ug/l			7.0 NJ					
Phenol, 4-(1,1-dimethylpropyl)- - TIC	ug/l								
Phenol, 4,4'-(1-methylethylidene)bis- - TIC	ug/l								6.2 NJ
Phenol, p-tert-butyl- - TIC	ug/l		3.4 NJ						
Squalene - TIC	ug/l								
Tetradecane - TIC	ug/l							4.8 NJ	
Tetradecanoic acid - TIC	ug/l								
Tridecanoic acid - TIC	ug/l							3.6 NJ	

TABLE 5B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) and PCBs IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

SVOC Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-15B	OB-20A	OB-20B	OB-21	OB-25	OB-27
Triethylene glycol monododecyl ether - TIC	ug/l								
PCBs									
None	ug/l								
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 5B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) and PCBs IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

SVOC Parameter	Result Unit	RW- 3 (77-87)	RW- 3 DS (155-160)	RW- 3 DS (155-160)-Dup-04-082515	RW- 3DD (175-180)	RW- 4 (333-343)	RW- 4 (393-403)	RW- 4A (113-123)	RW- 5A
2,4-Dinitrophenol	ug/l		6.6 J	6.8 J					
Acetophenone	ug/l								
Bis(2-chloroethyl)ether	ug/l								
Bis(2-ethylhexyl) phthalate	ug/l				2.8 B		2.4 UB		
Naphthalene	ug/l								
Pentachlorophenol	ug/l								
Phenol	ug/l		3.0 J	2.7 J	3.6				
SVOC Tentatively Identified Compounds (TICs)									
(-)-10-Camphorsulfonyl chloride - TIC	ug/l								
.alpha.-Pinene - TIC	ug/l								
1,4-Dioxane - TIC	ug/l	9.0 J	9.9 J	9.6 J					
17-Pentatriacontene - TIC	ug/l								
1-Heptadecene - TIC	ug/l								
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	ug/l								
1-Methylnaphthalene - TIC	ug/l								
1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	ug/l								
1-Phenyl-1-butene - TIC	ug/l								
2(3H)-Benzothiazolone - TIC	ug/l								
2-HYDRAZINO-2-IMIDAZOLINE - TIC	ug/l								
2-Mercaptobenzothiazole - TIC	ug/l		7.6 NJ	8.0 NJ					
3,5-di-tert-Butyl-4-hydroxybenzaldehyde - TIC	ug/l		9.5 NJ	9.5 NJ					
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	ug/l		8.8 NJ	10 NJ					
3H-Benz[e]indene, 2-methyl- - TIC	ug/l								
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	ug/l		20 NJ	22 NJ					
9,12-Octadecadienoic acid (Z,Z)- - TIC	ug/l								
9-Octadecenoic acid, (E)- - TIC	ug/l		18 NJ	19 NJ					
Allyldimethylphenylsilane - TIC	ug/l								
Benzenamine, N,N-dimethyl-4-nitro- - TIC	ug/l								
Benzene, 1,2,3,4-tetramethyl- - TIC	ug/l								
Benzene, 1,2,3-trimethyl- - TIC	ug/l								
Benzene, 1,2,4,5-tetramethyl- - TIC	ug/l								
Benzene, 1,4-bis(1-methylethenyl)- - TIC	ug/l								
Benzene, 4-ethyl-1,2-dimethyl- - TIC	ug/l								

TABLE 5B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) and PCBs IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

SVOC Parameter	Result Unit	RW- 3 (77-87)	RW- 3 DS (155-160)	RW- 3 DS (155-160)-Dup-04-082515	RW- 3DD (175-180)	RW- 4 (333-343)	RW- 4 (393-403)	RW- 4A (113-123)	RW- 5A
Benzenesulfonamide, N-butyl- - TIC	ug/l		7.6 NJ	8.2 NJ					
Benzenesulfonamide, N-cyclohexyl-4-methy - T	ug/l								
Benzoic Acid - TIC	ug/l								
Benzoic acid, 2,4-dimethyl- - TIC	ug/l		5.5 NJ						
Benzoic acid, 2,5-dimethyl- - TIC	ug/l			6.1 NJ					
Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	ug/l			5.8 NJ					
Benzothiazole - TIC	ug/l		4.5 NJ						
Benzyl Alcohol - TIC	ug/l								
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	ug/l								
Cyclohexanamine, N-cyclohexyl- - TIC	ug/l								
Diethyltoluamide - TIC	ug/l		5.6 NJ	8.0 NJ	14 NJ				5.4 NJ
Dodecanoic acid - TIC	ug/l								
Ethanol, 1-(2-butoxyethoxy)- - TIC	ug/l								
Ethanol, 2-(2-butoxyethoxy)- - TIC	ug/l								
Furan, tetrahydro-2,5-dipropyl- - TIC	ug/l								
Heptadecane, 2,6,10,15-tetramethyl- - TIC	ug/l			4.7 NJ					
Heptadecanoic acid - TIC	ug/l								
Hexadecanoic acid, butyl ester - TIC	ug/l			11 NJ					
Indane - TIC	ug/l								
Naphthalene, 1-ethyl- - TIC	ug/l								
Naphthalene, 2,7-dimethyl- - TIC	ug/l								
n-Hexadecanoic acid - TIC	ug/l		8.7 NJ			5.4 NJ		4.8 NJ	
Nonanoic acid - TIC	ug/l								
Octadecanoic acid - TIC	ug/l		11 NJ						
Oleic Acid - TIC	ug/l					5.5 NJ		15 NJ	6.6 NJ
p-Benzoquinone - TIC	ug/l								
Phenol, 4-(1,1-dimethylpropyl)- - TIC	ug/l								
Phenol, 4,4'-(1-methylethylidene)bis- - TIC	ug/l								
Phenol, p-tert-butyl- - TIC	ug/l								
Squalene - TIC	ug/l								
Tetradecane - TIC	ug/l								
Tetradecanoic acid - TIC	ug/l								
Tridecanoic acid - TIC	ug/l			6.3 NJ					

TABLE 5B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) and PCBs IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

SVOC Parameter	Result Unit	RW- 3 (77-87)	RW- 3 DS (155-160)	RW- 3 DS (155-160)-Dup-04-082515	RW- 3DD (175-180)	RW- 4 (333-343)	RW- 4 (393-403)	RW- 4A (113-123)	RW- 5A
Triethylene glycol monododecyl ether - TIC	ug/l								
PCBs									
None	ug/l								
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 5B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) and PCBs IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

SVOC Parameter	Result Unit	RW- 6	RW- 6A	RW-11D (262-267)	RW-13 (71-91)	RW-13 (100-120)	SC-1
2,4-Dinitrophenol	ug/l			6.6 J			
Acetophenone	ug/l		2.4 J				
Bis(2-chloroethyl)ether	ug/l		3.4 J				2.9 J
Bis(2-ethylhexyl) phthalate	ug/l						
Naphthalene	ug/l		5.6				5.5
Pentachlorophenol	ug/l						
Phenol	ug/l			2.3 J		6.6 J	
SVOC Tentatively Identified Compounds (TICs)							
(-)-10-Camphorsulfonyl chloride - TIC	ug/l						
.alpha.-Pinene - TIC	ug/l		3.8 NJ				
1,4-Dioxane - TIC	ug/l			9.5 J			
17-Pentatriacontene - TIC	ug/l			7.7 NJ			
1-Heptadecene - TIC	ug/l			6.7 NJ			
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	ug/l						
1-Methylnaphthalene - TIC	ug/l						
1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	ug/l					26 NJ	
1-Phenyl-1-butene - TIC	ug/l		6.8 NJ				4.4 NJ
2(3H)-Benzothiazolone - TIC	ug/l		4.2 NJ				6.3 NJ
2-HYDRAZINO-2-IMIDAZOLINE - TIC	ug/l					43 NJ	
2-Mercaptobenzothiazole - TIC	ug/l			12 NJ			
3,5-di-tert-Butyl-4-hydroxybenzaldehyde - TIC	ug/l			7.6 NJ			
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	ug/l			39 NJ			
3H-Benz[e]indene, 2-methyl- - TIC	ug/l				4.6 NJ		
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	ug/l			78 NJ		21 NJ	
9,12-Octadecadienoic acid (Z,Z)- - TIC	ug/l			16 NJ			
9-Octadecenoic acid, (E)- - TIC	ug/l						
Allyldimethylphenylsilane - TIC	ug/l					10 NJ	
Benzenamine, N,N-dimethyl-4-nitro- - TIC	ug/l				7.5 NJ		
Benzene, 1,2,3,4-tetramethyl- - TIC	ug/l		7.0 NJ				4.9 NJ
Benzene, 1,2,3-trimethyl- - TIC	ug/l						6.4 NJ
Benzene, 1,2,4,5-tetramethyl- - TIC	ug/l						
Benzene, 1,4-bis(1-methylethenyl)- - TIC	ug/l						
Benzene, 4-ethyl-1,2-dimethyl- - TIC	ug/l						3.9 NJ

TABLE 5B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) and PCBs IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

SVOC Parameter	Result Unit	RW- 6	RW- 6A	RW-11D (262-267)	RW-13 (71-91)	RW-13 (100-120)	SC-1
Benzenesulfonamide, N-butyl- - TIC	ug/l						
Benzenesulfonamide, N-cyclohexyl-4-methy - T	ug/l	3.4 NJ					8.0 NJ
Benzoic Acid - TIC	ug/l			8.5 NJ			
Benzoic acid, 2,4-dimethyl- - TIC	ug/l						
Benzoic acid, 2,5-dimethyl- - TIC	ug/l						
Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	ug/l						
Benzothiazole - TIC	ug/l						
Benzyl Alcohol - TIC	ug/l					14 NJ	
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	ug/l						4.0 NJ
Cyclohexanamine, N-cyclohexyl- - TIC	ug/l		4.8 NJ				
Diethyltoluamide - TIC	ug/l	7.4 NJ					
Dodecanoic acid - TIC	ug/l					10 NJ	
Ethanol, 1-(2-butoxyethoxy)- - TIC	ug/l			27 NJ			
Ethanol, 2-(2-butoxyethoxy)- - TIC	ug/l					96 NJ	
Furan, tetrahydro-2,5-dipropyl- - TIC	ug/l					9.5 NJ	
Heptadecane, 2,6,10,15-tetramethyl- - TIC	ug/l						
Heptadecanoic acid - TIC	ug/l			8.5 NJ			
Hexadecanoic acid, butyl ester - TIC	ug/l						
Indane - TIC	ug/l		10 NJ				3.6 NJ
Naphthalene, 1-ethyl- - TIC	ug/l						
Naphthalene, 2,7-dimethyl- - TIC	ug/l						
n-Hexadecanoic acid - TIC	ug/l			19 NJ	3.4 NJ	85 NJ	
Nonanoic acid - TIC	ug/l			43 NJ			
Octadecanoic acid - TIC	ug/l			29 NJ		100 NJ	
Oleic Acid - TIC	ug/l				5.7 NJ		
p-Benzoquinone - TIC	ug/l						
Phenol, 4-(1,1-dimethylpropyl)- - TIC	ug/l					12 NJ	
Phenol, 4,4'-(1-methylethylidene)bis- - TIC	ug/l		13 NJ				
Phenol, p-tert-butyl- - TIC	ug/l						
Squalene - TIC	ug/l						7.5 NJ
Tetradecane - TIC	ug/l				3.0 NJ		
Tetradecanoic acid - TIC	ug/l			7.6 NJ			
Tridecanoic acid - TIC	ug/l						

TABLE 5B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) and PCBs IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

SVOC Parameter	Result Unit	RW- 6	RW- 6A	RW-11D (262-267)	RW-13 (71-91)	RW-13 (100-120)	SC-1
Triethylene glycol monododecyl ether - TIC	ug/l					8.3 NJ	
PCBs							
None	ug/l						
See Table 12 for validation qualifiers.							
Result exceeds NJGWQS (NJAC 7:9C March 2014)							

TABLE 5C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS mg/l	OB-11R	OB-15B	OB-19	OB-20A	OB-20B	OB-21	OB-21-DUP-01	OB-25	OB-27	OB-30B
Aluminum	mg/l	0.2	0.072	0.89	0.071	0.084	0.066	2.2	2.2	12.8 B	0.064	0.082
Aluminum, Dissolved	mg/l	0.2	0.0096 U	0.17	0.0096 U	0.0096 U	0.0096 U	0.64	1.1	1.8	0.0096 U	0.011 J
Antimony	mg/l	0.006	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00083 UB	0.0005 U	0.0005 U
Antimony, Dissolved	mg/l	0.006	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00050 J	0.00070 J	0.00054 J	0.0013 J	0.0005 U	0.00061 J
Arsenic	mg/l	0.003	0.025 B	0.0014 J	0.0016 UB	0.0071 B	0.0015 J	0.0014 UB	0.0013 UB	0.0041 B	0.026 B	0.00089 UB
Arsenic, Dissolved	mg/l	0.003	0.00089 UB	0.0011 J	0.00087 UB	0.0020 B	0.0011 UB	0.00056 UB	0.00098 UB	0.0010 J	0.00092 UB	0.00058 J
Barium	mg/l	6	0.098	0.041	0.086	0.14	0.084	0.016	0.017	0.076	0.07	0.029
Barium, Dissolved	mg/l	6	0.044	0.0016 J	0.076	0.12	0.063	0.007	0.01	0.036	0.043	0.028
Beryllium	mg/l	0.001	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Beryllium, Dissolved	mg/l	0.001	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Cadmium	mg/l	0.004	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0018	0.0004 U	0.0004 U
Cadmium, Dissolved	mg/l	0.004	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.00064 J	0.0004 U	0.0004 U
Calcium	mg/l		60.2	23	13.1	28.2	62.6	11.6	11.8	43.4	38.1	24.5
Calcium, Dissolved	mg/l		55.8	21.7	12.7	28.1	58.9	10.8	10.9	39.5	36.3	24.9
Chromium	mg/l	0.07	0.00056 J	0.0022	0.00095 J	0.0011 J	0.00069 J	0.003	0.0032	0.0063	0.0005 U	0.0005 U
Chromium, Dissolved	mg/l	0.07	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00072 J	0.0012 J	0.002	0.0005 U	0.0005 U
Cobalt	mg/l	0.1	0.0022	0.00082 J	0.0005 U	0.00099 J	0.03	0.0021	0.002	0.0053	0.0041	0.0022
Cobalt, Dissolved	mg/l	0.1	0.0017 J	0.0005 U	0.0005 U	0.00088 J	0.028	0.0005 U	0.0005 U	0.00082 J	0.0037	0.0022
Copper	mg/l	1.3	0.0005 U	0.0019 J	0.0075	0.0005 U	0.00065 J	0.016	0.015	0.031	0.0005 U	0.0012 J
Copper, Dissolved	mg/l	1.3	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0016 J	0.0029	0.0082	0.0005 U	0.0015 UB
Cyanide, Total	mg/l	0.1	0.007 U	0.0098 J	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U
Iron	mg/l	0.3	70.4	1.6	16.5	31.7	42.5	3.5	3.3	8.1	52	0.13
Iron, Dissolved	mg/l	0.3	5.4	0.21	4.7	19.8	28.3	0.5	0.88	1.6	5.1	0.019 J
Lead	mg/l	0.005	0.0002 U	0.00063 UB	0.00044 J	0.00044 J	0.00028 J	0.0018 J	0.0017 J	0.011	0.0002 U	0.0002 U
Lead, Dissolved	mg/l	0.005	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00024 J	0.00034 J	0.0010 J	0.0002 U	0.00033 J
Magnesium	mg/l		7.4	5.8	2.5	2.9	11.6	5.5	5.6	9.8	5	5.5
Magnesium, Dissolved	mg/l		7.4	5.7	2.4	2.9	11.2	4.8	5	7.8	5	5.7
Manganese	mg/l	0.05	11.9	4	0.29	0.76	10.2	0.15	0.15	0.34 B	8	1.6
Manganese, Dissolved	mg/l	0.05	11.9	0.42 B	0.31 B	0.79 B	10.6 B	0.0099	0.022	0.051	8.2	1.6
Mercury	mg/l	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Mercury, Dissolved	mg/l	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Nickel	mg/l	0.1	0.00086 J	0.015	0.002	0.0011 J	0.0058	0.005	0.0051	0.01	0.0024	0.0023
Nickel, Dissolved	mg/l	0.1	0.9	0.0012 J	0.0015 J	0.0018 J	0.0072	0.0011 J	0.0012 J	0.0024	0.0027 J	0.0031
Potassium	mg/l		2.8	0.90 J	0.80 J	2.1	3	1.5	1.5	7.7	1.6	2.5
Potassium, Dissolved	mg/l		2.6	0.74 J	0.79 J	2	2.8	1.1	1.2	7.3	1.5	2.5

TABLE 5C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS mg/l	OB-11R	OB-15B	OB-19	OB-20A	OB-20B	OB-21	OB-21-DUP-01	OB-25	OB-27	OB-30B
Selenium	mg/l	0.04	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0017 J	0.00077 J	0.0006 U
Selenium, Dissolved	mg/l	0.04	0.0006 U	0.0006 U	0.00069 J	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Silver	mg/l	0.04	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Silver, Dissolved	mg/l	0.04	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l	50	3.7	4	3.3	3.3	4.8	3.9	15.5	69.9	3.1	23.8
Sodium, Dissolved	mg/l	50	3.5	3.9	3.2	3.1	4.8	3.7	3.9	67.7	3	24
Thallium	mg/l	0.002	0.0002 U	0.0011 UB	0.0002 U	0.0002 U	0.0002 U	0.00055 J	0.0002 U	0.00021 J	0.0002 U	0.0002 U
Thallium, Dissolved	mg/l	0.002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00077 J	0.00029 J	0.0002 U	0.0002 U	0.0002 U
Vanadium	mg/l		0.0017 UB	0.0054 B	0.0041 B	0.0026 B	0.0039 B	0.0050 B	0.0050 B	0.011 B	0.0016 UB	0.0015 UB
Vanadium, Dissolved	mg/l		0.0012 UB	0.0024 B	0.0011 UB	0.0011 UB	0.0011 UB	0.0025 B	0.0033 B	0.0050 B	0.0012 UB	0.0017 UB
Zinc	mg/l	2	0.01 U	0.01 U	0.01 U	0.017 J	0.01 U	0.085	0.011 J	0.052	0.01 U	0.01 U
Zinc, Dissolved	mg/l	2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.013 J	0.01 U	0.01 U
Wet Chemistry												
Bicarbonate Alkalinity as Ca	mg/l		241	66.9	53	122	261	46	43.1	124	174	67.3
Total Alkalinity as CaCO3	mg/l		241	66.9	53	122	261	46	43.1	124	174	67.3
Chloride	mg/l	250	5.37	1.53	1.21	1.75	1.62	20	10	91.7	2.98	33.5
Sulfate	mg/l	250	0.6 U	10.8	1.14	0.6 U	0.6 U	10.5	9.73	9.24	0.6 U	18.6
See Table 12 for validation qualifiers.												
Result exceeds NJGWQS (NJAC 7:9C March 2014)												

TABLE 5C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	OB-30C	RW- 3 (77-87)	RW- 3 DS (155-160)	RW- 3 DS (155-160)-Dup-04-082515	RW- 3DD (175-180)	RW- 4 (333-343)	RW- 4 (393-403)	RW- 4A (62-72)	RW- 4A (113-123)	RW- 5	RW- 5A
Aluminum	mg/l	1.8	0.013 J	0.082	0.077	0.11	0.86	1.6	0.086	0.016 J	0.4	0.055
Aluminum, Dissolved	mg/l	0.11	0.0096 U	0.061 J	0.055 J	0.099	1	0.16	0.016 J	0.0096 U	0.16	0.0096 U
Antimony	mg/l	0.0005 U	0.0005 U	0.00051 J	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Antimony, Dissolved	mg/l	0.00050 J	0.0005 U	0.0025 U	0.0025 U	0.0005 U	0.00055 J	0.0005 U	0.0005 U	0.00063 J	0.00069 J	0.0005 U
Arsenic	mg/l	0.0023 B	0.00088 UB	0.012	0.012	0.02	0.00090 J	0.00059 J	0.0005 U	0.0005 U	0.0089 B	0.0033
Arsenic, Dissolved	mg/l	0.0012 J	0.0005 U	0.014	0.012	0.019	0.0011 J	0.0005 U	0.0005 U	0.0005 U	0.0072 B	0.0011 J
Barium	mg/l	0.025	0.05	0.013	0.013	0.0064	0.019	0.023	0.0041	0.014	0.0094	0.025
Barium, Dissolved	mg/l	0.015	0.045	0.018	0.016	0.0068	0.022	0.014	0.0041	0.015	0.0055	0.025
Beryllium	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Beryllium, Dissolved	mg/l	0.0005 U	0.0005 U	0.0025 U	0.0025 U	0.0005 U ^	0.0005 U	0.0005 U ^	0.0005 U ^	0.0005 U	0.0005 U	0.0005 U
Cadmium	mg/l	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Cadmium, Dissolved	mg/l	0.0004 U	0.0004 U	0.002 U	0.002 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Calcium	mg/l	38.2	58.8	46.6	45.2	21.8	51.4	23.5	9.8	12.9	17.7	76.3
Calcium, Dissolved	mg/l	37.3	57.4	55.6	49.1	22.5	59.8	19.9	9.9	13.4	13.6	69.7
Chromium	mg/l	0.0029	0.0005 U	0.0035	0.0032	0.0005 U	0.036	0.0014 J	0.00061 J	0.0005 U	0.0037	0.0005 U
Chromium, Dissolved	mg/l	0.0005 U	0.0005 U	0.0025 U	0.0025 U	0.0005 U	0.043	0.0005 U	0.0005 U	0.0005 U	0.0014 J	0.0005 U
Cobalt	mg/l	0.0014 J	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0012 J
Cobalt, Dissolved	mg/l	0.0005 U	0.0005 U	0.0025 U	0.0025 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0011 J
Copper	mg/l	0.0037	0.00090 J	0.0005 U	0.0005 U	0.0005 U	0.0011 J	0.0013 J	0.00081 J	0.0005 U	0.0089	0.00050 J
Copper, Dissolved	mg/l	0.0005 U	0.0005 U	0.0025 U	0.0025 U	0.0005 U	0.0015 J	0.0005 U	0.0005 U	0.0005 U	0.0045	0.0005 U
Cyanide, Total	mg/l	0.007 U	0.007 U F	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.016	0.007 U	0.007 U F
Iron	mg/l	3	0.082	0.012 J	0.027	0.014 J	0.01 U	0.9	0.14	0.028	2.3	4.3
Iron, Dissolved	mg/l	0.099	0.012 J	0.05 U	0.05 U	0.017 J	0.01 U	0.068	0.019 J	0.01 U	0.73	0.14
Lead	mg/l	0.0013 J	0.00026 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0018 J	0.00044 J	0.0002 U	0.0066	0.0002 U
Lead, Dissolved	mg/l	0.0002 U	0.0002 U	0.001 U	0.001 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0024	0.0002 U
Magnesium	mg/l	16.7	15.6	0.13 U	0.13 U	0.72 J	0.13 U	7.5	4	4.7	3.2	8.4
Magnesium, Dissolved	mg/l	16.5	15.7	0.63 U	0.63 U	0.76 J	0.13 U	6.3	4.2	5.1	2.6	8.3
Manganese	mg/l	0.16	0.096	0.00059 J	0.00080 J	0.00099 J	0.0005 U	0.0084	0.0021	0.0016 J	0.29	1
Manganese, Dissolved	mg/l	0.066	0.093	0.0025 U	0.0025 U	0.0015 J	0.00052 J	0.00090 J	0.00086 J	0.0013 J	0.11 B	1.0 B
Mercury	mg/l	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Mercury, Dissolved	mg/l	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Nickel	mg/l	0.0038	0.0094	0.0056	0.0054	0.0035	0.0005 U	0.0031	0.027	0.015 B	0.0036	0.00085 J
Nickel, Dissolved	mg/l	0.0014 J	0.0069	0.0037 J	0.0035 J	0.0022	0.0005 U	0.00056 J	0.028	0.017	0.0034	0.0012 J
Potassium	mg/l	5.2	2.3	54.8	51.7	12.5	4.5	2.8	1.2	1.4	58.6	10.9
Potassium, Dissolved	mg/l	5	2.2	56	52.4	11.7	5.4	2.1	1.3	1.5	53.5	10.3

TABLE 5C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	OB-30C	RW- 3 (77-87)	RW- 3 DS (155-160)	RW- 3 DS (155-160)-Dup-04-082515	RW- 3DD (175-180)	RW- 4 (333-343)	RW- 4 (393-403)	RW- 4A (62-72)	RW- 4A (113-123)	RW- 5	RW- 5A
Selenium	mg/l	0.0024	0.0006 U	0.0042	0.0039	0.0006 U	0.00080 J	0.00065 J	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Selenium, Dissolved	mg/l	0.002	0.0006 U	0.0031 J	0.0041 J	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Silver	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Silver, Dissolved	mg/l	0.0005 U	0.0005 U	0.0025 U	0.0025 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l	8.7	7.7	219	221	53.7 B	15.8	8.9 B	5.7 B	5.7	44	7.7
Sodium, Dissolved	mg/l	8.6	7.5	220	209	51.2	18.8	8	5.9	6.4	40.6	7.3
Thallium	mg/l	0.0002 U	0.0002 U	0.00070 J	0.00024 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Thallium, Dissolved	mg/l	0.0002 U	0.0002 U	0.0012 J	0.001 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00037 J	0.0002 U	0.0002 U
Vanadium	mg/l	0.0084 B	0.0020 B	0.0058 B	0.0056 B	0.0079 B	0.012 B	0.0018 UB	0.0017 UB	0.0019 UB	0.0049 B	0.0022 B
Vanadium, Dissolved	mg/l	0.0059 B	0.0020 B	0.0085 UB	0.0083 UB	0.0070 B	0.013 B	0.0012 UB	0.0014 UB	0.0025 B	0.0034 B	0.00087 UB
Zinc	mg/l	0.01 U	0.016 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.22	0.01 U
Zinc, Dissolved	mg/l	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.069	0.01 U
Wet Chemistry												
Bicarbonate Alkalinity as Ca	mg/l	111	202	5 U	5 U	5 U	5 U	64.6	36.1	44.4	46.1	221
Total Alkalinity as CaCO3	mg/l	111	202	92.1	104	96.8	128	64.6	36.1	44.4	178	221
Chloride	mg/l	34	2190	32.2	31.4	8.43	3.76	1.41	1.31	1.54	1.54	1.53
Sulfate	mg/l	24.5	139	464	467	39.5	21.2	15.5	9.97	14.7	16	9.23

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

TABLE 5C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 6	RW- 6A	RW- 7	RW-11 S (236-241)	RW-11D (262-267)	RW-13 (71-91)	RW-13 (100-120)	RW-13 (150-170)	SC-1
Aluminum	mg/l	0.012 J	0.0098 J	0.38	0.0096 U	0.73	1.7	5.6	0.53 B	0.056
Aluminum, Dissolved	mg/l	0.0096 U	0.0096 U	0.42	0.0096 U	0.065 J	0.038	4.8	0.0096 U	0.0096 U
Antimony	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Antimony, Dissolved	mg/l	0.0005 U	0.0005 U	0.0014 J	0.0005 U	0.0025 U	0.00075 J	0.00063 J	0.0005 U	0.00050 J
Arsenic	mg/l	0.0015 UB	0.0014 UB	0.00074 UB	0.0010 J	0.0024	0.0029	0.0032	0.0046 B	0.0011 UB
Arsenic, Dissolved	mg/l	0.0011 UB	0.0011 UB	0.00072 UB	0.0005 U	0.0025 U	0.002	0.0021	0.002	0.00084 UB
Barium	mg/l	0.44	0.048	0.0021	0.015	0.54	0.059	0.024	0.031	0.46
Barium, Dissolved	mg/l	0.38	0.036	0.0014 J	0.015	0.57	0.046	0.021	0.36	0.4
Beryllium	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Beryllium, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0025 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Cadmium	mg/l	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Cadmium, Dissolved	mg/l	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.002 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Calcium	mg/l	77	85.5	12.1	16.1	383	49.6	24.9	31.9	42.5
Calcium, Dissolved	mg/l	75.4	87.5	11.6	15.2	439	47.9	26.2	92.9 J	39
Chromium	mg/l	0.0029	0.00080 J	0.0005 U	0.0005 U	0.04	0.008	0.055	0.00090 J	0.0038
Chromium, Dissolved	mg/l	0.00087 J	0.0005 U	0.0005 U	0.0005 U	0.03	0.00052 J	0.05	0.0005 U	0.00079 J
Cobalt	mg/l	0.0016 J	0.019	0.0005 U	0.0005 U	0.0005 U	0.00059 J	0.0005 U	0.0005 U	0.0034
Cobalt, Dissolved	mg/l	0.0014 J	0.019	0.0005 U	0.0005 U	0.0025 U	0.0005 U	0.0005 U	0.05 U	0.003
Copper	mg/l	0.0005 U	0.00071 J	0.0012 J	0.007	0.0032	0.0048	0.019	0.00074 J	0.00053 J
Copper, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0041	0.0025 U	0.0011 J	0.013	0.00084 J	0.0005 U
Cyanide, Total	mg/l	0.0072 J	0.007 U	0.007 UJ	0.007 U	0.007 U	0.0072 J	0.007 UJ	0.007 U	0.007 U F
Iron	mg/l	36.3	22.2	0.26	0.057	0.49	4.3	0.38	0.65	70.1
Iron, Dissolved	mg/l	26.1	9.8	0.14	0.01 U	0.05 U	0.041	0.31	2.7	51.4
Lead	mg/l	0.00025 J	0.0002 U	0.00048 J	0.0002 U	0.00069 J	0.0023	0.0002 U	0.00033 J	0.013
Lead, Dissolved	mg/l	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.001 U	0.0002 U	0.0002 U	0.00031 J	0.002
Magnesium	mg/l	13.6	19.3	4.2	2.2	0.13 U	14.8	0.13 U	6.8	4.4
Magnesium, Dissolved	mg/l	13.7	20	4.1	2.2	0.63 U	15.3	0.13 U	24.5 J	4.1
Manganese	mg/l	7.4	15.7	0.0042 J	0.22 B	0.0063	0.056	0.00060 UB	0.092 B	0.75
Manganese, Dissolved	mg/l	7.4 B	14.2 B	0.0019 J	0.2	0.0025 U	0.036 B	0.0005 U	0.22	0.64 B
Mercury	mg/l	0.00015 U	0.00015 U	0.00015 U	0.00018 J	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Mercury, Dissolved	mg/l	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Nickel	mg/l	0.0011 J	0.0033	0.00051 J	0.0039	0.017	0.003	0.0028	0.0084	0.013
Nickel, Dissolved	mg/l	0.0019 J	0.0041	0.0005 U	0.0027	0.015	0.0011 J	0.0016 J	0.00093 J	0.012
Potassium	mg/l	2.9	2.8	0.90 J	1.5	117	47.5	232	1.8	2.4
Potassium, Dissolved	mg/l	2.9	2.8	0.86 J	1.4	123	48.6	209	9.3	2.2

TABLE 5C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 6	RW- 6A	RW- 7	RW-11 S (236-241)	RW-11D (262-267)	RW-13 (71-91)	RW-13 (100-120)	RW-13 (150-170)	SC-1
Selenium	mg/l	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0010 J	0.0031	0.012	0.0006 U	0.0006 U
Selenium, Dissolved	mg/l	0.00066 J	0.0006 U	0.0006 U	0.0006 U	0.003 U	0.0030 B	0.011	0.0006 U	0.0006 U
Silver	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Silver, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0025 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l	6.8	8.2	4.2	3.1	210	19.4	246	9.9	4.1
Sodium, Dissolved	mg/l	6.5	8.1	3.9	3	209	20.3	210	153	3.5
Thallium	mg/l	0.0002 U	0.0002 U	0.00037 J	0.0002 U	0.0002 U	0.00020 J	0.00090 J	0.0002 U	0.0002 U
Thallium, Dissolved	mg/l	0.0002 U	0.0002 U	0.00064 J	0.0002 U	0.001 U	0.0002 U	0.00089 J	0.0002 U	0.0002 U
Vanadium	mg/l	0.0027 B	0.0033 B	0.0019 UB	0.0024 B	0.0024 B	0.0067 B	0.039 B	0.0020 B	0.0039 B
Vanadium, Dissolved	mg/l	0.0014 UB	0.0011 UB	0.0018 UB	0.0011 UB	0.0013 UB	0.0022 B	0.035 B	0.0020 B	0.0013 UB
Zinc	mg/l	0.01 U	0.01 U	0.01 U F	0.015 J	0.01 U	0.01 U	0.01 U	0.01 U	0.034
Zinc, Dissolved	mg/l	0.01 U	0.01 U	0.01 U	0.013 J	0.05 U	0.01 U	0.01 U	0.01 U	0.010 J
Wet Chemistry										
Bicarbonate Alkalinity as Ca	mg/l	284	326	40.8	49	5 U	146	5 U	96.4	217
Total Alkalinity as CaCO3	mg/l	284	326	40.8	49	1300	146	547	96.4	217
Chloride	mg/l	5.97	2	1.86	0.82 J	40.5	37.7	25.9	3.66	1.45
Sulfate	mg/l	1.41	0.6 U	10.8	7.21	40.6	63	50.7	16.5	0.6 U

See Table 12 for validation qualifiers.

Result exceeds NJGWQS (NJAC 7:9C M

TABLE 5D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-15B	OB-19	OB-20A	OB-20B	OB-21	OB-21-DUP-01
1,1,1-Trichloroethane	ug/l	30	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	ug/l	1	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2-Trichloroethane	ug/l	3	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	ug/l	50	0.32 J	0.24 U	0.24 U	0.24 U	0.26 J	0.24 U	0.24 U
1,1-Dichloroethene	ug/l	1	0.25 U	0.25 U F	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane	ug/l	0.03	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene	ug/l	9	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	ug/l	0.02	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
1,2-Dibromoethane	ug/l	0.03	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichlorobenzene	ug/l	600	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,2-Dichloroethane	ug/l	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dichlorobenzene	ug/l	600	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,4-Dichlorobenzene	ug/l	75	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,4-Dioxane	ug/l	10	4.3 J	0.27 U	0.27 U	0.27 U	0.95 J	0.27 U	0.27 U
2-Butanone (MEK)	ug/l	300	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
2-Hexanone	ug/l	300	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methyl-2-pentanone (MIBK)	ug/l		0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Acetone	ug/l	6000	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Benzene	ug/l	1	2.9	0.2 U	0.2 U	0.2 U	0.27 J	0.2 U	0.2 U
Bromoform	ug/l	4	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Bromomethane	ug/l	10	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Carbon disulfide	ug/l	700	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Carbon tetrachloride	ug/l	1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorobenzene	ug/l	50	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorodibromomethane	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chloroethane	ug/l	5	23	0.36 U	0.39 J	0.36 U	1.8	0.36 U	0.36 U
Chloroform	ug/l	70	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloromethane	ug/l		0.36 U	0.36 UJ	0.36 U	0.37 J	0.36 U	0.36 U	0.36 U
cis-1,2-Dichloroethene	ug/l	70	0.37 J	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,3-Dichloropropene	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Cyclohexane	ug/l		1.9 J	0.13 U	0.13 U	0.19 J	0.87 J	0.13 U	0.13 U
Dichlorobromomethane	ug/l	1	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U

TABLE 5D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-15B	OB-19	OB-20A	OB-20B	OB-21	OB-21-DUP-01
Dichlorodifluoromethane	ug/l	1000	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	ug/l	700	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Ethylene Dibromide	ug/l	0.03	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Freon-113	ug/l		0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l	700	0.36 J	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methyl acetate	ug/l	7000	0.58 U	0.58 UJ	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Methyl tert-butyl ether	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l		0.50 J	0.09 U	0.09 U	0.09 U	0.54 J	0.09 U	0.09 U
Methylene Chloride	ug/l	3	0.23 J	0.22 U	0.22 U	0.35 J	0.22 U	0.31 J	0.22 U
Styrene	ug/l	100	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	1	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	600	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
trans-1,2-Dichloroethene	ug/l	100	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l	2000	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Xylenes, Total	ug/l	1000	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Tentatively Identified Compounds (TICs)									
1,2,3-Trimethylbenzene - TIC	ug/l						0.26 J		
1,2,4-Trimethylbenzene - TIC	ug/l								
1,3,5-Trimethylbenzene - TIC	ug/l								
1-Hexanol, 2-ethyl- - TIC	ug/l	200							
1H-Indene, 2,3-dihydro-1,2-dimethyl- - TIC	ug/l								
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	ug/l								
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	ug/l		4.8 NJ						
1-Propene, 2-methyl- - TIC	ug/l								
2-Butanone, 3,3-dimethyl- - TIC	ug/l								
3-Phenylbut-1-ene - TIC	ug/l		4.7 NJ						
4-Isopropyltoluene - TIC	ug/l								
Benzene, (1-methyl-1-propenyl)-, (E)- - TIC	ug/l								
Benzene, (3-methyl-2-butenyl)- - TIC	ug/l								
Benzene, 1,2,3,4-tetramethyl- - TIC	ug/l								

TABLE 5D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-15B	OB-19	OB-20A	OB-20B	OB-21	OB-21-DUP-01
Benzene, 1,2,3,5-tetramethyl- - TIC	ug/l								
Benzene, 1,2,4,5-tetramethyl- - TIC	ug/l								
Benzene, 1,3-diethyl- - TIC	ug/l								
Benzene, 1,4-diethyl- - TIC	ug/l						3.6 NJ		
Benzene, 1-ethyl-2,4-dimethyl- - TIC	ug/l								
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	ug/l						2.8 NJ		
Benzene, 2-ethyl-1,4-dimethyl- - TIC	ug/l								
Benzene, 4-ethyl-1,2-dimethyl- - TIC	ug/l								
Cyclopentane, methyl- - TIC	ug/l		4.0 NJ						
Cysteic acid - TIC	ug/l								
Ethyl acrylate - TIC	ug/l								
Hexane - TIC	ug/l	30	0.36 J				0.21 J		
Indan, 1-methyl- - TIC	ug/l		2.7 NJ						
Indane - TIC	ug/l								
Isobutyl alcohol - TIC	ug/l								
Naphthalene - TIC	ug/l	300					1.6 J		
n-Butylbenzene - TIC	ug/l								
N-Propylbenzene - TIC	ug/l								
Propene, hexafluoro- - TIC	ug/l								
Silanol, dimethyl(1,1,2-trimethylpropyl) - TIC	ug/l								
tert-Butyldimethylsilanol - TIC	ug/l								
Tetrahydrofuran - TIC	ug/l	10							
Total Alkanes - TIC	ug/l								
Total Alkanes TIC - TIC	ug/l		0.36 NJ				0.21 NJ		
Unknown - TIC	ug/l								
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 5D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	OB-25	OB-27	OB-30B	OB-30C	RW- 3 (77-87)	RW- 3 DS (155-160)	RW- 3 DS (155-160) - Dup-04-082515	RW- 3DD (175-180)
1,1,1-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	ug/l	0.24 U	0.38 J	0.24 U	0.24 U	0.26 J	1	1	1.9
1,1-Dichloroethene	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	ug/l	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
1,2-Dibromoethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichlorobenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,2-Dichloroethane	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dichlorobenzene	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,4-Dichlorobenzene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,4-Dioxane	ug/l	0.27 U	6.2 J	0.27 U	0.27 U	22	38 J	36 J	20
2-Butanone (MEK)	ug/l	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	5.5 J
2-Hexanone	ug/l	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methyl-2-pentanone (MIBK)	ug/l	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Acetone	ug/l	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	3.0 UB	12 J
Benzene	ug/l	0.2 U	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.44 J
Bromoform	ug/l	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Bromomethane	ug/l	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Carbon disulfide	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	11	12	3.7
Carbon tetrachloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorobenzene	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorodibromomethane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chloroethane	ug/l	0.36 U	83	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroform	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloromethane	ug/l	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
cis-1,2-Dichloroethene	ug/l	0.21 U	0.39 J	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.22 J
cis-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Cyclohexane	ug/l	0.13 U	1.6 J	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorobromomethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U

TABLE 5D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	OB-25	OB-27	OB-30B	OB-30C	RW- 3 (77-87)	RW- 3 DS (155-160)	RW- 3 DS (155-160) - Dup-04-082515	RW- 3DD (175-180)
Dichlorodifluoromethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.26 J	0.23 J	0.19 U
Ethylene Dibromide	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Freon-113	ug/l	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l	0.33 U	2.3	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methyl acetate	ug/l	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 UJ	0.58 UJ	0.58 U
Methyl tert-butyl ether	ug/l	0.17 U	0.17 U	0.17 U	0.28 J	0.17 U	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l	0.09 U	0.98 J	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Methylene Chloride	ug/l	0.22 U	0.33 J	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Styrene	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.60 J	0.48 J	0.17 U
trans-1,2-Dichloroethene	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Xylenes, Total	ug/l	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Tentatively Identified Compounds (TICs)									
1,2,3-Trimethylbenzene - TIC	ug/l		3.4						
1,2,4-Trimethylbenzene - TIC	ug/l								
1,3,5-Trimethylbenzene - TIC	ug/l								
1-Hexanol, 2-ethyl- - TIC	ug/l								
1H-Indene, 2,3-dihydro-1,2-dimethyl- - TIC	ug/l		5.4 NJ						
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	ug/l		11 NJ						
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	ug/l		5.2 NJ						
1-Propene, 2-methyl- - TIC	ug/l						3.3 NJ	5.5 NJ	
2-Butanone, 3,3-dimethyl- - TIC	ug/l								
3-Phenylbut-1-ene - TIC	ug/l								
4-Isopropyltoluene - TIC	ug/l								
Benzene, (1-methyl-1-propenyl)-, (E)- - TIC	ug/l		3.8 NJ						
Benzene, (3-methyl-2-butenyl)- - TIC	ug/l		3.4 NJ						
Benzene, 1,2,3,4-tetramethyl- - TIC	ug/l		19 NJ						

TABLE 5D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	OB-25	OB-27	OB-30B	OB-30C	RW- 3 (77-87)	RW- 3 DS (155-160)	RW- 3 DS (155-160) - Dup-04-082515	RW- 3DD (175-180)
Benzene, 1,2,3,5-tetramethyl- - TIC	ug/l								
Benzene, 1,2,4,5-tetramethyl- - TIC	ug/l		8.4 NJ						
Benzene, 1,3-diethyl- - TIC	ug/l		10 NJ						
Benzene, 1,4-diethyl- - TIC	ug/l								
Benzene, 1-ethyl-2,4-dimethyl- - TIC	ug/l		7.3 NJ						
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	ug/l								
Benzene, 2-ethyl-1,4-dimethyl- - TIC	ug/l								
Benzene, 4-ethyl-1,2-dimethyl- - TIC	ug/l								
Cyclopentane, methyl- - TIC	ug/l								
Cysteic acid - TIC	ug/l						8.6 NJ		
Ethyl acrylate - TIC	ug/l								
Hexane - TIC	ug/l								
Indan, 1-methyl- - TIC	ug/l		6.0 NJ						
Indane - TIC	ug/l								
Isobutyl alcohol - TIC	ug/l						38 J	47 J	
Naphthalene - TIC	ug/l		5.9						
n-Butylbenzene - TIC	ug/l								
N-Propylbenzene - TIC	ug/l								
Propene, hexafluoro- - TIC	ug/l								
Silanol, dimethyl(1,1,2-trimethylpropyl) - TIC	ug/l	3.2 NJ							
tert-Butyldimethylsilanol - TIC	ug/l								
Tetrahydrofuran - TIC	ug/l								1.1 J
Total Alkanes - TIC	ug/l								
Total Alkanes TIC - TIC	ug/l								
Unknown - TIC	ug/l		4.6 NJ						

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

TABLE 5D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 4 (333-343)	RW- 4 (393-403)	RW- 4A (62-72)	RW- 4A (113-123)	RW- 5	RW- 5A	RW- 6	RW- 6A
1,1,1-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	ug/l	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.62 J	0.42 J
1,1-Dichloroethene	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	ug/l	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
1,2-Dibromoethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichlorobenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,2-Dichloroethane	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dichlorobenzene	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,4-Dichlorobenzene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.27 J
1,4-Dioxane	ug/l	0.27 U	0.27 U	0.27 U	0.27 U	6.7 J	0.27 U	1.5 J	2.7 J
2-Butanone (MEK)	ug/l	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
2-Hexanone	ug/l	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methyl-2-pentanone (MIBK)	ug/l	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Acetone	ug/l	2.7 U	2.7 U	2.7 U	2.7 U	4.9 UB	2.7 U	2.7 U	2.7 U
Benzene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 J	1.2	7.7
Bromoform	ug/l	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Bromomethane	ug/l	0.35 U	0.35 U	0.35 UJ	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Carbon disulfide	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Carbon tetrachloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorobenzene	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorodibromomethane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chloroethane	ug/l	0.36 U	0.36 U	0.36 U	0.36 U	1.4	0.36 U	3.3	2
Chloroform	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloromethane	ug/l	0.36 UJ	0.36 U	0.36 U	0.36 UJ	0.36 U	0.36 UJ	0.36 U	0.36 U
cis-1,2-Dichloroethene	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Cyclohexane	ug/l	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.48 J	4.1 J
Dichlorobromomethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U

TABLE 5D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 4 (333-343)	RW- 4 (393-403)	RW- 4A (62-72)	RW- 4A (113-123)	RW- 5	RW- 5A	RW- 6	RW- 6A
Dichlorodifluoromethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Ethylene Dibromide	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Freon-113	ug/l	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	4.6
Methyl acetate	ug/l	0.58 UJ	0.58 U	0.58 U	0.58 UJ	0.58 U	0.58 UJ	0.58 U	0.58 U
Methyl tert-butyl ether	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.33 J	0.74 J
Methylene Chloride	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Styrene	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
trans-1,2-Dichloroethene	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Xylenes, Total	ug/l	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	12
Tentatively Identified Compounds (TICs)									
1,2,3-Trimethylbenzene - TIC	ug/l								13
1,2,4-Trimethylbenzene - TIC	ug/l								
1,3,5-Trimethylbenzene - TIC	ug/l								2.6
1-Hexanol, 2-ethyl- - TIC	ug/l								
1H-Indene, 2,3-dihydro-1,2-dimethyl- - TIC	ug/l								
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	ug/l								
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	ug/l								
1-Propene, 2-methyl- - TIC	ug/l								
2-Butanone, 3,3-dimethyl- - TIC	ug/l								
3-Phenylbut-1-ene - TIC	ug/l								4.3 NJ
4-Isopropyltoluene - TIC	ug/l								
Benzene, (1-methyl-1-propenyl)-, (E)- - TIC	ug/l								4.7 NJ
Benzene, (3-methyl-2-butenyl)- - TIC	ug/l								
Benzene, 1,2,3,4-tetramethyl- - TIC	ug/l								10 NJ

TABLE 5D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 4 (333-343)	RW- 4 (393-403)	RW- 4A (62-72)	RW- 4A (113-123)	RW- 5	RW- 5A	RW- 6	RW- 6A
Benzene, 1,2,3,5-tetramethyl- - TIC	ug/l								
Benzene, 1,2,4,5-tetramethyl- - TIC	ug/l								3.8 NJ
Benzene, 1,3-diethyl- - TIC	ug/l								
Benzene, 1,4-diethyl- - TIC	ug/l								
Benzene, 1-ethyl-2,4-dimethyl- - TIC	ug/l								13 NJ
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	ug/l								15 NJ
Benzene, 2-ethyl-1,4-dimethyl- - TIC	ug/l								
Benzene, 4-ethyl-1,2-dimethyl- - TIC	ug/l								3.3 NJ
Cyclopentane, methyl- - TIC	ug/l								10 NJ
Cysteic acid - TIC	ug/l								
Ethyl acrylate - TIC	ug/l								
Hexane - TIC	ug/l								
Indan, 1-methyl- - TIC	ug/l								
Indane - TIC	ug/l								19 NJ
Isobutyl alcohol - TIC	ug/l								
Naphthalene - TIC	ug/l								8.1 B
n-Butylbenzene - TIC	ug/l								1.5
N-Propylbenzene - TIC	ug/l								4.8
Propene, hexafluoro- - TIC	ug/l		22 NJ						
Silanol, dimethyl(1,1,2-trimethylpropyl) - TIC	ug/l								
tert-Butyldimethylsilanol - TIC	ug/l				3.1 NJ				
Tetrahydrofuran - TIC	ug/l								
Total Alkanes - TIC	ug/l								0.00 NJ
Total Alkanes TIC - TIC	ug/l								
Unknown - TIC	ug/l								
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 5D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 7	RW-11 S (236-241)	RW-11D (262-267)	RW-13 (71-91)	RW-13 (100-120)	RW-13 (150-170)	SC-1
1,1,1-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	ug/l	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1-Dichloroethene	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	ug/l	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
1,2-Dibromoethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichlorobenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,2-Dichloroethane	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dichlorobenzene	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,4-Dichlorobenzene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,4-Dioxane	ug/l	0.27 U	1.1 J	26 J	0.27 U	0.27 U	0.27 U	0.39 J
2-Butanone (MEK)	ug/l	2.6 U	2.6 U	29 J	2.6 U	3.2 J	2.6 U	2.6 U
2-Hexanone	ug/l	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methyl-2-pentanone (MIBK)	ug/l	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Acetone	ug/l	2.7 U	2.7 U	45	2.7 U	41	2.7 U	2.7 U
Benzene	ug/l	0.2 U	0.2 U	1.6	0.2 U	0.2 U	0.2 U	1.3
Bromoform	ug/l	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Bromomethane	ug/l	0.35 U	0.35 U	0.35 U	0.35 U	0.35 UJ	0.35 U	0.35 U
Carbon disulfide	ug/l	0.22 U	0.22 U	63	0.22 U	0.22 U	0.22 U	0.22 U
Carbon tetrachloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorobenzene	ug/l	0.18 U	0.18 U	0.22 J	0.18 U	0.18 U	0.18 U	0.21 J
Chlorodibromomethane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chloroethane	ug/l	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.53 J
Chloroform	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloromethane	ug/l	0.36 U	0.36 U	0.36 U	0.36 UJ	0.36 U	0.36 U	0.36 U
cis-1,2-Dichloroethene	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Cyclohexane	ug/l	0.13 U	0.13 U	0.13 U	0.13 U	0.14 J	0.13 U	2.0 J
Dichlorobromomethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U

TABLE 5D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 7	RW-11 S (236-241)	RW-11D (262-267)	RW-13 (71-91)	RW-13 (100-120)	RW-13 (150-170)	SC-1
Dichlorodifluoromethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	2
Ethylene Dibromide	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Freon-113	ug/l	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.6
Methyl acetate	ug/l	0.58 U	0.58 U	0.58 UJ	0.58 UJ	0.58 U	0.58 U	0.58 U
Methyl tert-butyl ether	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	1.1 J
Methylene Chloride	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.34 UB	0.22 U
Styrene	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.65 UB	0.17 U	0.61 J
trans-1,2-Dichloroethene	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Xylenes, Total	ug/l	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	60
Tentatively Identified Compounds (TICs)								
1,2,3-Trimethylbenzene - TIC	ug/l							3.6
1,2,4-Trimethylbenzene - TIC	ug/l							4.7
1,3,5-Trimethylbenzene - TIC	ug/l							1.1
1-Hexanol, 2-ethyl- - TIC	ug/l					6.7 NJ		
1H-Indene, 2,3-dihydro-1,2-dimethyl- - TIC	ug/l							
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	ug/l							
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	ug/l							
1-Propene, 2-methyl- - TIC	ug/l							
2-Butanone, 3,3-dimethyl- - TIC	ug/l			3.1 NJ				
3-Phenylbut-1-ene - TIC	ug/l							
4-Isopropyltoluene - TIC	ug/l							0.26 J
Benzene, (1-methyl-1-propenyl)-, (E)- - TIC	ug/l							
Benzene, (3-methyl-2-butenyl)- - TIC	ug/l							
Benzene, 1,2,3,4-tetramethyl- - TIC	ug/l							5.7 NJ

TABLE 5D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 7	RW-11 S (236-241)	RW-11D (262-267)	RW-13 (71-91)	RW-13 (100-120)	RW-13 (150-170)	SC-1
Benzene, 1,2,3,5-tetramethyl- - TIC	ug/l							3.4 NJ
Benzene, 1,2,4,5-tetramethyl- - TIC	ug/l							
Benzene, 1,3-diethyl- - TIC	ug/l							
Benzene, 1,4-diethyl- - TIC	ug/l							
Benzene, 1-ethyl-2,4-dimethyl- - TIC	ug/l							
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	ug/l							5.8 NJ
Benzene, 2-ethyl-1,4-dimethyl- - TIC	ug/l							4.9 NJ
Benzene, 4-ethyl-1,2-dimethyl- - TIC	ug/l							
Cyclopentane, methyl- - TIC	ug/l							3.3 NJ
Cysteic acid - TIC	ug/l							
Ethyl acrylate - TIC	ug/l							0.63 NJ
Hexane - TIC	ug/l							
Indan, 1-methyl- - TIC	ug/l							
Indane - TIC	ug/l							4.5 NJ
Isobutyl alcohol - TIC	ug/l							
Naphthalene - TIC	ug/l							7.5 B
n-Butylbenzene - TIC	ug/l							0.95 J
N-Propylbenzene - TIC	ug/l							0.58 J
Propene, hexafluoro- - TIC	ug/l							
Silanol, dimethyl(1,1,2-trimethylpropyl) - TIC	ug/l							
tert-Butyldimethylsilanol - TIC	ug/l							
Tetrahydrofuran - TIC	ug/l				0.98 J			
Total Alkanes - TIC	ug/l							0.00 NJ
Total Alkanes TIC - TIC	ug/l							
Unknown - TIC	ug/l							
See Table 12 for validation qualifiers.								
Result exceeds NJGWQS (NJAC 7:9C March 2014)								

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-15B	OB-19	OB-20A	OB-20B	OB-21	OB-21-DUP-01
1,2,4,5-Tetrachlorobenzene	ug/l		2.1 U	1.8 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
2,2'-oxybis[1-chloropropane]	ug/l	300	2.8 U	2.4 UJ	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
2,3,4,6-Tetrachlorophenol	ug/l	200	6.9 U	5.9 U	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U
2,4,5-Trichlorophenol	ug/l	700	7.1 U	6.1 U	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U
2,4,6-Trichlorophenol	ug/l	20	6.8 U	5.9 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U
2,4-Dichlorophenol	ug/l	20	5.6 U	4.8 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
2,4-Dimethylphenol	ug/l	100	4.2 U	3.6 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U
2,4-Dinitrophenol	ug/l	40	5.9 U	5.1 U	5.9 U	5.9 U	5.9 U	5.9 U	5.9 U
2,4-Dinitrotoluene	ug/l		3.2 U	2.8 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
2,6-Dinitrotoluene	ug/l		2.3 U	2 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
2-Chloronaphthalene	ug/l	600	2.8 U	2.4 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
2-Chlorophenol	ug/l	40	4.8 U	4.1 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
2-Methylnaphthalene	ug/l	30	0.4 U	0.34 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Methylphenol	ug/l		2.3 U	2 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
2-Nitroaniline	ug/l		3.7 U	3.2 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
2-Nitrophenol	ug/l		5.3 U	4.6 U	5.3 U	5.3 U	5.3 U	5.3 U	5.3 U
3 & 4 Methylphenol	ug/l		2.2 U	1.9 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
3,3'-Dichlorobenzidine	ug/l	30	3.3 U	2.8 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
3-Nitroaniline	ug/l		2.7 U	2.3 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
4,6-Dinitro-2-methylphenol	ug/l	1	9.3 U	8 U	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U
4-Bromophenyl phenyl ether	ug/l		2.7 U	2.3 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
4-Chloro-3-methylphenol	ug/l	100	4.5 U	3.9 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
4-Chloroaniline	ug/l		4.2 U	3.6 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U
4-Chlorophenyl phenyl ether	ug/l		2.8 U	2.4 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
4-Nitroaniline	ug/l		3.1 U	2.7 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
4-Nitrophenol	ug/l		5.4 U	4.7 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
Acenaphthene	ug/l	400	0.32 U	0.28 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Acenaphthylene	ug/l	100	0.35 U	0.3 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Acetophenone	ug/l	700	2.3 U	2 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Anthracene	ug/l	2000	0.38 U	0.33 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Atrazine	ug/l	3	2.9 U	2.5 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Benzaldehyde	ug/l		5.7 U	4.9 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U
Benzo[a]anthracene	ug/l	0.1	0.025 U	0.023 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzo[a]pyrene	ug/l	0.1	0.025 U	0.023 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzo[b]fluoranthene	ug/l	0.2	0.025 U	0.023 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-15B	OB-19	OB-20A	OB-20B	OB-21	OB-21-DUP-01
Benzo[g,h,i]perylene	ug/l	100	0.62 U	0.53 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
Benzo[k]fluoranthene	ug/l	0.5	0.37 U	0.32 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Bis(2-chloroethoxy)methane	ug/l		3.1 U	2.7 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Bis(2-chloroethyl)ether	ug/l	7	2.8 U	2.4 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Bis(2-ethylhexyl) phthalate	ug/l	3	6 U	5.2 U	6 U	6 U	6 U	6 U	6 U
Butyl benzyl phthalate	ug/l	100	2.5 U	2.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Caprolactam	ug/l	5000	2.4 U	2.1 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Carbazole	ug/l		2.8 U	2.4 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Chrysene	ug/l	5	0.33 U	0.28 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Dibenz(a,h)anthracene	ug/l	0.3	0.45 U	0.39 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
Dibenzofuran	ug/l		2.9 U	2.5 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Diethyl phthalate	ug/l	6000	3 U	2.6 U	3 U	3 U	3 U	3 U	3 U
Dimethyl phthalate	ug/l	100	3.1 U	2.7 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Di-n-butyl phthalate	ug/l	700	2.5 U	2.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Di-n-octyl phthalate	ug/l	100	2.5 U	2.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Diphenyl	ug/l	400	2.2 U	1.9 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Fluoranthene	ug/l	300	0.32 U	0.28 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Fluorene	ug/l	300	0.32 U	0.28 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Hexachlorobenzene	ug/l	0.02	0.014 U	0.013 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Hexachlorobutadiene	ug/l	1	0.2 U	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Hexachlorocyclopentadiene	ug/l	40	1.8 U	1.6 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Hexachloroethane	ug/l	7	1.9 U	1.6 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Indeno[1,2,3-cd]pyrene	ug/l	0.2	0.41 U	0.35 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Isophorone	ug/l	40	3.1 U	2.7 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Naphthalene	ug/l	300	0.37 U	0.32 U	0.37 U	0.37 U	1.0 J	0.37 U	0.37 U
Nitrobenzene	ug/l	6	2.7 U	2.3 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
N-Nitrosodimethylamine	ug/l	0.8	0.2 U	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
N-Nitrosodi-n-propylamine	ug/l	10	3.4 U	2.9 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U
N-Nitrosodiphenylamine	ug/l	10	3.6 U	3.1 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U
Pentachlorophenol	ug/l	0.3	0.1 U	0.093 U	0.1 R	0.1 R	0.1 R	0.10 J	0.1 U
Phenanthrene	ug/l	100	0.42 U	0.36 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Phenol	ug/l	2000	1.5 U	1.3 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Pyrene	ug/l	200	0.35 U	0.3 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Tentatively Identified Compounds (TICs)									
(-)-10-Camphorsulfonyl chloride - TIC	ug/l		7.6 NJ						

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-15B	OB-19	OB-20A	OB-20B	OB-21	OB-21-DUP-01
.alpha.-Pinene - TIC	ug/l								
1,4-Dioxane - TIC	ug/l	10	1.5 J						
17-Pentatriacontene - TIC	ug/l								
1-Heptadecene - TIC	ug/l								
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	ug/l								
1-Methylnaphthalene - TIC	ug/l								
1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	ug/l								
1-Phenyl-1-butene - TIC	ug/l								
2(3H)-Benzothiazolone - TIC	ug/l								
2-HYDRAZINO-2-IMIDAZOLINE - TIC	ug/l								
2-Mercaptobenzothiazole - TIC	ug/l								
3,5-di-tert-Butyl-4-hydroxybenzaldehyde - TIC	ug/l								
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	ug/l								
3H-Benz[e]indene, 2-methyl- - TIC	ug/l								
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	ug/l								
9,12-Octadecadienoic acid (Z,Z)- - TIC	ug/l								
9-Octadecenoic acid, (E)- - TIC	ug/l								
Allyldimethylphenylsilane - TIC	ug/l								
Benzenamine, N,N-dimethyl-4-nitro- - TIC	ug/l								
Benzene, 1,2,3,4-tetramethyl- - TIC	ug/l								
Benzene, 1,2,3-trimethyl- - TIC	ug/l								
Benzene, 1,2,4,5-tetramethyl- - TIC	ug/l								
Benzene, 1,4-bis(1-methylethenyl)- - TIC	ug/l								
Benzene, 4-ethyl-1,2-dimethyl- - TIC	ug/l								
Benzenesulfonamide, N-butyl- - TIC	ug/l								
Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	ug/l		5.9 NJ			4.2 NJ	4.4 NJ		
Benzoic Acid - TIC	ug/l	30000							
Benzoic acid, 2,4-dimethyl- - TIC	ug/l								
Benzoic acid, 2,5-dimethyl- - TIC	ug/l								
Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	ug/l								
Benzothiazole - TIC	ug/l								
Benzyl Alcohol - TIC	ug/l	2000							
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	ug/l								
Cyclohexanamine, N-cyclohexyl- - TIC	ug/l								
Diethyltoluamide - TIC	ug/l								

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-15B	OB-19	OB-20A	OB-20B	OB-21	OB-21-DUP-01
Dodecanoic acid - TIC	ug/l								
Ethanol, 1-(2-butoxyethoxy)- - TIC	ug/l								
Ethanol, 2-(2-butoxyethoxy)- - TIC	ug/l								
Furan, tetrahydro-2,5-dipropyl- - TIC	ug/l								
Heptadecane, 2,6,10,15-tetramethyl- - TIC	ug/l								
Heptadecanoic acid - TIC	ug/l								
Hexadecanoic acid, butyl ester - TIC	ug/l								
Indane - TIC	ug/l								
Naphthalene, 1-ethyl- - TIC	ug/l								
Naphthalene, 2,7-dimethyl- - TIC	ug/l								
n-Hexadecanoic acid - TIC	ug/l								
Nonanoic acid - TIC	ug/l								
Octadecanoic acid - TIC	ug/l								
Oleic Acid - TIC	ug/l			3.1 NJ					
p-Benzoquinone - TIC	ug/l			7.0 NJ					
Phenol, 4-(1,1-dimethylpropyl)- - TIC	ug/l								
Phenol, 4,4'-(1-methylethylidene)bis- - TIC	ug/l								
Phenol, p-tert-butyl- - TIC	ug/l		3.4 NJ						
Squalene - TIC	ug/l								
Tetradecane - TIC	ug/l								
Tetradecanoic acid - TIC	ug/l								
Tridecanoic acid - TIC	ug/l								
Triethylene glycol monododecyl ether - TIC	ug/l								
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	OB-25	OB-27	OB-30B	OB-30C	RW- 3 (77-87)	RW- 3 DS (155-160)	RW- 3 DS (155-160)-Dup-04-082515	RW- 3DD (175-180)
1,2,4,5-Tetrachlorobenzene	ug/l	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	0.55 U
2,2'-oxybis[1-chloropropane]	ug/l	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	0.74 U
2,3,4,6-Tetrachlorophenol	ug/l	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	1.8 U
2,4,5-Trichlorophenol	ug/l	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U	1.9 U
2,4,6-Trichlorophenol	ug/l	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	1.8 U
2,4-Dichlorophenol	ug/l	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	1.5 U
2,4-Dimethylphenol	ug/l	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	1.1 U
2,4-Dinitrophenol	ug/l	5.9 U	5.9 U	5.9 U	5.9 U	5.9 U	6.6 J	6.8 J	1.6 U
2,4-Dinitrotoluene	ug/l	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	0.84 U
2,6-Dinitrotoluene	ug/l	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	0.61 U
2-Chloronaphthalene	ug/l	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	0.74 U
2-Chlorophenol	ug/l	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	1.3 U
2-Methylnaphthalene	ug/l	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.11 U
2-Methylphenol	ug/l	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	0.61 U
2-Nitroaniline	ug/l	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	0.97 U
2-Nitrophenol	ug/l	5.3 U	5.3 U	5.3 U	5.3 U	5.3 U	5.3 U	5.3 U	1.4 U
3 & 4 Methylphenol	ug/l	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.58 U
3,3'-Dichlorobenzidine	ug/l	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	0.87 U
3-Nitroaniline	ug/l	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	0.71 U
4,6-Dinitro-2-methylphenol	ug/l	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	2.4 U
4-Bromophenyl phenyl ether	ug/l	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	0.71 U
4-Chloro-3-methylphenol	ug/l	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	1.2 U
4-Chloroaniline	ug/l	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	1.1 U
4-Chlorophenyl phenyl ether	ug/l	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	0.74 U
4-Nitroaniline	ug/l	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	0.82 U
4-Nitrophenol	ug/l	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	1.4 U
Acenaphthene	ug/l	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.084 U
Acenaphthylene	ug/l	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.092 U
Acetophenone	ug/l	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	0.61 U
Anthracene	ug/l	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.1 U
Atrazine	ug/l	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	0.76 U
Benzaldehyde	ug/l	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	1.5 U
Benzo[a]anthracene	ug/l	0.025 U	0.0064 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzo[a]pyrene	ug/l	0.025 U	0.0064 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzo[b]fluoranthene	ug/l	0.025 U	0.0064 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	OB-25	OB-27	OB-30B	OB-30C	RW- 3 (77-87)	RW- 3 DS (155-160)	RW- 3 DS (155-160)-Dup-04-082515	RW- 3DD (175-180)
Benzo[g,h,i]perylene	ug/l	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.16 U
Benzo[k]fluoranthene	ug/l	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.097 U
Bis(2-chloroethoxy)methane	ug/l	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	0.82 U
Bis(2-chloroethyl)ether	ug/l	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	0.74 U
Bis(2-ethylhexyl) phthalate	ug/l	6 U	6 U	6 U	6 U	6 U	6 U	6 U	2.8 B
Butyl benzyl phthalate	ug/l	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.66 U
Caprolactam	ug/l	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	0.63 U
Carbazole	ug/l	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	0.74 U
Chrysene	ug/l	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.087 U
Dibenz(a,h)anthracene	ug/l	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.12 U
Dibenzofuran	ug/l	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	0.76 U
Diethyl phthalate	ug/l	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.79 U
Dimethyl phthalate	ug/l	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	0.82 U
Di-n-butyl phthalate	ug/l	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.66 U
Di-n-octyl phthalate	ug/l	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.66 U
Diphenyl	ug/l	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.58 U
Fluoranthene	ug/l	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.084 U
Fluorene	ug/l	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.084 U
Hexachlorobenzene	ug/l	0.014 U	0.0036 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Hexachlorobutadiene	ug/l	0.2 U	0.052 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Hexachlorocyclopentadiene	ug/l	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.47 U
Hexachloroethane	ug/l	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.5 U
Indeno[1,2,3-cd]pyrene	ug/l	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.11 U
Isophorone	ug/l	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	0.82 U
Naphthalene	ug/l	0.37 U	2.5	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.097 U
Nitrobenzene	ug/l	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	0.71 U
N-Nitrosodimethylamine	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
N-Nitrosodi-n-propylamine	ug/l	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	0.89 U
N-Nitrosodiphenylamine	ug/l	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	0.95 U
Pentachlorophenol	ug/l	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenanthrene	ug/l	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.11 U
Phenol	ug/l	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3.0 J	2.7 J	3.6
Pyrene	ug/l	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.092 U
Tentatively Identified Compounds (TICs)									
(-)-10-Camphorsulfonyl chloride - TIC	ug/l								

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	OB-25	OB-27	OB-30B	OB-30C	RW- 3 (77-87)	RW- 3 DS (155-160)	RW- 3 DS (155-160)-Dup-04-082515	RW- 3DD (175-180)
.alpha.-Pinene - TIC	ug/l								
1,4-Dioxane - TIC	ug/l		2.2 J			9.0 J	9.9 J	9.6 J	
17-Pentatriacontene - TIC	ug/l								
1-Heptadecene - TIC	ug/l								
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	ug/l		9.0 NJ						
1-Methylnaphthalene - TIC	ug/l		2.4						
1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	ug/l								
1-Phenyl-1-butene - TIC	ug/l		5.2 NJ						
2(3H)-Benzothiazolone - TIC	ug/l								
2-HYDRAZINO-2-IMIDAZOLINE - TIC	ug/l								
2-Mercaptobenzothiazole - TIC	ug/l						7.6 NJ	8.0 NJ	
3,5-di-tert-Butyl-4-hydroxybenzaldehyde - TIC	ug/l						9.5 NJ	9.5 NJ	
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	ug/l						8.8 NJ	10 NJ	
3H-Benz[e]indene, 2-methyl- - TIC	ug/l								
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	ug/l						20 NJ	22 NJ	
9,12-Octadecadienoic acid (Z,Z)- - TIC	ug/l								
9-Octadecenoic acid, (E)- - TIC	ug/l						18 NJ	19 NJ	
Allyldimethylphenylsilane - TIC	ug/l								
Benzenamine, N,N-dimethyl-4-nitro- - TIC	ug/l								
Benzene, 1,2,3,4-tetramethyl- - TIC	ug/l								
Benzene, 1,2,3-trimethyl- - TIC	ug/l								
Benzene, 1,2,4,5-tetramethyl- - TIC	ug/l		3.6 NJ						
Benzene, 1,4-bis(1-methylethenyl)- - TIC	ug/l		3.4 NJ						
Benzene, 4-ethyl-1,2-dimethyl- - TIC	ug/l								
Benzenesulfonamide, N-butyl- - TIC	ug/l						7.6 NJ	8.2 NJ	
Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	ug/l								
Benzoic Acid - TIC	ug/l								
Benzoic acid, 2,4-dimethyl- - TIC	ug/l						5.5 NJ		
Benzoic acid, 2,5-dimethyl- - TIC	ug/l							6.1 NJ	
Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	ug/l							5.8 NJ	
Benzothiazole - TIC	ug/l						4.5 NJ		
Benzyl Alcohol - TIC	ug/l								
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	ug/l								
Cyclohexanamine, N-cyclohexyl- - TIC	ug/l								
Diethyltoluamide - TIC	ug/l						5.6 NJ	8.0 NJ	14 NJ

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	OB-25	OB-27	OB-30B	OB-30C	RW- 3 (77-87)	RW- 3 DS (155-160)	RW- 3 DS (155-160)-Dup-04-082515	RW- 3DD (175-180)
Dodecanoic acid - TIC	ug/l								
Ethanol, 1-(2-butoxyethoxy)- - TIC	ug/l								
Ethanol, 2-(2-butoxyethoxy)- - TIC	ug/l								
Furan, tetrahydro-2,5-dipropyl- - TIC	ug/l								
Heptadecane, 2,6,10,15-tetramethyl- - TIC	ug/l							4.7 NJ	
Heptadecanoic acid - TIC	ug/l								
Hexadecanoic acid, butyl ester - TIC	ug/l							11 NJ	
Indane - TIC	ug/l		4.9 NJ						
Naphthalene, 1-ethyl- - TIC	ug/l		4.5 NJ						
Naphthalene, 2,7-dimethyl- - TIC	ug/l		4.0 NJ						
n-Hexadecanoic acid - TIC	ug/l						8.7 NJ		
Nonanoic acid - TIC	ug/l								
Octadecanoic acid - TIC	ug/l						11 NJ		
Oleic Acid - TIC	ug/l								
p-Benzoquinone - TIC	ug/l								
Phenol, 4-(1,1-dimethylpropyl)- - TIC	ug/l								
Phenol, 4,4'-(1-methylethylidene)bis- - TIC	ug/l		6.2 NJ						
Phenol, p-tert-butyl- - TIC	ug/l								
Squalene - TIC	ug/l								
Tetradecane - TIC	ug/l	4.8 NJ							
Tetradecanoic acid - TIC	ug/l								
Tridecanoic acid - TIC	ug/l	3.6 NJ						6.3 NJ	
Triethylene glycol monododecyl ether - TIC	ug/l								
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 4 (333-343)	RW- 4 (393-403)	RW- 4A (62-72)	RW- 4A (113-123)	RW- 5	RW- 5A	RW- 6	RW- 6A
1,2,4,5-Tetrachlorobenzene	ug/l	2.1 U	0.53 U	0.55 U	2.1 U	2.1 U	1.8 U	2.1 U	2.1 U
2,2'-oxybis[1-chloropropane]	ug/l	2.8 UJ	0.7 U	0.73 U	2.8 UJ	2.8 U	2.4 UJ	2.8 U	2.8 U
2,3,4,6-Tetrachlorophenol	ug/l	6.9 U	1.7 U	1.8 U	6.9 U	6.9 U	5.9 U	6.9 U	6.9 U
2,4,5-Trichlorophenol	ug/l	7.1 U	1.8 U	1.8 U	7.1 U	7.1 U	6.1 U	7.1 U	7.1 U
2,4,6-Trichlorophenol	ug/l	6.8 U	1.7 U	1.8 U	6.8 U	6.8 U	5.9 U	6.8 U	6.8 U
2,4-Dichlorophenol	ug/l	5.6 U	1.4 U	1.5 U	5.6 U	5.6 U	4.8 U	5.6 U	5.6 U
2,4-Dimethylphenol	ug/l	4.2 U	1.1 U	1.1 U	4.2 U	4.2 U	3.6 U	4.2 U	4.2 U
2,4-Dinitrophenol	ug/l	5.9 U	1.5 U	1.5 U	5.9 U	5.9 U	5.1 U	5.9 U	5.9 U
2,4-Dinitrotoluene	ug/l	3.2 U	0.8 U	0.83 U	3.2 U	3.2 U	2.8 U	3.2 U	3.2 U
2,6-Dinitrotoluene	ug/l	2.3 U	0.58 U	0.6 U	2.3 U	2.3 U	2 U	2.3 U	2.3 U
2-Chloronaphthalene	ug/l	2.8 U	0.7 U	0.73 U	2.8 U	2.8 U	2.4 U	2.8 U	2.8 U
2-Chlorophenol	ug/l	4.8 U	1.2 U	1.3 U	4.8 U	4.8 U	4.1 U	4.8 U	4.8 U
2-Methylnaphthalene	ug/l	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U	0.34 U	0.4 U	0.4 U
2-Methylphenol	ug/l	2.3 U	0.58 U	0.6 U	2.3 U	2.3 U	2 U	2.3 U	2.3 U
2-Nitroaniline	ug/l	3.7 U	0.93 U	0.96 U	3.7 U	3.7 U	3.2 U	3.7 U	3.7 U
2-Nitrophenol	ug/l	5.3 U	1.3 U	1.4 U	5.3 U	5.3 U	4.6 U	5.3 U	5.3 U
3 & 4 Methylphenol	ug/l	2.2 U	0.55 U	0.57 U	2.2 U	2.2 U	1.9 U	2.2 U	2.2 U
3,3'-Dichlorobenzidine	ug/l	3.3 U	0.83 U	0.86 U	3.3 U	3.3 U	2.8 U	3.3 U	3.3 U
3-Nitroaniline	ug/l	2.7 U	0.68 U	0.7 U	2.7 U	2.7 U	2.3 U	2.7 U	2.7 U
4,6-Dinitro-2-methylphenol	ug/l	9.3 U	2.3 U	2.4 U	9.3 U	9.3 U	8 U	9.3 U	9.3 U
4-Bromophenyl phenyl ether	ug/l	2.7 U	0.68 U	0.7 U	2.7 U	2.7 U	2.3 U	2.7 U	2.7 U
4-Chloro-3-methylphenol	ug/l	4.5 U	1.1 U	1.2 U	4.5 U	4.5 U	3.9 U	4.5 U	4.5 U
4-Chloroaniline	ug/l	4.2 U	1.1 U	1.1 U	4.2 U	4.2 U	3.6 U	4.2 U	4.2 U
4-Chlorophenyl phenyl ether	ug/l	2.8 U	0.7 U	0.73 U	2.8 U	2.8 U	2.4 U	2.8 U	2.8 U
4-Nitroaniline	ug/l	3.1 U	0.78 U	0.81 U	3.1 U	3.1 U	2.7 U	3.1 U	3.1 U
4-Nitrophenol	ug/l	5.4 U	1.4 U	1.4 U	5.4 U	5.4 U	4.7 U	5.4 U	5.4 U
Acenaphthene	ug/l	0.32 U	0.08 U	0.083 U	0.32 U	0.32 U	0.28 U	0.32 U	0.32 U
Acenaphthylene	ug/l	0.35 U	0.088 U	0.091 U	0.35 U	0.35 U	0.3 U	0.35 U	0.35 U
Acetophenone	ug/l	2.3 U	0.58 U	0.6 U	2.3 U	2.3 U	2 U	2.3 U	2.4 J
Anthracene	ug/l	0.38 U	0.095 U	0.099 U	0.38 U	0.38 U	0.33 U	0.38 U	0.38 U
Atrazine	ug/l	2.9 U	0.73 U	0.76 U	2.9 U	2.9 U	2.5 U	2.9 U	2.9 U
Benzaldehyde	ug/l	5.7 U	1.4 U	1.5 U	5.7 U	5.7 U	4.9 U	5.7 U	5.7 U
Benzo[a]anthracene	ug/l	0.023 U	0.025 U	0.025 U	0.023 U	0.025 U	0.022 U	0.025 U	0.025 U
Benzo[a]pyrene	ug/l	0.023 U	0.025 U	0.025 U	0.023 U	0.025 U	0.022 U	0.025 U	0.025 U
Benzo[b]fluoranthene	ug/l	0.023 U	0.025 U	0.025 U	0.023 U	0.025 U	0.022 U	0.025 U	0.025 U

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PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 4 (333-343)	RW- 4 (393-403)	RW- 4A (62-72)	RW- 4A (113-123)	RW- 5	RW- 5A	RW- 6	RW- 6A
Benzo[g,h,i]perylene	ug/l	0.62 U	0.16 U	0.16 U	0.62 U	0.62 U	0.53 U	0.62 U	0.62 U
Benzo[k]fluoranthene	ug/l	0.37 U	0.093 U	0.096 U	0.37 U	0.37 U	0.32 U	0.37 U	0.37 U
Bis(2-chloroethoxy)methane	ug/l	3.1 U	0.78 U	0.81 U	3.1 U	3.1 U	2.7 U	3.1 U	3.1 U
Bis(2-chloroethyl)ether	ug/l	2.8 U	0.7 U	0.73 U	2.8 U	2.8 U	2.4 U	2.8 U	3.4 J
Bis(2-ethylhexyl) phthalate	ug/l	6 U	2.4 UB	1.6 U	6 U	6 U	5.2 U	6 U	6 U
Butyl benzyl phthalate	ug/l	2.5 U	0.63 U	0.65 U	2.5 U	2.5 U	2.2 U	2.5 U	2.5 U
Caprolactam	ug/l	2.4 U	0.6 U	0.63 U	2.4 U	2.4 U	2.1 U	2.4 U	2.4 U
Carbazole	ug/l	2.8 U	0.7 U	0.73 U	2.8 U	2.8 U	2.4 U	2.8 U	2.8 U
Chrysene	ug/l	0.33 U	0.083 U	0.086 U	0.33 U	0.33 U	0.28 U	0.33 U	0.33 U
Dibenz(a,h)anthracene	ug/l	0.45 U	0.11 U	0.12 U	0.45 U	0.45 U	0.39 U	0.45 U	0.45 U
Dibenzofuran	ug/l	2.9 U	0.73 U	0.76 U	2.9 U	2.9 U	2.5 U	2.9 U	2.9 U
Diethyl phthalate	ug/l	3 U	0.75 U	0.78 U	3 U	3 U	2.6 U	3 U	3 U
Dimethyl phthalate	ug/l	3.1 U	0.78 U	0.81 U	3.1 U	3.1 U	2.7 U	3.1 U	3.1 U
Di-n-butyl phthalate	ug/l	2.5 U	0.63 U	0.65 U	2.5 U	2.5 U	2.2 U	2.5 U	2.5 U
Di-n-octyl phthalate	ug/l	2.5 U	0.63 U	0.65 U	2.5 U	2.5 U	2.2 U	2.5 U	2.5 U
Diphenyl	ug/l	2.2 U	0.55 U	0.57 U	2.2 U	2.2 U	1.9 U	2.2 U	2.2 U
Fluoranthene	ug/l	0.32 U	0.08 U	0.083 U	0.32 U	0.32 U	0.28 U	0.32 U	0.32 U
Fluorene	ug/l	0.32 U	0.08 U	0.083 U	0.32 U	0.32 U	0.28 U	0.32 U	0.32 U
Hexachlorobenzene	ug/l	0.013 U	0.014 U	0.014 U	0.013 U	0.014 U	0.013 U	0.014 U	0.014 U
Hexachlorobutadiene	ug/l	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.18 U	0.2 U	0.2 U
Hexachlorocyclopentadiene	ug/l	1.8 U	0.45 U	0.47 U	1.8 U	1.8 U	1.6 U	1.8 U	1.8 U
Hexachloroethane	ug/l	1.9 U	0.48 U	0.49 U	1.9 U	1.9 U	1.6 U	1.9 U	1.9 U
Indeno[1,2,3-cd]pyrene	ug/l	0.41 U	0.1 U	0.11 U	0.41 U	0.41 U	0.35 U	0.41 U	0.41 U
Isophorone	ug/l	3.1 U	0.78 U	0.81 U	3.1 U	3.1 U	2.7 U	3.1 U	3.1 U
Naphthalene	ug/l	0.37 U	0.093 U	0.096 U	0.37 U	0.37 U	0.32 U	0.37 U	5.6
Nitrobenzene	ug/l	2.7 U	0.68 U	0.7 U	2.7 U	2.7 U	2.3 U	2.7 U	2.7 U
N-Nitrosodimethylamine	ug/l	0.19 U	0.2 U	0.2 U	0.19 U	0.2 U	0.18 U	0.2 U	0.2 U
N-Nitrosodi-n-propylamine	ug/l	3.4 U	0.85 U	0.89 U	3.4 U	3.4 U	2.9 U	3.4 U	3.4 U
N-Nitrosodiphenylamine	ug/l	3.6 U	0.9 U	0.94 U	3.6 U	3.6 U	3.1 U	3.6 U	3.6 U
Pentachlorophenol	ug/l	0.093 U	0.1 U	0.1 U	0.093 U	0.1 R	0.089 U	0.1 R	0.1 R
Phenanthrene	ug/l	0.42 U	0.11 U	0.11 U	0.42 U	0.42 U	0.36 U	0.42 U	0.42 U
Phenol	ug/l	1.5 U	0.38 U	0.39 U	1.5 U	1.5 U	1.3 U	1.5 U	1.5 U
Pyrene	ug/l	0.35 U	0.088 U	0.091 U	0.35 U	0.35 U	0.3 U	0.35 U	0.35 U
Tentatively Identified Compounds (TICs)									
(-)-10-Camphorsulfonyl chloride - TIC	ug/l								

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 4 (333-343)	RW- 4 (393-403)	RW- 4A (62-72)	RW- 4A (113-123)	RW- 5	RW- 5A	RW- 6	RW- 6A
.alpha.-Pinene - TIC	ug/l								3.8 NJ
1,4-Dioxane - TIC	ug/l								
17-Pentatriacontene - TIC	ug/l								
1-Heptadecene - TIC	ug/l								
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	ug/l								
1-Methylnaphthalene - TIC	ug/l								
1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	ug/l								
1-Phenyl-1-butene - TIC	ug/l								6.8 NJ
2(3H)-Benzothiazolone - TIC	ug/l								4.2 NJ
2-HYDRAZINO-2-IMIDAZOLINE - TIC	ug/l								
2-Mercaptobenzothiazole - TIC	ug/l								
3,5-di-tert-Butyl-4-hydroxybenzaldehyde - TIC	ug/l								
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	ug/l								
3H-Benz[e]indene, 2-methyl- - TIC	ug/l								
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	ug/l								
9,12-Octadecadienoic acid (Z,Z)- - TIC	ug/l								
9-Octadecenoic acid, (E)- - TIC	ug/l								
Allyldimethylphenylsilane - TIC	ug/l								
Benzenamine, N,N-dimethyl-4-nitro- - TIC	ug/l								
Benzene, 1,2,3,4-tetramethyl- - TIC	ug/l								7.0 NJ
Benzene, 1,2,3-trimethyl- - TIC	ug/l								
Benzene, 1,2,4,5-tetramethyl- - TIC	ug/l								
Benzene, 1,4-bis(1-methylethenyl)- - TIC	ug/l								
Benzene, 4-ethyl-1,2-dimethyl- - TIC	ug/l								
Benzenesulfonamide, N-butyl- - TIC	ug/l								
Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	ug/l							3.4 NJ	
Benzoic Acid - TIC	ug/l								
Benzoic acid, 2,4-dimethyl- - TIC	ug/l								
Benzoic acid, 2,5-dimethyl- - TIC	ug/l								
Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	ug/l								
Benzothiazole - TIC	ug/l								
Benzyl Alcohol - TIC	ug/l								
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	ug/l								
Cyclohexanamine, N-cyclohexyl- - TIC	ug/l								4.8 NJ
Diethyltoluamide - TIC	ug/l						5.4 NJ	7.4 NJ	

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 4 (333-343)	RW- 4 (393-403)	RW- 4A (62-72)	RW- 4A (113-123)	RW- 5	RW- 5A	RW- 6	RW- 6A
Dodecanoic acid - TIC	ug/l								
Ethanol, 1-(2-butoxyethoxy)- - TIC	ug/l								
Ethanol, 2-(2-butoxyethoxy)- - TIC	ug/l								
Furan, tetrahydro-2,5-dipropyl- - TIC	ug/l								
Heptadecane, 2,6,10,15-tetramethyl- - TIC	ug/l								
Heptadecanoic acid - TIC	ug/l								
Hexadecanoic acid, butyl ester - TIC	ug/l								
Indane - TIC	ug/l								10 NJ
Naphthalene, 1-ethyl- - TIC	ug/l								
Naphthalene, 2,7-dimethyl- - TIC	ug/l								
n-Hexadecanoic acid - TIC	ug/l	5.4 NJ			4.8 NJ				
Nonanoic acid - TIC	ug/l								
Octadecanoic acid - TIC	ug/l								
Oleic Acid - TIC	ug/l	5.5 NJ			15 NJ		6.6 NJ		
p-Benzoquinone - TIC	ug/l								
Phenol, 4-(1,1-dimethylpropyl)- - TIC	ug/l								
Phenol, 4,4'-(1-methylethylidene)bis- - TIC	ug/l								13 NJ
Phenol, p-tert-butyl- - TIC	ug/l								
Squalene - TIC	ug/l								
Tetradecane - TIC	ug/l								
Tetradecanoic acid - TIC	ug/l								
Tridecanoic acid - TIC	ug/l								
Triethylene glycol monododecyl ether - TIC	ug/l								
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 7	RW-11 S (236-241)	RW-11D (262-267)	RW-13 (71-91)	RW-13 (100-120)	RW-13 (150-170)	SC-1
1,2,4,5-Tetrachlorobenzene	ug/l	2.1 U	2.1 U	2.1 U	1.9 U	2.1 U	2.1 U	2.1 U
2,2'-oxybis[1-chloropropane]	ug/l	2.8 U	2.8 U	2.8 U	2.6 UJ	2.8 U	2.8 U	2.8 U
2,3,4,6-Tetrachlorophenol	ug/l	6.9 U	6.9 U	6.9 U	6.4 U	6.9 U	6.9 U	6.9 U
2,4,5-Trichlorophenol	ug/l	7.1 U F	7.1 U	7.1 U	6.6 U	7.1 U	7.1 U	7.1 U
2,4,6-Trichlorophenol	ug/l	6.8 U	6.8 U	6.8 U	6.3 U	6.8 U	6.8 U	6.8 U
2,4-Dichlorophenol	ug/l	5.6 U	5.6 U	5.6 U	5.2 U	5.6 U	5.6 U	5.6 U
2,4-Dimethylphenol	ug/l	4.2 U	4.2 U	4.2 U	3.9 U	4.2 U	4.2 U	4.2 U
2,4-Dinitrophenol	ug/l	5.9 U	5.9 U	6.6 J	5.5 U	5.9 U	5.9 U	5.9 U
2,4-Dinitrotoluene	ug/l	3.2 U F	3.2 U	3.2 U	3 U	3.2 U	3.2 U	3.2 U
2,6-Dinitrotoluene	ug/l	2.3 U F	2.3 U	2.3 U	2.1 U	2.3 U	2.3 U	2.3 U
2-Chloronaphthalene	ug/l	2.8 U F	2.8 U	2.8 U	2.6 U	2.8 U	2.8 U	2.8 U
2-Chlorophenol	ug/l	4.8 U	4.8 U	4.8 U	4.4 U	4.8 U	4.8 U	4.8 U
2-Methylnaphthalene	ug/l	0.4 U	0.4 U	0.4 U	0.37 U	0.4 U	0.4 U	0.4 U
2-Methylphenol	ug/l	2.3 U	2.3 U	2.3 U	2.1 U	2.3 U	2.3 U	2.3 U
2-Nitroaniline	ug/l	3.7 U F	3.7 U	3.7 U	3.4 U	3.7 U	3.7 U	3.7 U
2-Nitrophenol	ug/l	5.3 U F	5.3 U	5.3 U	4.9 U	5.3 U	5.3 U	5.3 U
3 & 4 Methylphenol	ug/l	2.2 U	2.2 U	2.2 U	2 U	2.2 U	2.2 U	2.2 U
3,3'-Dichlorobenzidine	ug/l	3.3 U	3.3 U	3.3 U	3.1 U	3.3 U	3.3 U	3.3 U
3-Nitroaniline	ug/l	2.7 U	2.7 U	2.7 U	2.5 U	2.7 U	2.7 U	2.7 U
4,6-Dinitro-2-methylphenol	ug/l	9.3 U	9.3 U	9.3 U	8.6 U	9.3 U	9.3 U	9.3 U
4-Bromophenyl phenyl ether	ug/l	2.7 U F	2.7 U	2.7 U	2.5 U	2.7 U	2.7 U	2.7 U
4-Chloro-3-methylphenol	ug/l	4.5 U F	4.5 U	4.5 U	4.2 U	4.5 U	4.5 U	4.5 U
4-Chloroaniline	ug/l	4.2 U	4.2 U	4.2 U	3.9 U	4.2 U	4.2 U	4.2 U
4-Chlorophenyl phenyl ether	ug/l	2.8 U F	2.8 U	2.8 U	2.6 U	2.8 U	2.8 U	2.8 U
4-Nitroaniline	ug/l	3.1 U F	3.1 U	3.1 U	2.9 U	3.1 U	3.1 U	3.1 U
4-Nitrophenol	ug/l	5.4 U	5.4 U	5.4 U	5 U	5.4 U	5.4 U	5.4 U
Acenaphthene	ug/l	0.32 U F	0.32 U	0.32 U	0.3 U	0.32 U	0.32 U	0.32 U
Acenaphthylene	ug/l	0.35 U F	0.35 U	0.35 U	0.32 U	0.35 U	0.35 U	0.35 U
Acetophenone	ug/l	2.3 U	2.3 U	2.3 U	2.1 U	2.3 U	2.3 U	2.3 U
Anthracene	ug/l	0.38 U F	0.38 U	0.38 U	0.35 U	0.38 U	0.38 U	0.38 U
Atrazine	ug/l	2.9 U	2.9 U	2.9 U	2.7 U	2.9 U	2.9 U	2.9 U
Benzaldehyde	ug/l	5.7 U F	5.7 U	5.7 U	5.3 U	5.7 U	5.7 U	5.7 U
Benzo[a]anthracene	ug/l	0.025 U	0.025 U	0.025 U	0.022 U	0.025 U	0.025 U	0.025 U
Benzo[a]pyrene	ug/l	0.025 U	0.025 U	0.025 U	0.022 U	0.025 U	0.025 U	0.025 U
Benzo[b]fluoranthene	ug/l	0.025 U	0.025 U	0.025 U	0.022 U	0.025 U	0.025 U	0.025 U

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 7	RW-11 S (236-241)	RW-11D (262-267)	RW-13 (71-91)	RW-13 (100-120)	RW-13 (150-170)	SC-1
Benzo[g,h,i]perylene	ug/l	0.62 U	0.62 U	0.62 U	0.57 U	0.62 U	0.62 U	0.62 U
Benzo[k]fluoranthene	ug/l	0.37 U	0.37 U	0.37 U	0.34 U	0.37 U	0.37 U	0.37 U
Bis(2-chloroethoxy)methane	ug/l	3.1 U	3.1 U	3.1 U	2.9 U	3.1 U	3.1 U	3.1 U
Bis(2-chloroethyl)ether	ug/l	2.8 U	2.8 U	2.8 U	2.6 U	2.8 U	2.8 U	2.9 J
Bis(2-ethylhexyl) phthalate	ug/l	6 U	6 U	6 U	5.6 U	6 U	6 U	6 U
Butyl benzyl phthalate	ug/l	2.5 U	2.5 U	2.5 U	2.3 U	2.5 U	2.5 U	2.5 U
Caprolactam	ug/l	2.4 U F	2.4 U	2.4 U	2.2 U	2.4 U	2.4 U	2.4 U
Carbazole	ug/l	2.8 U F	2.8 U	2.8 U	2.6 U	2.8 U	2.8 U	2.8 U
Chrysene	ug/l	0.33 U F	0.33 U	0.33 U	0.31 U	0.33 U	0.33 U	0.33 U
Dibenz(a,h)anthracene	ug/l	0.45 U	0.45 U	0.45 U	0.42 U	0.45 U	0.45 U	0.45 U
Dibenzofuran	ug/l	2.9 U F	2.9 U	2.9 U	2.7 U	2.9 U	2.9 U	2.9 U
Diethyl phthalate	ug/l	3 U F	3 U	3 U	2.8 U	3 U	3 U	3 U
Dimethyl phthalate	ug/l	3.1 U F	3.1 U	3.1 U	2.9 U	3.1 U	3.1 U	3.1 U
Di-n-butyl phthalate	ug/l	2.5 U F	2.5 U	2.5 U	2.3 U	2.5 U	2.5 U	2.5 U
Di-n-octyl phthalate	ug/l	2.5 U	2.5 U	2.5 U	2.3 U	2.5 U	2.5 U	2.5 U
Diphenyl	ug/l	2.2 U	2.2 U	2.2 U	2 U	2.2 U	2.2 U	2.2 U
Fluoranthene	ug/l	0.32 U F	0.32 U	0.32 U	0.3 U	0.32 U	0.32 U	0.32 U
Fluorene	ug/l	0.32 U F	0.32 U	0.32 U	0.3 U	0.32 U	0.32 U	0.32 U
Hexachlorobenzene	ug/l	0.014 U	0.014 U	0.014 U	0.012 U	0.014 U	0.014 U	0.014 U
Hexachlorobutadiene	ug/l	0.2 U	0.2 U	0.2 U	0.17 U	0.2 U	0.2 U	0.2 U
Hexachlorocyclopentadiene	ug/l	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	1.8 U
Hexachloroethane	ug/l	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
Indeno[1,2,3-cd]pyrene	ug/l	0.41 U	0.41 U	0.41 U	0.38 U	0.41 U	0.41 U	0.41 U
Isophorone	ug/l	3.1 U	3.1 U	3.1 U	2.9 U	3.1 U	3.1 U	3.1 U
Naphthalene	ug/l	0.37 U	0.37 U	0.37 U	0.34 U	0.37 U	0.37 U	5.5
Nitrobenzene	ug/l	2.7 U	2.7 U	2.7 U	2.5 U	2.7 U	2.7 U	2.7 U
N-Nitrosodimethylamine	ug/l	0.2 U	0.2 U	0.2 U	0.17 U	0.2 U	0.2 U	0.2 U
N-Nitrosodi-n-propylamine	ug/l	3.4 U F	3.4 U	3.4 U	3.1 U	3.4 U	3.4 U	3.4 U
N-Nitrosodiphenylamine	ug/l	3.6 U	3.6 U	3.6 U	3.3 U	3.6 U	3.6 U	3.6 U
Pentachlorophenol	ug/l	0.1 U F	0.1 U	0.1 U	0.086 U	0.1 U	0.1 U	0.1 R
Phenanthrene	ug/l	0.42 U F	0.42 U	0.42 U	0.39 U	0.42 U	0.42 U	0.42 U
Phenol	ug/l	1.5 U	1.5 U	2.3 J	1.4 U	6.6 J	1.5 U	1.5 U
Pyrene	ug/l	0.35 U F	0.35 U	0.35 U	0.32 U	0.35 U	0.35 U	0.35 U
Tentatively Identified Compounds (TICs)								
(-)-10-Camphorsulfonyl chloride - TIC	ug/l							

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 7	RW-11 S (236-241)	RW-11D (262-267)	RW-13 (71-91)	RW-13 (100-120)	RW-13 (150-170)	SC-1
.alpha.-Pinene - TIC	ug/l							
1,4-Dioxane - TIC	ug/l			9.5 J				
17-Pentatriacontene - TIC	ug/l			7.7 NJ				
1-Heptadecene - TIC	ug/l			6.7 NJ				
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	ug/l							
1-Methylnaphthalene - TIC	ug/l							
1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	ug/l					26 NJ		
1-Phenyl-1-butene - TIC	ug/l							4.4 NJ
2(3H)-Benzothiazolone - TIC	ug/l							6.3 NJ
2-HYDRAZINO-2-IMIDAZOLINE - TIC	ug/l					43 NJ		
2-Mercaptobenzothiazole - TIC	ug/l			12 NJ				
3,5-di-tert-Butyl-4-hydroxybenzaldehyde - TIC	ug/l			7.6 NJ				
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	ug/l			39 NJ				
3H-Benz[e]indene, 2-methyl- - TIC	ug/l				4.6 NJ			
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	ug/l			78 NJ		21 NJ		
9,12-Octadecadienoic acid (Z,Z)- - TIC	ug/l			16 NJ				
9-Octadecenoic acid, (E)- - TIC	ug/l							
Allyldimethylphenylsilane - TIC	ug/l					10 NJ		
Benzenamine, N,N-dimethyl-4-nitro- - TIC	ug/l				7.5 NJ			
Benzene, 1,2,3,4-tetramethyl- - TIC	ug/l							4.9 NJ
Benzene, 1,2,3-trimethyl- - TIC	ug/l							6.4 NJ
Benzene, 1,2,4,5-tetramethyl- - TIC	ug/l							
Benzene, 1,4-bis(1-methylethenyl)- - TIC	ug/l							
Benzene, 4-ethyl-1,2-dimethyl- - TIC	ug/l							3.9 NJ
Benzenesulfonamide, N-butyl- - TIC	ug/l							
Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	ug/l							8.0 NJ
Benzoic Acid - TIC	ug/l			8.5 NJ				
Benzoic acid, 2,4-dimethyl- - TIC	ug/l							
Benzoic acid, 2,5-dimethyl- - TIC	ug/l							
Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	ug/l							
Benzothiazole - TIC	ug/l							
Benzyl Alcohol - TIC	ug/l					14 NJ		
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	ug/l							4.0 NJ
Cyclohexanamine, N-cyclohexyl- - TIC	ug/l							
Diethyltoluamide - TIC	ug/l							

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 7	RW-11 S (236-241)	RW-11D (262-267)	RW-13 (71-91)	RW-13 (100-120)	RW-13 (150-170)	SC-1
Dodecanoic acid - TIC	ug/l					10 NJ		
Ethanol, 1-(2-butoxyethoxy)- - TIC	ug/l			27 NJ				
Ethanol, 2-(2-butoxyethoxy)- - TIC	ug/l					96 NJ		
Furan, tetrahydro-2,5-dipropyl- - TIC	ug/l					9.5 NJ		
Heptadecane, 2,6,10,15-tetramethyl- - TIC	ug/l							
Heptadecanoic acid - TIC	ug/l			8.5 NJ				
Hexadecanoic acid, butyl ester - TIC	ug/l							
Indane - TIC	ug/l							3.6 NJ
Naphthalene, 1-ethyl- - TIC	ug/l							
Naphthalene, 2,7-dimethyl- - TIC	ug/l							
n-Hexadecanoic acid - TIC	ug/l			19 NJ	3.4 NJ	85 NJ		
Nonanoic acid - TIC	ug/l			43 NJ				
Octadecanoic acid - TIC	ug/l			29 NJ		100 NJ		
Oleic Acid - TIC	ug/l				5.7 NJ			
p-Benzoquinone - TIC	ug/l							
Phenol, 4-(1,1-dimethylpropyl)- - TIC	ug/l					12 NJ		
Phenol, 4,4'-(1-methylethylidene)bis- - TIC	ug/l							
Phenol, p-tert-butyl- - TIC	ug/l							
Squalene - TIC	ug/l							7.5 NJ
Tetradecane - TIC	ug/l				3.0 NJ			
Tetradecanoic acid - TIC	ug/l			7.6 NJ				
Tridecanoic acid - TIC	ug/l							
Triethylene glycol monododecyl ether - TIC	ug/l					8.3 NJ		
See Table 12 for validation qualifiers.								
Result exceeds NJGWQS (NJAC 7:9C March 2014)								

TABLE 5F
SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBs) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-15B	OB-19	OB-20A	OB-20B	OB-21	OB-21-DUP-01	OB-25
PCB-1016	ug/l		0.57 U	0.37 U	0.43 U	0.43 U	0.43 U	0.55 U	0.55 U	0.43 U
PCB-1221	ug/l		0.45 U	0.29 U	0.34 U	0.34 U	0.34 U	0.44 U	0.44 U	0.34 U
PCB-1232	ug/l		0.53 U	0.34 U	0.4 U	0.4 U	0.4 U	0.52 U	0.52 U	0.4 U
PCB-1242	ug/l		0.29 U	0.19 U	0.22 U	0.22 U	0.22 U	0.28 U	0.28 U	0.22 U
PCB-1248	ug/l		0.2 U	0.13 U	0.15 U	0.15 U	0.15 U	0.19 U	0.19 U	0.15 U
PCB-1254	ug/l		0.22 U	0.15 U	0.17 U	0.17 U	0.17 U	0.22 U	0.22 U	0.17 U
PCB-1260	ug/l		0.24 U	0.16 U	0.18 U	0.18 U	0.18 U	0.23 U	0.23 U	0.18 U
Polychlorinated biphenyls, Total	ug/l	0.5	0.66 U	0.37 U	0.5 U	0.5 U	0.5 U	0.64 U	0.64 U	0.43 U

Parameter	Result Unit	OB-27	OB-30B	OB-30C	RW- 3 (77-87)	RW- 3 DS (155-160)	RW- 3 DS (155-160)-Dup-04-082515	RW- 3DD (175-180)	RW- 4 (333-343)	RW- 4 (393-403)
PCB-1016	ug/l	0.56 U	0.54 U	0.57 U	0.57 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
PCB-1221	ug/l	0.44 U	0.43 U	0.45 U	0.45 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
PCB-1232	ug/l	0.52 U	0.5 U	0.53 U	0.53 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1242	ug/l	0.29 U	0.28 U	0.29 U	0.29 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
PCB-1248	ug/l	0.2 U	0.19 U	0.2 U	0.2 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
PCB-1254	ug/l	0.22 U	0.21 U	0.22 U	0.22 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
PCB-1260	ug/l	0.23 U	0.23 U	0.24 U	0.24 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Polychlorinated biphenyls, Total	ug/l	0.65 U	0.63 U	0.66 U	0.66 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U

TABLE 5F
SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBs) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 4A (62-72)	RW- 4A (113-123)	RW- 5	RW- 5A	RW- 6	RW- 6A	RW- 7	RW-11 S (236-241)	RW-11D (262-267)
PCB-1016	ug/l	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.57 U	0.43 U	0.43 U
PCB-1221	ug/l	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.45 U	0.34 U	0.34 U
PCB-1232	ug/l	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.53 U	0.4 U	0.4 U
PCB-1242	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.29 U	0.22 U	0.22 U
PCB-1248	ug/l	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.2 U	0.15 U	0.15 U
PCB-1254	ug/l	0.17 U	1.3/0.17U*	0.17 U	0.18 J/0.15U*	0.17 U	0.17 U	0.22 U	0.17 U	0.17 U
PCB-1260	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.24 U	0.18 U	0.18 U
Polychlorinated biphenyls, Total	ug/l	0.43 U	1.3/0.43 U*	0.5 U	0.43 U/0.38U*	0.5 U	0.5 U	0.66 U	0.43 U	0.43 U

Parameter	Result Unit	RW-13 (71-91)	RW-13 (100-120)	RW-13 (150-170)	SC-1
PCB-1016	ug/l	0.41 U	0.43 U	0.43 U	0.43 U
PCB-1221	ug/l	0.33 U	0.34 U	0.34 U	0.34 U
PCB-1232	ug/l	0.38 U	0.4 U	0.4 U	0.4 U
PCB-1242	ug/l	0.21 U	0.22 U	0.22 U	0.22 U
PCB-1248	ug/l	0.14 U	0.15 U	0.15 U	0.15 U
PCB-1254	ug/l	0.16 U	0.17 U	0.17 U	0.17 U
PCB-1260	ug/l	0.17 U	0.18 U	0.18 U	0.18 U
Polychlorinated biphenyls, Total	ug/l	0.41 U	0.43 U	0.43 U	0.5 U

See Table 12 for validation qualifiers.

Result exceeds NJGWQS (NJAC 7:9C March 2014)

*Samples re-analyzed with non-detectable results. Both original and non-detect results shown.

TABLE 6A
SUMMARY OF DETECTED ORGANIC COMPOUNDS IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

VOC Parameter	Result Unit	NJGWQS ug/l	OB-14A	OB-16	OB-17
1,1-Dichloroethane	ug/l	50			0.78 J
1,4-Dioxane	ug/l	10			17
VOC Tentatively Identified Compounds (TICs)					
None					
SVOC Parameter					
None					
SVOC Tentatively Identified Compounds (TICs)					
Cyclohexanamine, N-cyclohexyl- - TIC	ug/l		16 NJ		
Pyridine, 3-butyl-, 1-oxide - TIC	ug/l			13 NJ	
PCBs					
None					
See Table 12 for validation qualifiers.					
Result exceeds NJGWQS (NJAC 7:9C March 2014)					

TABLE 6B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS mg/l	OB-14A	OB-14B	OB-16	OB-17	OB-18	OB-24	OB-28
Aluminum	mg/l	0.2	0.025	0.0096 U	0.0096 U	0.051	0.27	0.06	1.4
Aluminum, Dissolved	mg/l	0.2	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.017 J	0.010 J	0.0096 U
Antimony	mg/l	0.006	0.00061 J	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Antimony, Dissolved	mg/l	0.006	0.00074 J	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Arsenic	mg/l	0.003	0.0092	0.0025	0.012	0.0050 B	0.0014 J	0.0018 J	0.0015 J
Arsenic, Dissolved	mg/l	0.003	0.0012 J	0.0011 J	0.0023	0.00058 J	0.0005 U	0.00064 J	0.00082 J
Barium	mg/l	6	0.46	0.041	0.1	0.016	0.01	0.048	0.084
Barium, Dissolved	mg/l	6	0.31	0.041	0.069	0.013	0.0089	0.032	0.073
Beryllium	mg/l	0.001	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Beryllium, Dissolved	mg/l	0.001	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Cadmium	mg/l	0.004	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Cadmium, Dissolved	mg/l	0.004	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Calcium	mg/l		146	125	170	110	54.7	99.2	141
Calcium, Dissolved	mg/l		115	100	142	99.3	53.6	99.2	103
Chromium	mg/l	0.07	0.00077 J	0.00055 J	0.0005 U	0.00073 J	0.0012 J	0.00092 J	0.0024
Chromium, Dissolved	mg/l	0.07	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00067 J	0.0005 U	0.0005 U
Cobalt	mg/l	0.1	0.0012 J	0.0005 U	0.0019 J	0.0010 J	0.0005 U	0.0005 U	0.0028
Cobalt, Dissolved	mg/l	0.1	0.00088 J	0.0005 U	0.0018 J	0.00088 J	0.0005 U	0.0005 U	0.0015 J
Copper	mg/l	1.3	0.0005 U	0.0005 U	0.0005 U	0.0011 J	0.0005 U	0.0011 J	0.006
Copper, Dissolved	mg/l	1.3	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0016 J
Cyanide, Total	mg/l	0.1	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U
Iron	mg/l	0.3	59.3	0.93	20.1	6.1	0.36	0.17	2.7
Iron, Dissolved	mg/l	0.3	27.3	0.05	2.9	0.11	0.018 J	0.014 J	0.01 U
Lead	mg/l	0.005	0.00086 J	0.0002 U	0.0002 U	0.00036 J	0.0002 U	0.00024 J	0.0010 J
Lead, Dissolved	mg/l	0.005	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Magnesium	mg/l		10.9	28.8	18.2	31	10.8	23.8	31.6
Magnesium, Dissolved	mg/l		10.2	29.9	18	31.6	11	24.6	29.5
Manganese	mg/l	0.05	1.5 B	1.6 B	4.9 B	0.53	0.013 B	1.3 B	4.4 B
Manganese, Dissolved	mg/l	0.05	1.8	3.3	4	0.55	0.00075 J	0.022	0.54
Mercury	mg/l	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Mercury, Dissolved	mg/l	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Nickel	mg/l	0.1	0.0026	0.0019 J	0.0015 J	0.0014 J	0.0014 J	0.0015 J	0.0027
Nickel, Dissolved	mg/l	0.1	0.0013 J	0.0012 J	0.00070 J	0.00063 J	0.0005 U	0.0005 U	0.0016 J
Potassium	mg/l		5.8	3.1	10.6	0.91 J	0.53 J	2.4	4.6
Potassium, Dissolved	mg/l		5.1	2.9	10.5	0.81 J	0.39 J	2.1	4
Selenium	mg/l	0.04	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Selenium, Dissolved	mg/l	0.04	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Silver	mg/l	0.04	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U

TABLE 6B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS mg/l	OB-14A	OB-14B	OB-16	OB-17	OB-18	OB-24	OB-28
Silver, Dissolved	mg/l	0.04	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l	50	18.4	18.4	34.2	14.8	6.2	16.2	24.4
Sodium, Dissolved	mg/l	50	17.5	19.4	34.4	14.9	6.4	18	24.2
Thallium	mg/l	0.002	0.0002 U	0.0002 U	0.0002 U	0.00066 J	0.0002 U	0.00044 J	0.0002 U
Thallium, Dissolved	mg/l	0.002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00031 J	0.0002 U
Vanadium	mg/l		0.0040 B	0.0024 B	0.0025 B	0.0028 B	0.0026 B	0.0035 B	0.0055 B
Vanadium, Dissolved	mg/l		0.0017 UB	0.0016 UB	0.0016 UB	0.0017 UB	0.0015 UB	0.0022 B	0.0017 UB
Zinc	mg/l	2	0.01 U	0.01 U	0.011 J	0.01 U	0.01 U	0.01 U	0.01 U
Zinc, Dissolved	mg/l	2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Wet Chemistry									
Bicarbonate Alkalinity as Ca	mg/l		377	311	401	328	163	218	362
Total Alkalinity as CaCO3	mg/l		377	311	401	328	163	218	362
Chloride	mg/l	250	20.6	45.1	56.6	8.57	1.22	86.8	89.4
Sulfate	mg/l	250	0.6 U	13.4	3.37	38.5	11.6	27.3	18.1
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 6C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-14A	OB-14B	OB-16	OB-17	OB-18	OB-24	OB-28
1,1,1-Trichloroethane	ug/l	30	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	ug/l	1	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2-Trichloroethane	ug/l	3	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	ug/l	50	0.24 U	0.24 U	0.24 U	0.78 J	0.24 U	0.24 U	0.24 U
1,1-Dichloroethene	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane	ug/l	0.03	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene	ug/l	9	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	ug/l	0.02	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
1,2-Dibromoethane	ug/l	0.03	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichlorobenzene	ug/l	600	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,2-Dichloroethane	ug/l	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dichlorobenzene	ug/l	600	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,4-Dichlorobenzene	ug/l	75	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,4-Dioxane	ug/l	10	0.27 U	0.27 U	0.27 U	17	0.27 U	0.27 U	0.27 U
2-Butanone (MEK)	ug/l	300	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
2-Hexanone	ug/l	300	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methyl-2-pentanone (MIBK)	ug/l		0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Acetone	ug/l	6000	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Benzene	ug/l	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/l	4	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Bromomethane	ug/l	10	0.35 UJ	0.35 UJ	0.35 UJ	0.35 UJ	0.35 UJ	0.35 UJ	0.35 UJ
Carbon disulfide	ug/l	700	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Carbon tetrachloride	ug/l	1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorobenzene	ug/l	50	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorodibromomethane	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chloroethane	ug/l	5	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroform	ug/l	70	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloromethane	ug/l		0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
cis-1,2-Dichloroethene	ug/l	70	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,3-Dichloropropene	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Cyclohexane	ug/l		0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorobromomethane	ug/l	1	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dichlorodifluoromethane	ug/l	1000	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	ug/l	700	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Ethylene Dibromide	ug/l	0.03	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U

TABLE 6C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-14A	OB-14B	OB-16	OB-17	OB-18	OB-24	OB-28
Freon-113	ug/l		0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l	700	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methyl acetate	ug/l	7000	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Methyl tert-butyl ether	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l		0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Methylene Chloride	ug/l	3	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Styrene	ug/l	100	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	1	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	600	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
trans-1,2-Dichloroethene	ug/l	100	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l	2000	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Xylenes, Total	ug/l	1000	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Tentatively Identified Compounds (TICs)									
None									
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 6D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-14A	OB-14B	OB-16	OB-17	OB-18	OB-24	OB-28
1,2,4,5-Tetrachlorobenzene	ug/l		2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
2,2'-oxybis[1-chloropropane]	ug/l	300	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
2,3,4,6-Tetrachlorophenol	ug/l	200	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U
2,4,5-Trichlorophenol	ug/l	700	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U
2,4,6-Trichlorophenol	ug/l	20	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U
2,4-Dichlorophenol	ug/l	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
2,4-Dimethylphenol	ug/l	100	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U
2,4-Dinitrophenol	ug/l	40	5.9 U	5.9 U	5.9 U	5.9 U	5.9 U	5.9 U	5.9 U
2,4-Dinitrotoluene	ug/l		3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
2,6-Dinitrotoluene	ug/l		2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
2-Chloronaphthalene	ug/l	600	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
2-Chlorophenol	ug/l	40	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
2-Methylnaphthalene	ug/l	30	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Methylphenol	ug/l		2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
2-Nitroaniline	ug/l		3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
2-Nitrophenol	ug/l		5.3 U	5.3 U	5.3 U	5.3 U	5.3 U	5.3 U	5.3 U
3 & 4 Methylphenol	ug/l		2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
3,3'-Dichlorobenzidine	ug/l	30	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
3-Nitroaniline	ug/l		2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
4,6-Dinitro-2-methylphenol	ug/l	1	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U
4-Bromophenyl phenyl ether	ug/l		2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
4-Chloro-3-methylphenol	ug/l	100	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
4-Chloroaniline	ug/l		4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U
4-Chlorophenyl phenyl ether	ug/l		2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
4-Nitroaniline	ug/l		3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
4-Nitrophenol	ug/l		5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
Acenaphthene	ug/l	400	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Acenaphthylene	ug/l	100	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Acetophenone	ug/l	700	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Anthracene	ug/l	2000	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Atrazine	ug/l	3	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Benzaldehyde	ug/l		5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U
Benzo[a]anthracene	ug/l	0.1	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzo[a]pyrene	ug/l	0.1	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzo[b]fluoranthene	ug/l	0.2	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzo[g,h,i]perylene	ug/l	100	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U

TABLE 6D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-14A	OB-14B	OB-16	OB-17	OB-18	OB-24	OB-28
Benzo[k]fluoranthene	ug/l	0.5	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Bis(2-chloroethoxy)methane	ug/l		3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Bis(2-chloroethyl)ether	ug/l	7	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Bis(2-ethylhexyl) phthalate	ug/l	3	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Butyl benzyl phthalate	ug/l	100	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Caprolactam	ug/l	5000	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Carbazole	ug/l		2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Chrysene	ug/l	5	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Dibenz(a,h)anthracene	ug/l	0.3	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
Dibenzofuran	ug/l		2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Diethyl phthalate	ug/l	6000	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dimethyl phthalate	ug/l	100	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Di-n-butyl phthalate	ug/l	700	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Di-n-octyl phthalate	ug/l	100	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Diphenyl	ug/l	400	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Fluoranthene	ug/l	300	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Fluorene	ug/l	300	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Hexachlorobenzene	ug/l	0.02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Hexachlorobutadiene	ug/l	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Hexachlorocyclopentadiene	ug/l	40	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Hexachloroethane	ug/l	7	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Indeno[1,2,3-cd]pyrene	ug/l	0.2	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Isophorone	ug/l	40	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Naphthalene	ug/l	300	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Nitrobenzene	ug/l	6	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
N-Nitrosodimethylamine	ug/l	0.8	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
N-Nitrosodi-n-propylamine	ug/l	10	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U
N-Nitrosodiphenylamine	ug/l	10	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U
Pentachlorophenol	ug/l	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenanthrene	ug/l	100	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Phenol	ug/l	2000	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Pyrene	ug/l	200	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Tentatively Identified Compounds (TICs)									
Cyclohexanamine, N-cyclohexyl- - TIC	ug/l		16 NJ						
Pyridine, 3-butyl-, 1-oxide - TIC	ug/l				13 NJ				
See Table 12 for validation qualifiers.									

TABLE 6D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-14A	OB-14B	OB-16	OB-17	OB-18	OB-24	OB-28
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 6E
SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBs) IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-14A	OB-14B	OB-16	OB-17	OB-18	OB-24	OB-28
PCB-1016	ug/l		0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
PCB-1221	ug/l		0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
PCB-1232	ug/l		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1242	ug/l		0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
PCB-1248	ug/l		0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
PCB-1254	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
PCB-1260	ug/l		0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Polychlorinated biphenyls, Total	ug/l	0.5	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 7A
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB- 2	OB- 5	OB- 7	RW- 2 (279-289)	RW- 2 (452-462)	RW- 8 (163-173)	RW- 8 (204-214)
1,1-Dichloroethane	ug/l	50		0.37 J					
1,2,3-Trichloropropane	ug/l	0.03							
1,4-Dichlorobenzene	ug/l	75		0.20 J	0.18 J	0.24 J			
1,4-Dioxane	ug/l	10		0.35 J		10	4.7 J		
2-Butanone (MEK)	ug/l	300				3.2 J			
Acetone	ug/l	6000				12 J	16 J		4.1 UB
Benzene	ug/l	1				0.22 J	0.24 J	0.27 J	0.57 J
Carbon disulfide	ug/l	700					1.8		
Chlorobenzene	ug/l	50				2.3			
Dichlorodifluoromethane	ug/l	1000					0.19 J		
Methyl tert-butyl ether	ug/l			0.27 J		0.25 J	0.30 J		
Methylene Chloride	ug/l	3	0.22 UB						
Toluene	ug/l	600				0.83 J	0.71 J		
Tentatively Identified Compounds (TICs)									
1-Propene, 2-methyl- - TIC	ug/l					3.0 NJ	5.2 NJ		
Ethyl ether - TIC	ug/l	1000		0.95 J	0.28 J	1.5 J			
Isopropyl alcohol - TIC	ug/l						62		
Tetrahydrofuran - TIC	ug/l	10				3.3 J			
Unknown - TIC	ug/l					62 NJ	3.1 NJ		

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

TABLE 7A
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 9 (206-216)	RW- 9A (85-95)	RW-10 (120-130)	RW-10 (185-195)	SC-2
1,1-Dichloroethane	ug/l					
1,2,3-Trichloropropane	ug/l				0.016 UB	
1,4-Dichlorobenzene	ug/l					
1,4-Dioxane	ug/l					
2-Butanone (MEK)	ug/l		11 J	5.3 J		
Acetone	ug/l	5.6 J	3.9 J	43	24 J	
Benzene	ug/l					
Carbon disulfide	ug/l			3.2	1.6	
Chlorobenzene	ug/l					
Dichlorodifluoromethane	ug/l					
Methyl tert-butyl ether	ug/l					
Methylene Chloride	ug/l					0.23 UB
Toluene	ug/l	0.20 J		0.22 J		
Tentatively Identified Compounds (TICs)						
1-Propene, 2-methyl- - TIC	ug/l					
Ethyl ether - TIC	ug/l					
Isopropyl alcohol - TIC	ug/l			48 J		
Tetrahydrofuran - TIC	ug/l					
Unknown - TIC	ug/l			27 NJ		
See Table 12 for validation qualifiers.						
Result exceeds NJGWQS (NJAC 7:9C March 2014)						

TABLE 7B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) AND PCBs IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB- 2	OB- 3	OB- 4	OB- 5	OB- 7	OB-12	OB-13
2,4-Dinitrophenol	ug/l	40							
Benzo[g,h,i]perylene	ug/l	100							
Bis(2-ethylhexyl) phthalate	ug/l	3		6.3 B	1.7 UB	2.2 UB		3.7 B	3.1 B
Phenol	ug/l	2000							
Tentatively Identified Compounds (TICs)									
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	ug/l								
1,4-Benzenediamine, N-(1-methylethyl)-N' - TIC	ug/l								
14-Pentadecenoic acid - TIC	ug/l								
15-Crown-5 - TIC	ug/l								
1H-Pyrrole, 3,5-dimethyl-2-phenyl- - TIC	ug/l								
2(3H)-Benzothiazolone - TIC	ug/l								
2-Naphthalenecarboxylic acid - TIC	ug/l								
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	ug/l								
4-Methoxybenzhydrazide - TIC	ug/l								
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	ug/l								
9-Octadecenamide, (Z)- - TIC	ug/l								
9-Octadecenoic acid, (E)- - TIC	ug/l								
Benzeneacetic acid - TIC	ug/l								
Benzenesulfonamide, 2-methyl- - TIC	ug/l								
Benzenesulfonamide, N-butyl- - TIC	ug/l								
Benzo[b]triphenylene - TIC	ug/l								
Benzocycloheptatriene - TIC	ug/l								
Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	ug/l								
Cyclohexanone, 3,3,5-trimethyl- - TIC	ug/l								
Diethyltoluamide - TIC	ug/l								
Eicosane - TIC	ug/l								
Ethanone, 1-(2-hydroxyphenyl)- - TIC	ug/l								
Hexadeca-2,6,10,14-tetraen-1-ol, 3,7,11, - TIC	ug/l								
Hexagol - TIC	ug/l		16 NJ						
n-Hexadecanoic acid - TIC	ug/l		6.8 NJ						
Nonanoic acid - TIC	ug/l								
Octadec-9-enoic acid - TIC	ug/l								
Octadecanoic acid - TIC	ug/l		5.5 NJ						
Oleic Acid - TIC	ug/l						17 NJ		
Tetradecanoic acid - TIC	ug/l								
Tetraethyleneglycol monomethylether - TIC	ug/l								

TABLE 7B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) AND PCBs IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB- 2	OB- 3	OB- 4	OB- 5	OB- 7	OB-12	OB-13
Tridecanoic acid - TIC	ug/l						3.5 NJ		
Unknown - TIC	ug/l								
PCBs									
None									
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 7B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) AND PCBs IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	OB-13-DUP-02	RW-2 (279-289)	RW-2 (452-462)	RW-8 (163-173)	RW-8 (204-214)	RW-9 (206-216)	RW-9A (85-95)	RW-10 (120-130)
2,4-Dinitrophenol	ug/l			6.5 J					
Benzo[g,h,i]perylene	ug/l								
Bis(2-ethylhexyl) phthalate	ug/l	3.6 B							
Phenol	ug/l		1.7 J	10					8.6 J
Tentatively Identified Compounds (TICs)									
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	ug/l								
1,4-Benzenediamine, N-(1-methylethyl)-N' - TIC	ug/l		5.9 NJ						
14-Pentadecenoic acid - TIC	ug/l					23 NJ			
15-Crown-5 - TIC	ug/l								
1H-Pyrrole, 3,5-dimethyl-2-phenyl- - TIC	ug/l								3.5 NJ
2(3H)-Benzothiazolone - TIC	ug/l		3.8 NJ						
2-Naphthalenecarboxylic acid - TIC	ug/l								5.6 NJ
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	ug/l		33 NJ	18 NJ		22 NJ	22 NJ		15 NJ
4-Methoxybenzhydrazide - TIC	ug/l								
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	ug/l		17 NJ	12 NJ		5.8 NJ	6.0 NJ		7.7 NJ
9-Octadecenamide, (Z)- - TIC	ug/l					4.3 NJ			
9-Octadecenoic acid, (E)- - TIC	ug/l							14 NJ	
Benzeneacetic acid - TIC	ug/l			10 NJ					
Benzenesulfonamide, 2-methyl- - TIC	ug/l		9.6 NJ						
Benzenesulfonamide, N-butyl- - TIC	ug/l				8.4 NJ	37 NJ	15 NJ		
Benzo[b]triphenylene - TIC	ug/l								
Benzocycloheptatriene - TIC	ug/l								
Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	ug/l						4.8 NJ		
Cyclohexanone, 3,3,5-trimethyl- - TIC	ug/l			5.1 NJ					
Diethyltoluamide - TIC	ug/l	4.7 NJ							
Eicosane - TIC	ug/l					3.1 NJ			
Ethanone, 1-(2-hydroxyphenyl)- - TIC	ug/l			3.6 NJ					
Hexadeca-2,6,10,14-tetraen-1-ol, 3,7,11, - TIC	ug/l					3.1 NJ			
Hexagol - TIC	ug/l								
n-Hexadecanoic acid - TIC	ug/l			5.0 NJ					9.9 NJ
Nonanoic acid - TIC	ug/l			5.5 NJ		69 NJ			
Octadec-9-enoic acid - TIC	ug/l								
Octadecanoic acid - TIC	ug/l		4.9 NJ						8.7 NJ
Oleic Acid - TIC	ug/l		11 NJ	19 NJ			17 NJ		
Tetradecanoic acid - TIC	ug/l			4.2 NJ		6.9 NJ			
Tetraethyleneglycol monomethylether - TIC	ug/l		3.5 NJ						

TABLE 7B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) AND PCBs IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	OB-13-DUP-02	RW- 2 (279-289)	RW- 2 (452-462)	RW- 8 (163-173)	RW- 8 (204-214)	RW- 9 (206-216)	RW- 9A (85-95)	RW-10 (120-130)
Tridecanoic acid - TIC	ug/l						5.6 NJ		
Unknown - TIC	ug/l			6.7 J					
PCBs									
None									

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

TABLE 7B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) AND PCBs IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW-10 (185-195)	RW-10A (51-61)	SC-2
2,4-Dinitrophenol	ug/l			
Benzo[g,h,i]perylene	ug/l			0.81 UB
Bis(2-ethylhexyl) phthalate	ug/l			
Phenol	ug/l	3.3 J		3.1 J
Tentatively Identified Compounds (TICs)				
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	ug/l		4.9 NJ	8.5 NJ
1,4-Benzenediamine, N-(1-methylethyl)-N' - TIC	ug/l			
14-Pentadecenoic acid - TIC	ug/l			
15-Crown-5 - TIC	ug/l			62 NJ
1H-Pyrrole, 3,5-dimethyl-2-phenyl- - TIC	ug/l			
2(3H)-Benzothiazolone - TIC	ug/l			
2-Naphthalenecarboxylic acid - TIC	ug/l			
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	ug/l	12 NJ		
4-Methoxybenzhydrazide - TIC	ug/l			5.6 NJ
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	ug/l	3.8 NJ		
9-Octadecenamide, (Z)- - TIC	ug/l			
9-Octadecenoic acid, (E)- - TIC	ug/l			
Benzeneacetic acid - TIC	ug/l			
Benzenesulfonamide, 2-methyl- - TIC	ug/l			
Benzenesulfonamide, N-butyl- - TIC	ug/l			
Benzo[b]triphenylene - TIC	ug/l			25 NJ
Benzocycloheptatriene - TIC	ug/l			3.6 NJ
Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	ug/l			
Cyclohexanone, 3,3,5-trimethyl- - TIC	ug/l			
Diethyltoluamide - TIC	ug/l			
Eicosane - TIC	ug/l			
Ethanone, 1-(2-hydroxyphenyl)- - TIC	ug/l			
Hexadeca-2,6,10,14-tetraen-1-ol, 3,7,11, - TIC	ug/l			
Hexagol - TIC	ug/l			
n-Hexadecanoic acid - TIC	ug/l	5.8 NJ		4.8 NJ
Nonanoic acid - TIC	ug/l			
Octadec-9-enoic acid - TIC	ug/l			4.6 NJ
Octadecanoic acid - TIC	ug/l			4.3 NJ
Oleic Acid - TIC	ug/l		24 NJ	
Tetradecanoic acid - TIC	ug/l			
Tetraethyleneglycol monomethylether - TIC	ug/l			

TABLE 7B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) AND PCBs IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW-10 (185-195)	RW-10A (51-61)	SC-2
Tridecanoic acid - TIC	ug/l			
Unknown - TIC	ug/l			
PCBs				
None				
See Table 12 for validation qualifiers.				
Result exceeds NJGWQS (NJAC 7:9C March 2014)				

TABLE 7C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS mg/l	OB- 2	OB- 3	OB- 4	OB- 5	OB- 6	OB- 7	OB-12	OB-13	OB-13-DUP-02	RW- 2 (279-289)
Aluminum	mg/l	0.2	0.046 B	0.0096 U	0.0096 J	0.0096 U	0.0096 U	0.0096 U	0.021	0.02	0.019 J	0.25
Aluminum, Dissolved	mg/l	0.2	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.014 J	0.0096 U	0.0098 J	0.25
Antimony	mg/l	0.006	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Antimony, Dissolved	mg/l	0.006	0.00064 J	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00050 J	0.0005 U	0.0005 U	0.0005 U	0.00069 J
Arsenic	mg/l	0.003	0.0012 UB	0.0005 U	0.0005 U	0.0005 U	0.00070 UB	0.00057 J	0.0005 U	0.0005 U	0.0005 U	0.0019 J
Arsenic, Dissolved	mg/l	0.003	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00076 UB	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0021
Barium	mg/l	6	0.0052	0.0029	0.09	0.026	0.02	0.018	0.003	0.0046	0.0049	0.032
Barium, Dissolved	mg/l	6	0.0054	0.0029	0.079	0.015	0.02	0.017	0.0028	0.0045	0.0045	0.038
Beryllium	mg/l	0.001	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Beryllium, Dissolved	mg/l	0.001	0.0005 U	0.0005 U ^	0.0005 U ^	0.0005 U ^	0.0005 U	0.0005 U	0.0005 U ^	0.0005 U ^	0.0005 U ^	0.0005 U
Cadmium	mg/l	0.004	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Cadmium, Dissolved	mg/l	0.004	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Calcium	mg/l		12.1	17.3	86.7	82	24.3	76.5	9.8	7.9	8.2	132
Calcium, Dissolved	mg/l		12.8	16.9	86.3	82.6	23.8	78.1	9.5	7.6	7.7	134
Chromium	mg/l	0.07	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00056 J	0.0005 U	0.0005 U	0.0005 U
Chromium, Dissolved	mg/l	0.07	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Cobalt	mg/l	0.1	0.0005 U	0.0005 U	0.0011 J	0.0052	0.0073	0.0032	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Cobalt, Dissolved	mg/l	0.1	0.0005 U	0.0005 U	0.0005 U	0.0045	0.0076	0.0033	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Copper	mg/l	1.3	0.002	0.0005 U	0.0005 U	0.0005 U	0.003	0.003	0.0046	0.0005 U	0.0005 U	0.0005 U
Copper, Dissolved	mg/l	1.3	0.0013 J	0.0005 U	0.0005 U	0.0005 U	0.0012 J	0.0012 J	0.0041	0.0005 U	0.0005 U	0.00055 J
Cyanide, Total	mg/l	0.1	0.007 U	0.007 U	0.01	0.007 UJ	0.007 U	0.0095 J	0.007 U	0.007 U	0.007 U	0.007 U
Iron	mg/l	0.3	0.12	1.8	13.5	31.3	3.8	1.7	0.061	0.020 J	0.020 J	0.015 J
Iron, Dissolved	mg/l	0.3	0.01 U	0.11	6.3	8.4	0.32	0.013 J	0.014 J	0.01 U	0.01 U	0.01 U
Lead	mg/l	0.005	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Lead, Dissolved	mg/l	0.005	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Magnesium	mg/l		4.5	4.9	25	39.5	5.9	28	3.7	3	3.2	0.13 U
Magnesium, Dissolved	mg/l		4.6	4.8	24.9	40.4	5.9	30.7	3.5	2.9	3	0.13 U
Manganese	mg/l	0.05	0.0054 B	0.13	2.6 B	2.2	0.76	2.7	0.0019 J	0.0045	0.0049	0.0005 U
Manganese, Dissolved	mg/l	0.05	0.00081 J	0.12	2.7	2.3	0.73	2.7 E	0.0013 J	0.0029	0.0035	0.00050 J
Mercury	mg/l	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Mercury, Dissolved	mg/l	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Nickel	mg/l	0.1	0.00070 J	0.0005 U	0.00087 J	0.002	0.0018 J	0.0019 J	0.0005 U	0.00061 J	0.0005 U	0.0029
Nickel, Dissolved	mg/l	0.1	0.0005 U	0.0005 U	0.0011 J	0.0015 J	0.0016 J	0.0022	0.0005 U	0.0005 U	0.00070 J	0.0032
Potassium	mg/l		1.2	1.1	3.9	3.6	1.9	2.8	0.61 J	1.1	1.2	23.6
Potassium, Dissolved	mg/l		1.3	1.1	3.8	3.7	1.8	2.9	0.61 J	1.1	1.1	25.1
Selenium	mg/l	0.04	0.0006 U	0.0006 U	0.0006 U	0.0006 UJ	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.00086 J

TABLE 7C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS mg/l	OB- 2	OB- 3	OB- 4	OB- 5	OB- 6	OB- 7	OB-12	OB-13	OB-13-DUP-02	RW- 2 (279-289)
Selenium, Dissolved	mg/l	0.04	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.00069 J
Silver	mg/l	0.04	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Silver, Dissolved	mg/l	0.04	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l	50	3.6	3.5 B	109	32.1 B	15.8	10.2	3.2 B	3.2 B	3.2 B	134
Sodium, Dissolved	mg/l	50	3.9	3.4	97.2	32.7	15.7	11.1	3.2	3	3.4	125
Thallium	mg/l	0.002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Thallium, Dissolved	mg/l	0.002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00059 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Vanadium	mg/l		0.0015 UB	0.0011 UB	0.0017 UB	0.0012 UB	0.0015 UB	0.0017 UB	0.0011 UB	0.0014 UB	0.0015 UB	0.018 B
Vanadium, Dissolved	mg/l		0.0018 UB	0.00082 UB	0.00096 UB	0.00084 UB	0.0012 UB	0.0019 UB	0.00096 UB	0.0013 UB	0.0013 UB	0.017 B
Zinc	mg/l	2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc, Dissolved	mg/l	2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Wet Chemistry												
Bicarbonate Alkalinity as	mg/l		37.6	47.7	204	318	82.5	297	17.2	24.4	22.9	5 U
Total Alkalinity as CaCO3	mg/l		37.6	47.7	204	318	82.5	297	17.2	24.4	22.9	104
Chloride	mg/l	250	2.18	1.66	238	67	14.7	8.06	1.22	2.75	2.73	194
Sulfate	mg/l	250	10.1	8.5	3.15	4.49	21.8	7.39	15.3	7.65	7.34	176

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C March 2014)
NA - Not Analyzed - Insufficient sample volume

TABLE 7C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 2 (452-462)	RW- 8 (163-173)	RW- 8 (204-214)	RW- 9 (206-216)	RW- 9A (85-95)	RW-10 (120-130)	RW-10 (185-195)	RW-10A (51-61)	RW-10A (75-85)	SC-2
Aluminum	mg/l	0.1	0.0096 U	0.0096 U	0.1	0.059	0.17	0.17	0.0096 U	0.0096 U	0.088 B
Aluminum, Dissolved	mg/l	0.14	0.0096 U	0.0096 U	NA	0.0096 U	0.13	0.18	0.0096 U	0.0096 U	0.0096 U
Antimony	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00077 UB
Antimony, Dissolved	mg/l	0.0025 U	0.0005 U	0.0005 U	NA	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Arsenic	mg/l	0.0054	0.0036 B	0.002	0.003	0.0032	0.0075 B	0.0067 B	0.0021	0.0020 B	0.0021 B
Arsenic, Dissolved	mg/l	0.0056 J	0.0021	0.0019 J	NA	0.0034	0.0067	0.0052	0.0015 J	0.0005 U	0.0046
Barium	mg/l	0.059	0.012	0.037	0.035	0.012	0.017	0.011	0.016	0.0071	0.032
Barium, Dissolved	mg/l	0.07	0.012	0.041	NA	0.012	0.015	0.011	0.014	0.0069	0.04
Beryllium	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Beryllium, Dissolved	mg/l	0.0025 U	0.0005 U	0.0005 U	NA	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Cadmium	mg/l	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Cadmium, Dissolved	mg/l	0.002 U	0.0004 U	0.0004 U	NA	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Calcium	mg/l	132	37.5	67.5	27.6	26.5	50.8	47.7	61.4	51.4	65.7
Calcium, Dissolved	mg/l	145	35	63.5	NA	23.2	46	47.2	66.3	50.2	452
Chromium	mg/l	0.00058 J	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00052 J
Chromium, Dissolved	mg/l	0.0025 U	0.0005 U	0.0005 U	NA	0.0005 U	0.0005 U	0.0005 U	0.00081 J	0.0005 U	0.0005 U
Cobalt	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0038	0.0005 U	0.0019 J
Cobalt, Dissolved	mg/l	0.0025 U	0.0005 U	0.0005 U	NA	0.0005 U	0.0005 U	0.0005 U	0.0048	0.0005 U	0.00083 J
Copper	mg/l	0.0010 J	0.0005 U	0.0011 J	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.004	0.003
Copper, Dissolved	mg/l	0.0025 U	0.0005 U	0.0005 U	NA	0.0005 U	0.0005 U	0.0005 U	0.0015 J	0.0019 J	0.0005 U
Cyanide, Total	mg/l	0.007 UJ	0.007 U	0.007 U F	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 UJ	0.007 U
Iron	mg/l	0.021 J	0.029	1.5	0.092	0.34	0.028	0.014 J	0.7	0.029	0.3
Iron, Dissolved	mg/l	0.05 U	0.017 J	0.24	NA	0.06	0.01 U	0.03	0.33	0.01 U	13.3
Lead	mg/l	0.00020 J	0.0002 U	0.00097 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00082 J	0.00058 J
Lead, Dissolved	mg/l	0.001 U	0.0002 U	0.0002 U	NA	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00026 J	0.0002 U
Magnesium	mg/l	0.13 U	6.2	20	17.6	5.6	0.13 U	0.44 J	14.6	14	15.2
Magnesium, Dissolved	mg/l	0.63 U	6.3	20.9	NA	5.1	0.13 U	0.43 J	16.2	14.4	123
Manganese	mg/l	0.0005 U	0.015	0.31	0.0046	0.046	0.0005 U	0.0005 U	2.1	0.0019 J	0.21 B
Manganese, Dissolved	mg/l	0.0025 U	0.016	0.27	NA	0.038	0.0005 U	0.0005 U	3	0.00082 J	1.1
Mercury	mg/l	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Mercury, Dissolved	mg/l	0.00015 U	0.00015 U	0.00015 U	NA	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Nickel	mg/l	0.0083	0.019	0.035	0.00057 J	0.0049	0.013	0.0037	0.029	0.0059	0.003
Nickel, Dissolved	mg/l	0.0088 J	0.014	0.024	NA	0.00096 J	0.011	0.0031	0.015	0.0058	0.00067 J
Potassium	mg/l	103	2.5	10.3	50.9	2.7	28.6	11.7	3	2.2	2.7
Potassium, Dissolved	mg/l	129	2.2	16.3	NA	2.2	24.6	11.9	3	2.1	6.9
Selenium	mg/l	0.0036	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0033	0.0011 J	0.0006 U	0.0006 U	0.0006 U

TABLE 7C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW- 2 (452-462)	RW- 8 (163-173)	RW- 8 (204-214)	RW- 9 (206-216)	RW- 9A (85-95)	RW-10 (120-130)	RW-10 (185-195)	RW-10A (51-61)	RW-10A (75-85)	SC-2
Selenium, Dissolved	mg/l	0.0049 J	0.0006 U	0.0006 U	NA	0.0006 U	0.0027	0.00081 J	0.0006 U	0.0006 U	0.0006 U
Silver	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Silver, Dissolved	mg/l	0.0025 U	0.0005 U	0.0005 U	NA	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l	371	52.4	87.5	162	5.9	65.8	39	27.6	5	7.3
Sodium, Dissolved	mg/l	382	48.9	92.5	NA	6.4	64.9	41.5	16.7	5.1	64.1
Thallium	mg/l	0.00051 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Thallium, Dissolved	mg/l	0.0029 J	0.0002 U	0.0002 U	NA	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Vanadium	mg/l	0.040 B	0.0012 UB	0.0014 UB	0.0015 UB	0.0014 UB	0.0088 B	0.0024 B	0.0017 UB	0.0014 UB	0.0015 UB
Vanadium, Dissolved	mg/l	0.040 B	0.0013 UB	0.0011 UB	NA	0.00098 UB	0.0071 B	0.0028 B	0.00090 UB	0.0015 UB	0.0016 UB
Zinc	mg/l	0.01 U	0.01 U	0.022 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.013 J	0.03
Zinc, Dissolved	mg/l	0.05 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	0.01 U	0.049	0.01 U	0.01 U
Wet Chemistry											
Bicarbonate Alkalinity as	mg/l	5 U	72.8	216	NA	76.6	5 U	5 U	207	147	208
Total Alkalinity as CaCO3	mg/l	127	72.8	216	NA	76.6	121	69.5	207	147	208
Chloride	mg/l	601 J	11.1	55.2	NA	1.52	8.09	4.61	2.61	3.02	1.93
Sulfate	mg/l	167 J	162	149	NA	14.2	134	123	36.2	34.1	27.4
See Table 12 for validation qualifiers											
Result exceeds NJGWQS (NJAC 7:9											
NA - Not Analyzed - Insufficient sample volume											

TABLE 7D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB- 2	OB- 3	OB- 4	OB- 5	OB- 6	OB- 7	OB-12
1,1,1-Trichloroethane	ug/l	30	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	ug/l	1	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2-Trichloroethane	ug/l	3	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	ug/l	50	0.24 U	0.24 U	0.24 U	0.37 J	0.24 U	0.24 U	0.24 U
1,1-Dichloroethene	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane	ug/l	0.03	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene	ug/l	9	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	ug/l	0.02	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
1,2-Dibromoethane	ug/l	0.03	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichlorobenzene	ug/l	600	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,2-Dichloroethane	ug/l	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dichlorobenzene	ug/l	600	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,4-Dichlorobenzene	ug/l	75	0.17 U	0.17 U	0.17 U	0.20 J	0.17 U	0.18 J	0.17 U
1,4-Dioxane	ug/l	10	0.27 U	0.27 U	0.27 U	0.35 J	0.27 U	0.27 U	0.27 U
2-Butanone (MEK)	ug/l	300	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
2-Hexanone	ug/l	300	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methyl-2-pentanone (MIBK)	ug/l		0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Acetone	ug/l	6000	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Benzene	ug/l	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/l	4	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Bromomethane	ug/l	10	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Carbon disulfide	ug/l	700	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Carbon tetrachloride	ug/l	1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorobenzene	ug/l	50	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorodibromomethane	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chloroethane	ug/l	5	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroform	ug/l	70	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloromethane	ug/l		0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 UJ	0.36 U
cis-1,2-Dichloroethene	ug/l	70	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,3-Dichloropropene	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Cyclohexane	ug/l		0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorobromomethane	ug/l	1	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dichlorodifluoromethane	ug/l	1000	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	ug/l	700	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Ethylene Dibromide	ug/l	0.03	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U

TABLE 7D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB- 2	OB- 3	OB- 4	OB- 5	OB- 6	OB- 7	OB-12
Freon-113	ug/l		0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l	700	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methyl acetate	ug/l	7000	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 UJ	0.58 U
Methyl tert-butyl ether	ug/l		0.17 U	0.17 U	0.17 U	0.27 J	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l		0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Methylene Chloride	ug/l	3	0.22 UB	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Styrene	ug/l	100	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	1	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	600	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
trans-1,2-Dichloroethene	ug/l	100	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l	2000	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Xylenes, Total	ug/l	1000	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Tentatively Identified Compounds (TICs)									
1-Propene, 2-methyl- - TIC	ug/l								
Ethyl ether - TIC	ug/l	1000				0.95 J		0.28 J	
Isopropyl alcohol - TIC	ug/l								
Tetrahydrofuran - TIC	ug/l	10							
Unknown - TIC	ug/l								
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 7D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	OB-13	OB-13-DUP-02	RW-2 (279-289)	RW-2 (452-462)	RW-8 (163-173)	RW-8 (204-214)	RW-9 (206-216)	RW-9A (85-95)
1,1,1-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	ug/l	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1-Dichloroethene	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	ug/l	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
1,2-Dibromoethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichlorobenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,2-Dichloroethane	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dichlorobenzene	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,4-Dichlorobenzene	ug/l	0.17 U	0.17 U	0.24 J	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,4-Dioxane	ug/l	0.27 U	0.27 U	10	4.7 J	0.27 U	0.27 U	0.27 U	0.27 U
2-Butanone (MEK)	ug/l	2.6 U	2.6 U	3.2 J	2.6 U	2.6 U	2.6 U	2.6 U	11 J
2-Hexanone	ug/l	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methyl-2-pentanone (MIBK)	ug/l	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Acetone	ug/l	2.7 U	2.7 U	12 J	16 J	2.7 U	4.1 UB	5.6 J	3.9 J
Benzene	ug/l	0.2 U	0.2 U	0.22 J	0.24 J	0.27 J	0.57 J	0.2 U	0.2 U
Bromoform	ug/l	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Bromomethane	ug/l	0.35 U	0.35 U	0.35 UJ	0.35 U	0.35 U	0.35 U	0.35 UJ	0.35 UJ
Carbon disulfide	ug/l	0.22 U	0.22 U	0.22 U	1.8	0.22 U	0.22 U	0.22 U	0.22 U
Carbon tetrachloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorobenzene	ug/l	0.18 U	0.18 U	2.3	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorodibromomethane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chloroethane	ug/l	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroform	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloromethane	ug/l	0.36 U	0.36 U	0.36 UJ	0.36 U	0.36 U	0.36 UJ	0.36 UJ	0.36 UJ
cis-1,2-Dichloroethene	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Cyclohexane	ug/l	0.13 U	0.13 U	0.13 U	0.13 U F	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorobromomethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dichlorodifluoromethane	ug/l	0.17 U	0.17 U	0.17 U	0.19 J	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Ethylene Dibromide	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U

TABLE 7D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	OB-13	OB-13-DUP-02	RW- 2 (279-289)	RW- 2 (452-462)	RW- 8 (163-173)	RW- 8 (204-214)	RW- 9 (206-216)	RW- 9A (85-95)
Freon-113	ug/l	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methyl acetate	ug/l	0.58 U	0.58 U	0.58 UJ	0.58 UJ	0.58 U	0.58 UJ	0.58 UJ	0.58 UJ
Methyl tert-butyl ether	ug/l	0.17 U	0.17 U	0.25 J	0.30 J	0.17 U	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Methylene Chloride	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Styrene	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	0.17 U	0.17 U	0.83 J	0.71 J	0.17 U	0.17 U	0.20 J	0.17 U
trans-1,2-Dichloroethene	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Xylenes, Total	ug/l	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Tentatively Identified Compounds (TICs)									
1-Propene, 2-methyl- - TIC	ug/l			3.0 NJ	5.2 NJ				
Ethyl ether - TIC	ug/l			1.5 J					
Isopropyl alcohol - TIC	ug/l				62				
Tetrahydrofuran - TIC	ug/l			3.3 J					
Unknown - TIC	ug/l			62 NJ	3.1 NJ				
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 7D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW-10 (120-130)	RW-10 (185-195)	RW-10A (51-61)	RW-10A (75-85)	SC-2
1,1,1-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	ug/l	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1-Dichloroethene	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane	ug/l	0.01 U	0.016 UB	0.01 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	ug/l	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
1,2-Dibromoethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichlorobenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,2-Dichloroethane	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dichlorobenzene	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,4-Dichlorobenzene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,4-Dioxane	ug/l	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
2-Butanone (MEK)	ug/l	5.3 J	2.6 U	2.6 U	2.6 U	2.6 U
2-Hexanone	ug/l	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methyl-2-pentanone (MIBK)	ug/l	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Acetone	ug/l	43	24 J	2.7 U	2.7 U	2.7 U
Benzene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/l	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Bromomethane	ug/l	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Carbon disulfide	ug/l	3.2	1.6	0.22 U	0.22 U	0.22 U
Carbon tetrachloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorobenzene	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorodibromomethane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chloroethane	ug/l	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroform	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloromethane	ug/l	0.36 U	0.36 U	0.36 UJ	0.36 U	0.36 U
cis-1,2-Dichloroethene	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Cyclohexane	ug/l	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorobromomethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dichlorodifluoromethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Ethylene Dibromide	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U

TABLE 7D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW-10 (120-130)	RW-10 (185-195)	RW-10A (51-61)	RW-10A (75-85)	SC-2
Freon-113	ug/l	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methyl acetate	ug/l	0.58 UJ	0.58 U	0.58 UJ	0.58 U	0.58 U
Methyl tert-butyl ether	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Methylene Chloride	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.23 UB
Styrene	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	0.22 J	0.17 U	0.17 U	0.17 U	0.17 U
trans-1,2-Dichloroethene	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Xylenes, Total	ug/l	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Tentatively Identified Compounds (TICs)						
1-Propene, 2-methyl- - TIC	ug/l					
Ethyl ether - TIC	ug/l					
Isopropyl alcohol - TIC	ug/l	48 J				
Tetrahydrofuran - TIC	ug/l					
Unknown - TIC	ug/l	27 NJ				
See Table 12 for validation qualifiers.						
Result exceeds NJGWQS (NJAC 7:9C March 2014)						

TABLE 7E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB- 2	OB- 3	OB- 4	OB- 5	OB- 6	OB- 7	OB-12
1,2,4,5-Tetrachlorobenzene	ug/l		2.1 U	0.54 U	0.54 U	0.54 U	2.1 U	1.9 U	0.54 U
2,2'-oxybis[1-chloropropane]	ug/l	300	2.8 U	0.71 U	0.72 U	0.72 U	2.8 U	2.6 UJ	0.71 U
2,3,4,6-Tetrachlorophenol	ug/l	200	6.9 U	1.8 U	1.8 U	1.8 U	6.9 U	6.4 U	1.8 U
2,4,5-Trichlorophenol	ug/l	700	7.1 U	1.8 U	1.8 U	1.8 U	7.1 U	6.6 U	1.8 U
2,4,6-Trichlorophenol	ug/l	20	6.8 U	1.7 U	1.7 U	1.8 U	6.8 U	6.3 U	1.7 U
2,4-Dichlorophenol	ug/l	20	5.6 U	1.4 U	1.4 U	1.4 U	5.6 U	5.2 U	1.4 U
2,4-Dimethylphenol	ug/l	100	4.2 U	1.1 U	1.1 U	1.1 U	4.2 U	3.9 U	1.1 U
2,4-Dinitrophenol	ug/l	40	5.9 U	1.5 U	1.5 U	1.5 U	5.9 U	5.5 U	1.5 U
2,4-Dinitrotoluene	ug/l		3.2 U	0.82 U	0.82 U	0.82 U	3.2 U	3 U	0.82 U
2,6-Dinitrotoluene	ug/l		2.3 U	0.59 U	0.59 U	0.59 U	2.3 U	2.1 U	0.59 U
2-Chloronaphthalene	ug/l	600	2.8 U	0.71 U	0.72 U	0.72 U	2.8 U	2.6 U	0.71 U
2-Chlorophenol	ug/l	40	4.8 U	1.2 U	1.2 U	1.2 U	4.8 U	4.4 U	1.2 U
2-Methylnaphthalene	ug/l	30	0.4 U	0.1 U	0.1 U	0.1 U	0.4 U	0.37 U	0.1 U
2-Methylphenol	ug/l		2.3 U	0.59 U	0.59 U	0.59 U	2.3 U	2.1 U	0.59 U
2-Nitroaniline	ug/l		3.7 U	0.94 U	0.95 U	0.95 U	3.7 U	3.4 U	0.94 U
2-Nitrophenol	ug/l		5.3 U	1.4 U	1.4 U	1.4 U	5.3 U	4.9 U	1.4 U
3 & 4 Methylphenol	ug/l		2.2 U	0.56 U	0.56 U	0.57 U	2.2 U	2 U	0.56 U
3,3'-Dichlorobenzidine	ug/l	30	3.3 U	0.84 U	0.85 U	0.85 U	3.3 U	3.1 U	0.84 U
3-Nitroaniline	ug/l		2.7 U	0.69 U	0.69 U	0.7 U	2.7 U	2.5 U	0.69 U
4,6-Dinitro-2-methylphenol	ug/l	1	9.3 U	2.4 U	2.4 U	2.4 U	9.3 U	8.6 U	2.4 U
4-Bromophenyl phenyl ether	ug/l		2.7 U	0.69 U	0.69 U	0.7 U	2.7 U	2.5 U	0.69 U
4-Chloro-3-methylphenol	ug/l	100	4.5 U	1.1 U	1.2 U	1.2 U	4.5 U	4.2 U	1.1 U
4-Chloroaniline	ug/l		4.2 U	1.1 U	1.1 U	1.1 U	4.2 U	3.9 U	1.1 U
4-Chlorophenyl phenyl ether	ug/l		2.8 U	0.71 U	0.72 U	0.72 U	2.8 U	2.6 U	0.71 U
4-Nitroaniline	ug/l		3.1 U	0.79 U	0.79 U	0.8 U	3.1 U	2.9 U	0.79 U
4-Nitrophenol	ug/l		5.4 U	1.4 U	1.4 U	1.4 U	5.4 U	5 U	1.4 U
Acenaphthene	ug/l	400	0.32 U	0.082 U	0.082 U	0.082 U	0.32 U	0.3 U	0.082 U
Acenaphthylene	ug/l	100	0.35 U	0.089 U	0.09 U	0.09 U	0.35 U	0.32 U	0.089 U
Acetophenone	ug/l	700	2.3 U	0.59 U	0.59 U	0.59 U	2.3 U	2.1 U	0.59 U
Anthracene	ug/l	2000	0.38 U	0.097 U	0.097 U	0.098 U	0.38 U	0.35 U	0.097 U
Atrazine	ug/l	3	2.9 U	0.74 U	0.74 U	0.75 U	2.9 U	2.7 U	0.74 U
Benzaldehyde	ug/l		5.7 U	1.5 U	1.5 U	1.5 U	5.7 U	5.3 U	1.5 U
Benzo[a]anthracene	ug/l	0.1	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.023 U	0.025 U
Benzo[a]pyrene	ug/l	0.1	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.023 U	0.025 U
Benzo[b]fluoranthene	ug/l	0.2	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.023 U	0.025 U
Benzo[g,h,i]perylene	ug/l	100	0.62 U	0.16 U	0.16 U	0.16 U	0.62 U	0.57 U	0.16 U

TABLE 7E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB- 2	OB- 3	OB- 4	OB- 5	OB- 6	OB- 7	OB-12
Benzo[k]fluoranthene	ug/l	0.5	0.37 U	0.094 U	0.095 U	0.095 U	0.37 U	0.34 U	0.094 U
Bis(2-chloroethoxy)methane	ug/l		3.1 U	0.79 U	0.79 U	0.8 U	3.1 U	2.9 U	0.79 U
Bis(2-chloroethyl)ether	ug/l	7	2.8 U	0.71 U	0.72 U	0.72 U	2.8 U	2.6 U	0.71 U
Bis(2-ethylhexyl) phthalate	ug/l	3	6 U	6.3 B	1.7 UB	2.2 UB	6 U	5.6 U	3.7 B
Butyl benzyl phthalate	ug/l	100	2.5 U	0.64 U	0.64 U	0.64 U	2.5 U	2.3 U	0.64 U
Caprolactam	ug/l	5000	2.4 U	0.61 U	0.62 U	0.62 U	2.4 U	2.2 U	0.61 U
Carbazole	ug/l		2.8 U	0.71 U	0.72 U	0.72 U	2.8 U	2.6 U	0.71 U
Chrysene	ug/l	5	0.33 U	0.084 U	0.085 U	0.085 U	0.33 U	0.31 U	0.084 U
Dibenz(a,h)anthracene	ug/l	0.3	0.45 U	0.11 U	0.12 U	0.12 U	0.45 U	0.42 U	0.11 U
Dibenzofuran	ug/l		2.9 U	0.74 U	0.74 U	0.75 U	2.9 U	2.7 U	0.74 U
Diethyl phthalate	ug/l	6000	3 U	0.77 U	0.77 U	0.77 U	3 U	2.8 U	0.77 U
Dimethyl phthalate	ug/l	100	3.1 U	0.79 U	0.79 U	0.8 U	3.1 U	2.9 U	0.79 U
Di-n-butyl phthalate	ug/l	700	2.5 U	0.64 U	0.64 U	0.64 U	2.5 U	2.3 U	0.64 U
Di-n-octyl phthalate	ug/l	100	2.5 U	0.64 U	0.64 U	0.64 U	2.5 U	2.3 U	0.64 U
Diphenyl	ug/l	400	2.2 U	0.56 U	0.56 U	0.57 U	2.2 U	2 U	0.56 U
Fluoranthene	ug/l	300	0.32 U	0.082 U	0.082 U	0.082 U	0.32 U	0.3 U	0.082 U
Fluorene	ug/l	300	0.32 U	0.082 U	0.082 U	0.082 U	0.32 U	0.3 U	0.082 U
Hexachlorobenzene	ug/l	0.02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.013 U	0.014 U
Hexachlorobutadiene	ug/l	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U
Hexachlorocyclopentadiene	ug/l	40	1.8 U	0.46 U	0.46 U	0.46 U	1.8 U	1.7 U	0.46 U
Hexachloroethane	ug/l	7	1.9 U	0.48 U	0.49 U	0.49 U	1.9 U	1.8 U	0.48 U
Indeno[1,2,3-cd]pyrene	ug/l	0.2	0.41 U	0.1 U	0.11 U	0.11 U	0.41 U	0.38 U	0.1 U
Isophorone	ug/l	40	3.1 U	0.79 U	0.79 U	0.8 U	3.1 U	2.9 U	0.79 U
Naphthalene	ug/l	300	0.37 U	0.094 U	0.095 U	0.095 U	0.37 U	0.34 U	0.094 U
Nitrobenzene	ug/l	6	2.7 U	0.69 U	0.69 U	0.7 U	2.7 U	2.5 U	0.69 U
N-Nitrosodimethylamine	ug/l	0.8	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U
N-Nitrosodi-n-propylamine	ug/l	10	3.4 U	0.87 U	0.87 U	0.88 U	3.4 U	3.1 U	0.87 U
N-Nitrosodiphenylamine	ug/l	10	3.6 U	0.92 U	0.92 U	0.93 U	3.6 U	3.3 U	0.92 U
Pentachlorophenol	ug/l	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.093 U	0.1 U
Phenanthrene	ug/l	100	0.42 U	0.11 U	0.11 U	0.11 U	0.42 U	0.39 U	0.11 U
Phenol	ug/l	2000	1.5 U	0.38 U	0.38 U	0.39 U	1.5 U	1.4 U	0.38 U
Pyrene	ug/l	200	0.35 U	0.089 U	0.09 U	0.09 U	0.35 U	0.32 U	0.089 U
Tentatively Identified Compounds (TICs)									
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	ug/l								
1,4-Benzenediamine, N-(1-methylethyl)-N' - TIC	ug/l								
14-Pentadecenoic acid - TIC	ug/l								

TABLE 7E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB- 2	OB- 3	OB- 4	OB- 5	OB- 6	OB- 7	OB-12
15-Crown-5 - TIC	ug/l								
1H-Pyrrole, 3,5-dimethyl-2-phenyl- - TIC	ug/l								
2(3H)-Benzothiazolone - TIC	ug/l								
2-Naphthalenecarboxylic acid - TIC	ug/l								
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	ug/l								
4-Methoxybenzhydrazide - TIC	ug/l								
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	ug/l								
9-Octadecenamide, (Z)- - TIC	ug/l								
9-Octadecenoic acid, (E)- - TIC	ug/l								
Benzeneacetic acid - TIC	ug/l								
Benzenesulfonamide, 2-methyl- - TIC	ug/l								
Benzenesulfonamide, N-butyl- - TIC	ug/l								
Benzo[b]triphenylene - TIC	ug/l								
Benzocycloheptatriene - TIC	ug/l								
Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	ug/l								
Cyclohexanone, 3,3,5-trimethyl- - TIC	ug/l								
Diethyltoluamide - TIC	ug/l								
Eicosane - TIC	ug/l								
Ethanone, 1-(2-hydroxyphenyl)- - TIC	ug/l								
Hexadeca-2,6,10,14-tetraen-1-ol, 3,7,11, - TIC	ug/l								
Hexagol - TIC	ug/l		16 NJ						
n-Hexadecanoic acid - TIC	ug/l		6.8 NJ						
Nonanoic acid - TIC	ug/l								
Octadec-9-enoic acid - TIC	ug/l								
Octadecanoic acid - TIC	ug/l		5.5 NJ						
Oleic Acid - TIC	ug/l							17 NJ	
Tetradecanoic acid - TIC	ug/l								
Tetraethyleneglycol monomethylether - TIC	ug/l								
Tridecanoic acid - TIC	ug/l							3.5 NJ	
Unknown - TIC	ug/l								
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 7E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	OB-13	OB-13-DUP-02	RW- 2 (279-289)	RW- 2 (452-462)	RW- 8 (163-173)	RW- 8 (204-214)	RW- 9 (206-216)	RW- 9A (85-95)
1,2,4,5-Tetrachlorobenzene	ug/l	0.53 U	0.55 U	2.1 U	2.1 U	2.1 U	1.9 U	2.1 U	1.9 U
2,2'-oxybis[1-chloropropane]	ug/l	0.71 U	0.74 U	2.7 U	2.8 U	2.8 U	2.5 U	2.8 U	2.6 U
2,3,4,6-Tetrachlorophenol	ug/l	1.7 U	1.8 U	6.8 U	6.9 U	6.9 U	6.3 U	6.9 U	6.4 U
2,4,5-Trichlorophenol	ug/l	1.8 U	1.9 U	7 U	7.1 U	7.1 U	6.5 U	7.1 U	6.6 U
2,4,6-Trichlorophenol	ug/l	1.7 U	1.8 U	6.7 U	6.8 U	6.8 U	6.2 U	6.8 U	6.3 U
2,4-Dichlorophenol	ug/l	1.4 U	1.5 U	5.5 U	5.6 U	5.6 U	5.1 U	5.6 U	5.2 U
2,4-Dimethylphenol	ug/l	1.1 U	1.1 U	4.1 U	4.2 U	4.2 U	3.8 U	4.2 U	3.9 U
2,4-Dinitrophenol	ug/l	1.5 U	1.6 U	5.8 U	6.5 J	5.9 U	5.4 U	5.9 U	5.5 U
2,4-Dinitrotoluene	ug/l	0.81 U	0.84 U	3.1 U	3.2 U	3.2 U	2.9 U	3.2 U	3 U
2,6-Dinitrotoluene	ug/l	0.58 U	0.61 U	2.3 U	2.3 U	2.3 U	2.1 U	2.3 U	2.1 U
2-Chloronaphthalene	ug/l	0.71 U	0.74 U	2.7 U	2.8 U	2.8 U	2.5 U	2.8 U	2.6 U
2-Chlorophenol	ug/l	1.2 U	1.3 U	4.7 U	4.8 U	4.8 U	4.4 U	4.8 U	4.4 U
2-Methylnaphthalene	ug/l	0.1 U	0.11 U	0.39 U	0.4 U	0.4 U	0.36 U	0.4 U	0.37 U
2-Methylphenol	ug/l	0.58 U	0.61 U	2.3 U	2.3 U	2.3 U	2.1 U	2.3 U	2.1 U
2-Nitroaniline	ug/l	0.93 U	0.97 U	3.6 U	3.7 U	3.7 U	3.4 U	3.7 U	3.4 U
2-Nitrophenol	ug/l	1.3 U	1.4 U	5.2 U	5.3 U	5.3 U	4.8 U	5.3 U	4.9 U
3 & 4 Methylphenol	ug/l	0.56 U	0.58 U	2.2 U	2.2 U	2.2 U	2 U	2.2 U	2 U
3,3'-Dichlorobenzidine	ug/l	0.83 U	0.87 U	3.2 U	3.3 U	3.3 U	3 U	3.3 U	3.1 U
3-Nitroaniline	ug/l	0.68 U	0.71 U	2.6 U	2.7 U	2.7 U	2.5 U	2.7 U	2.5 U
4,6-Dinitro-2-methylphenol	ug/l	2.3 U	2.4 U	9.1 U	9.3 U	9.3 U	8.5 U	9.3 U	8.6 U
4-Bromophenyl phenyl ether	ug/l	0.68 U	0.71 U	2.6 U	2.7 U	2.7 U	2.5 U	2.7 U	2.5 U
4-Chloro-3-methylphenol	ug/l	1.1 U	1.2 U	4.4 U	4.5 U	4.5 U	4.1 U	4.5 U	4.2 U
4-Chloroaniline	ug/l	1.1 U	1.1 U	4.1 U	4.2 U	4.2 U	3.8 U	4.2 U	3.9 U
4-Chlorophenyl phenyl ether	ug/l	0.71 U	0.74 U	2.7 U	2.8 U	2.8 U	2.5 U	2.8 U	2.6 U
4-Nitroaniline	ug/l	0.78 U	0.82 U	3 U	3.1 U	3.1 U	2.8 U	3.1 U	2.9 U
4-Nitrophenol	ug/l	1.4 U	1.4 U	5.3 U	5.4 U	5.4 U	4.9 U	5.4 U	5 U
Acenaphthene	ug/l	0.081 U	0.084 U	0.31 U	0.32 U	0.32 U	0.29 U	0.32 U	0.3 U
Acenaphthylene	ug/l	0.088 U	0.092 U	0.34 U	0.35 U	0.35 U	0.32 U	0.35 U	0.32 U
Acetophenone	ug/l	0.58 U	0.61 U	2.3 U	2.3 U	2.3 U	2.1 U	2.3 U	2.1 U
Anthracene	ug/l	0.096 U	0.1 U	0.37 U	0.38 U	0.38 U	0.35 U	0.38 U	0.35 U
Atrazine	ug/l	0.73 U	0.76 U	2.8 U	2.9 U	2.9 U	2.6 U	2.9 U	2.7 U
Benzaldehyde	ug/l	1.4 U	1.5 U	5.6 U	5.7 U	5.7 U	5.2 U	5.7 U	5.3 U
Benzo[a]anthracene	ug/l	0.025 U	0.025 U	0.025 R	0.025 U	0.025 U	0.025 U	0.025 R	0.025 U
Benzo[a]pyrene	ug/l	0.025 U	0.025 U	0.025 R	0.025 U	0.025 U	0.025 U	0.025 R	0.025 U
Benzo[b]fluoranthene	ug/l	0.025 U	0.025 U	0.025 R	0.025 U	0.025 U	0.025 U	0.025 R	0.025 U
Benzo[g,h,i]perylene	ug/l	0.16 U	0.16 U	0.61 U	0.62 U	0.62 U	0.56 U	0.62 U	0.57 U

TABLE 7E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	OB-13	OB-13-DUP-02	RW- 2 (279-289)	RW- 2 (452-462)	RW- 8 (163-173)	RW- 8 (204-214)	RW- 9 (206-216)	RW- 9A (85-95)
Benzo[k]fluoranthene	ug/l	0.093 U	0.097 U	0.36 U	0.37 U	0.37 U	0.34 U	0.37 U	0.34 U
Bis(2-chloroethoxy)methane	ug/l	0.78 U	0.82 U	3 U	3.1 U	3.1 U	2.8 U	3.1 U	2.9 U
Bis(2-chloroethyl)ether	ug/l	0.71 U	0.74 U	2.7 U	2.8 U	2.8 U	2.5 U	2.8 U	2.6 U
Bis(2-ethylhexyl) phthalate	ug/l	3.1 B	3.6 B	5.9 U	6 U	6 U	5.5 U	6 U	5.6 U
Butyl benzyl phthalate	ug/l	0.63 U	0.66 U	2.5 U	2.5 U	2.5 U	2.3 U	2.5 U	2.3 U
Caprolactam	ug/l	0.61 U	0.63 U	2.4 U	2.4 U	2.4 U	2.2 U	2.4 U	2.2 U
Carbazole	ug/l	0.71 U	0.74 U	2.7 U	2.8 U	2.8 U	2.5 U	2.8 U	2.6 U
Chrysene	ug/l	0.083 U	0.087 U	0.32 U	0.33 U	0.33 U	0.3 U	0.33 U	0.31 U
Dibenz(a,h)anthracene	ug/l	0.11 U	0.12 U	0.44 U	0.45 U	0.45 U	0.41 U	0.45 U	0.42 U
Dibenzofuran	ug/l	0.73 U	0.76 U	2.8 U	2.9 U	2.9 U	2.6 U	2.9 U	2.7 U
Diethyl phthalate	ug/l	0.76 U	0.79 U	2.9 U	3 U	3 U	2.7 U	3 U	2.8 U
Dimethyl phthalate	ug/l	0.78 U	0.82 U	3 U	3.1 U	3.1 U	2.8 U	3.1 U	2.9 U
Di-n-butyl phthalate	ug/l	0.63 U	0.66 U	2.5 U	2.5 U	2.5 U	2.3 U	2.5 U	2.3 U
Di-n-octyl phthalate	ug/l	0.63 U	0.66 U	2.5 U	2.5 U	2.5 U	2.3 U	2.5 U	2.3 U
Diphenyl	ug/l	0.56 U	0.58 U	2.2 U	2.2 U	2.2 U	2 U	2.2 U	2 U
Fluoranthene	ug/l	0.081 U	0.084 U	0.31 U	0.32 U	0.32 U	0.29 U	0.32 U	0.3 U
Fluorene	ug/l	0.081 U	0.084 U	0.31 U	0.32 U	0.32 U	0.29 U	0.32 U	0.3 U
Hexachlorobenzene	ug/l	0.014 U	0.014 U	0.014 R	0.014 U	0.014 U	0.014 U	0.014 R	0.014 U
Hexachlorobutadiene	ug/l	0.2 U	0.2 U	0.2 R	0.2 U	0.2 U	0.2 U	0.2 R	0.2 U
Hexachlorocyclopentadiene	ug/l	0.45 U	0.47 U	1.8 U	1.8 U	1.8 U	1.6 U	1.8 U	1.7 U
Hexachloroethane	ug/l	0.48 U	0.5 U	1.9 U	1.9 U	1.9 U	1.7 U	1.9 U	1.8 U
Indeno[1,2,3-cd]pyrene	ug/l	0.1 U	0.11 U	0.4 U	0.41 U	0.41 U	0.37 U	0.41 U	0.38 U
Isophorone	ug/l	0.78 U	0.82 U	3 U	3.1 U	3.1 U	2.8 U	3.1 U	2.9 U
Naphthalene	ug/l	0.093 U	0.097 U	0.36 U	0.37 U	0.37 U	0.34 U	0.37 U	0.34 U
Nitrobenzene	ug/l	0.68 U	0.71 U	2.6 U	2.7 U	2.7 U	2.5 U	2.7 U	2.5 U
N-Nitrosodimethylamine	ug/l	0.2 U	0.2 U	0.2 R	0.2 U	0.2 U	0.2 U	0.2 R	0.2 U
N-Nitrosodi-n-propylamine	ug/l	0.86 U	0.89 U	3.3 U	3.4 U	3.4 U	3.1 U	3.4 U	3.1 U
N-Nitrosodiphenylamine	ug/l	0.91 U	0.95 U	3.5 U	3.6 U	3.6 U	3.3 U	3.6 U	3.3 U
Pentachlorophenol	ug/l	0.1 U	0.1 U	0.1 R	0.1 U	0.1 U	0.1 U	0.1 R	0.1 U
Phenanthrene	ug/l	0.11 U	0.11 U	0.41 U	0.42 U	0.42 U	0.38 U	0.42 U	0.39 U
Phenol	ug/l	0.38 U	0.39 U	1.7 J	10	1.5 U	1.4 U	1.5 U	1.4 U
Pyrene	ug/l	0.088 U	0.092 U	0.34 U	0.35 U	0.35 U	0.32 U	0.35 U	0.32 U
Tentatively Identified Compounds (TICs)									
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	ug/l								
1,4-Benzenediamine, N-(1-methylethyl)-N' - TIC	ug/l			5.9 NJ					
14-Pentadecenoic acid - TIC	ug/l						23 NJ		

TABLE 7E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	OB-13	OB-13-DUP-02	RW- 2 (279-289)	RW- 2 (452-462)	RW- 8 (163-173)	RW- 8 (204-214)	RW- 9 (206-216)	RW- 9A (85-95)
15-Crown-5 - TIC	ug/l								
1H-Pyrrole, 3,5-dimethyl-2-phenyl- - TIC	ug/l								
2(3H)-Benzothiazolone - TIC	ug/l			3.8 NJ					
2-Naphthalenecarboxylic acid - TIC	ug/l								
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	ug/l			33 NJ	18 NJ		22 NJ	22 NJ	
4-Methoxybenzhydrazide - TIC	ug/l								
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	ug/l			17 NJ	12 NJ		5.8 NJ	6.0 NJ	
9-Octadecenamide, (Z)- - TIC	ug/l						4.3 NJ		
9-Octadecenoic acid, (E)- - TIC	ug/l								14 NJ
Benzeneacetic acid - TIC	ug/l				10 NJ				
Benzenesulfonamide, 2-methyl- - TIC	ug/l			9.6 NJ					
Benzenesulfonamide, N-butyl- - TIC	ug/l					8.4 NJ	37 NJ	15 NJ	
Benzo[b]triphenylene - TIC	ug/l								
Benzocycloheptatriene - TIC	ug/l								
Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	ug/l							4.8 NJ	
Cyclohexanone, 3,3,5-trimethyl- - TIC	ug/l				5.1 NJ				
Diethyltoluamide - TIC	ug/l		4.7 NJ						
Eicosane - TIC	ug/l						3.1 NJ		
Ethanone, 1-(2-hydroxyphenyl)- - TIC	ug/l				3.6 NJ				
Hexadeca-2,6,10,14-tetraen-1-ol, 3,7,11, - TIC	ug/l						3.1 NJ		
Hexagol - TIC	ug/l								
n-Hexadecanoic acid - TIC	ug/l				5.0 NJ				
Nonanoic acid - TIC	ug/l				5.5 NJ		69 NJ		
Octadec-9-enoic acid - TIC	ug/l								
Octadecanoic acid - TIC	ug/l			4.9 NJ					
Oleic Acid - TIC	ug/l			11 NJ	19 NJ			17 NJ	
Tetradecanoic acid - TIC	ug/l				4.2 NJ		6.9 NJ		
Tetraethyleneglycol monomethylether - TIC	ug/l			3.5 NJ					
Tridecanoic acid - TIC	ug/l							5.6 NJ	
Unknown - TIC	ug/l				6.7 J				
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 7E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW-10 (120-130)	RW-10 (185-195)	RW-10A (51-61)	RW-10A (75-85)	SC-2
1,2,4,5-Tetrachlorobenzene	ug/l	2.1 U	2.1 U	2.6 U	2.1 U	2.1 U
2,2'-oxybis[1-chloropropane]	ug/l	2.8 U	2.8 U	3.5 U	2.8 U	2.8 U
2,3,4,6-Tetrachlorophenol	ug/l	6.9 U	6.9 U	8.6 U	6.9 U	6.9 U
2,4,5-Trichlorophenol	ug/l	7.1 U	7.1 U	8.9 U	7.1 U	7.1 U
2,4,6-Trichlorophenol	ug/l	6.8 U	6.8 U	8.5 U	6.8 U	6.8 U
2,4-Dichlorophenol	ug/l	5.6 U	5.6 U	7 U	5.6 U	5.6 U
2,4-Dimethylphenol	ug/l	4.2 U	4.2 U	5.3 U	4.2 U	4.2 U
2,4-Dinitrophenol	ug/l	5.9 U	5.9 U	7.4 U	5.9 U	5.9 U
2,4-Dinitrotoluene	ug/l	3.2 U	3.2 U	4 U	3.2 U	3.2 U
2,6-Dinitrotoluene	ug/l	2.3 U	2.3 U	2.9 U	2.3 U	2.3 U
2-Chloronaphthalene	ug/l	2.8 U	2.8 U	3.5 U	2.8 U	2.8 U
2-Chlorophenol	ug/l	4.8 U	4.8 U	6 U	4.8 U	4.8 U
2-Methylnaphthalene	ug/l	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U
2-Methylphenol	ug/l	2.3 U	2.3 U	2.9 U	2.3 U	2.3 U
2-Nitroaniline	ug/l	3.7 U	3.7 U	4.6 U	3.7 U	3.7 U
2-Nitrophenol	ug/l	5.3 U	5.3 U	6.6 U	5.3 U	5.3 U
3 & 4 Methylphenol	ug/l	2.2 U	2.2 U	2.8 U	2.2 U	2.2 U
3,3'-Dichlorobenzidine	ug/l	3.3 U	3.3 U	4.1 U	3.3 U	3.3 U
3-Nitroaniline	ug/l	2.7 U	2.7 U	3.4 U	2.7 U	2.7 U
4,6-Dinitro-2-methylphenol	ug/l	9.3 U	9.3 U	12 U	9.3 U	9.3 U
4-Bromophenyl phenyl ether	ug/l	2.7 U	2.7 U	3.4 U	2.7 U	2.7 U
4-Chloro-3-methylphenol	ug/l	4.5 U	4.5 U	5.6 U	4.5 U	4.5 U
4-Chloroaniline	ug/l	4.2 U	4.2 U	5.3 U	4.2 U	4.2 U
4-Chlorophenyl phenyl ether	ug/l	2.8 U	2.8 U	3.5 U	2.8 U	2.8 U
4-Nitroaniline	ug/l	3.1 U	3.1 U	3.9 U	3.1 U	3.1 U
4-Nitrophenol	ug/l	5.4 U	5.4 U	6.8 U	5.4 U	5.4 U
Acenaphthene	ug/l	0.32 U	0.32 U	0.4 U	0.32 U	0.32 U
Acenaphthylene	ug/l	0.35 U	0.35 U	0.44 U	0.35 U	0.35 U
Acetophenone	ug/l	2.3 U	2.3 U	2.9 U	2.3 U	2.3 U
Anthracene	ug/l	0.38 U	0.38 U	0.48 U	0.38 U	0.38 U
Atrazine	ug/l	2.9 U	2.9 U	3.6 U	2.9 U	2.9 U
Benzaldehyde	ug/l	5.7 U	5.7 U	7.1 U	5.7 U	5.7 U
Benzo[a]anthracene	ug/l	0.024 U	0.022 U	0.025 U	0.025 U	0.025 U
Benzo[a]pyrene	ug/l	0.024 U	0.022 U	0.025 U	0.025 U	0.025 U
Benzo[b]fluoranthene	ug/l	0.024 U	0.022 U	0.025 U	0.025 U	0.025 U
Benzo[g,h,i]perylene	ug/l	0.62 U	0.62 U	0.78 U	0.62 U	0.81 UB

TABLE 7E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW-10 (120-130)	RW-10 (185-195)	RW-10A (51-61)	RW-10A (75-85)	SC-2
Benzo[k]fluoranthene	ug/l	0.37 U	0.37 U	0.46 U	0.37 U	0.37 U
Bis(2-chloroethoxy)methane	ug/l	3.1 U	3.1 U	3.9 U	3.1 U	3.1 U
Bis(2-chloroethyl)ether	ug/l	2.8 U	2.8 U	3.5 U	2.8 U	2.8 U
Bis(2-ethylhexyl) phthalate	ug/l	6 U	6 U	7.5 U	6 U	6 U
Butyl benzyl phthalate	ug/l	2.5 U	2.5 U	3.1 U	2.5 U	2.5 U
Caprolactam	ug/l	2.4 U	2.4 U	3 U	2.4 U	2.4 U
Carbazole	ug/l	2.8 U	2.8 U	3.5 U	2.8 U	2.8 U
Chrysene	ug/l	0.33 U	0.33 U	0.41 U	0.33 U	0.33 U
Dibenz(a,h)anthracene	ug/l	0.45 U	0.45 U	0.56 U	0.45 U	0.45 U
Dibenzofuran	ug/l	2.9 U	2.9 U	3.6 U	2.9 U	2.9 U
Diethyl phthalate	ug/l	3 U	3 U	3.8 U	3 U	3 U
Dimethyl phthalate	ug/l	3.1 U	3.1 U	3.9 U	3.1 U	3.1 U
Di-n-butyl phthalate	ug/l	2.5 U	2.5 U	3.1 U	2.5 U	2.5 U
Di-n-octyl phthalate	ug/l	2.5 U	2.5 U	3.1 U	2.5 U	2.5 U
Diphenyl	ug/l	2.2 U	2.2 U	2.8 U	2.2 U	2.2 U
Fluoranthene	ug/l	0.32 U	0.32 U	0.4 U	0.32 U	0.32 U
Fluorene	ug/l	0.32 U	0.32 U	0.4 U	0.32 U	0.32 U
Hexachlorobenzene	ug/l	0.013 U	0.012 U	0.014 U	0.014 U	0.014 U
Hexachlorobutadiene	ug/l	0.19 U	0.17 U	0.2 U	0.2 U	0.2 U
Hexachlorocyclopentadiene	ug/l	1.8 U	1.8 U	2.3 U	1.8 U	1.8 U
Hexachloroethane	ug/l	1.9 U	1.9 U	2.4 U	1.9 U	1.9 U
Indeno[1,2,3-cd]pyrene	ug/l	0.41 U	0.41 U	0.51 U	0.41 U	0.41 U
Isophorone	ug/l	3.1 U	3.1 U	3.9 U	3.1 U	3.1 U
Naphthalene	ug/l	0.37 U	0.37 U	0.46 U	0.37 U	0.37 U
Nitrobenzene	ug/l	2.7 U	2.7 U	3.4 U	2.7 U	2.7 U
N-Nitrosodimethylamine	ug/l	0.19 U	0.17 U	0.2 U	0.2 U	0.2 U
N-Nitrosodi-n-propylamine	ug/l	3.4 U	3.4 U	4.3 U	3.4 U	3.4 U
N-Nitrosodiphenylamine	ug/l	3.6 U	3.6 U	4.5 U	3.6 U	3.6 U
Pentachlorophenol	ug/l	0.094 U	0.086 U	0.1 U	0.1 U	0.1 U
Phenanthrene	ug/l	0.42 U	0.42 U	0.53 U	0.42 U	0.42 U
Phenol	ug/l	8.6 J	3.3 J	1.9 U	1.5 U	3.1 J
Pyrene	ug/l	0.35 U	0.35 U	0.44 U	0.35 U	0.35 U
Tentatively Identified Compounds (TICs)						
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	ug/l			4.9 NJ		8.5 NJ
1,4-Benzenediamine, N-(1-methylethyl)-N' - TIC	ug/l					
14-Pentadecenoic acid - TIC	ug/l					

TABLE 7E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	RW-10 (120-130)	RW-10 (185-195)	RW-10A (51-61)	RW-10A (75-85)	SC-2
15-Crown-5 - TIC	ug/l					62 NJ
1H-Pyrrole, 3,5-dimethyl-2-phenyl- - TIC	ug/l	3.5 NJ				
2(3H)-Benzothiazolone - TIC	ug/l					
2-Naphthalenecarboxylic acid - TIC	ug/l	5.6 NJ				
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	ug/l	15 NJ	12 NJ			
4-Methoxybenzhydrazide - TIC	ug/l					5.6 NJ
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	ug/l	7.7 NJ	3.8 NJ			
9-Octadecenamide, (Z)- - TIC	ug/l					
9-Octadecenoic acid, (E)- - TIC	ug/l					
Benzeneacetic acid - TIC	ug/l					
Benzenesulfonamide, 2-methyl- - TIC	ug/l					
Benzenesulfonamide, N-butyl- - TIC	ug/l					
Benzo[b]triphenylene - TIC	ug/l					25 NJ
Benzocycloheptatriene - TIC	ug/l					3.6 NJ
Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	ug/l					
Cyclohexanone, 3,3,5-trimethyl- - TIC	ug/l					
Diethyltoluamide - TIC	ug/l					
Eicosane - TIC	ug/l					
Ethanone, 1-(2-hydroxyphenyl)- - TIC	ug/l					
Hexadeca-2,6,10,14-tetraen-1-ol, 3,7,11, - TIC	ug/l					
Hexagol - TIC	ug/l					
n-Hexadecanoic acid - TIC	ug/l	9.9 NJ	5.8 NJ			4.8 NJ
Nonanoic acid - TIC	ug/l					
Octadec-9-enoic acid - TIC	ug/l					4.6 NJ
Octadecanoic acid - TIC	ug/l	8.7 NJ				4.3 NJ
Oleic Acid - TIC	ug/l			24 NJ		
Tetradecanoic acid - TIC	ug/l					
Tetraethyleneglycol monomethylether - TIC	ug/l					
Tridecanoic acid - TIC	ug/l					
Unknown - TIC	ug/l					
See Table 12 for validation qualifiers.						
Result exceeds NJGWQS (NJAC 7:9C March 2014)						

TABLE 7F
SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBs) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB- 2	OB- 3	OB- 4	OB- 5	OB- 6	OB- 7	OB-12
PCB-1016	ug/l		0.43 U	0.43 U	0.43 U	0.43 U	0.57 U	0.43 U	0.43 U
PCB-1221	ug/l		0.34 U	0.34 U	0.34 U	0.34 U	0.45 U	0.34 U	0.34 U
PCB-1232	ug/l		0.4 U	0.4 U	0.4 U	0.4 U	0.53 U	0.4 U	0.4 U
PCB-1242	ug/l		0.22 U	0.22 U	0.22 U	0.22 U	0.29 U	0.22 U	0.22 U
PCB-1248	ug/l		0.15 U	0.15 U	0.15 U	0.15 U	0.2 U	0.15 U	0.15 U
PCB-1254	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.22 U	0.17 U	0.17 U
PCB-1260	ug/l		0.18 U	0.18 U	0.18 U	0.18 U	0.24 U	0.18 U	0.18 U
Polychlorinated biphenyls, Total	ug/l	0.5	0.43 U	0.43 U	0.43 U	0.43 U	0.66 U	0.43 U	0.43 U

Parameter	Result Unit	OB-13	OB-13-DUP-02	RW- 2 (279-289)	RW- 8 (163-173)	RW- 8 (204-214)	RW- 9A (85-95)	RW-10 (120-130)	RW-10 (185-195)
PCB-1016	ug/l	0.43 U	0.43 U	0.43 U	0.4 U	0.43 U	0.43 U	0.43 U	0.4 U
PCB-1221	ug/l	0.34 U	0.34 U	0.34 U	0.31 U	0.34 U	0.34 U	0.34 U	0.31 U
PCB-1232	ug/l	0.4 U	0.4 U	0.4 U	0.37 U	0.4 U	0.4 U	0.4 U	0.37 U
PCB-1242	ug/l	0.22 U	0.22 U	0.22 U	0.2 U	0.22 U	0.22 U	0.22 U	0.2 U
PCB-1248	ug/l	0.15 U	0.15 U	0.15 U	0.14 U	0.15 U	0.15 U	0.15 U	0.14 U
PCB-1254	ug/l	0.17 U	0.17 U	0.17 U	0.16 U	0.17 U	0.17 U	0.17 U	0.16 U
PCB-1260	ug/l	0.18 U	0.18 U	0.18 U	0.17 U	0.18 U	0.18 U	0.18 U	0.17 U
Polychlorinated biphenyls, Total	ug/l	0.43 U	0.43 U	0.43 U	0.4 U	0.43 U	0.43 U	0.43 U	0.4 U

Parameter	Result Unit	RW-10A (51-61)	RW-10A (75-85)	SC-2					
PCB-1016	ug/l	0.4 U	0.43 U	0.43 U					
PCB-1221	ug/l	0.31 U	0.34 U	0.34 U					
PCB-1232	ug/l	0.37 U	0.4 U	0.4 U					
PCB-1242	ug/l	0.2 U	0.22 U	0.22 U					
PCB-1248	ug/l	0.14 U	0.15 U	0.15 U					
PCB-1254	ug/l	0.16 U	0.17 U	0.17 U					
PCB-1260	ug/l	0.17 U	0.18 U	0.18 U					
Polychlorinated biphenyls, Total	ug/l	0.4 U	0.43 U	0.43 U					

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

TABLE 8A
SUMMARY OF DETECTED ORGANIC COMPOUNDS IN GROUNDWATER
SALLY'S POND AREA
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

VOC Parameter	Result Unit	NJGWQS ug/l	OB-29	RW-12 (55-65)	RW-12 (130-140)
4-Methyl-2-pentanone (MIBK)	ug/l			1.0 J	
Acetone	ug/l	6000		8.3 UB	
Carbon disulfide	ug/l	700		3.4	0.27 J
Cyclohexane	ug/l			0.17 J	0.66 J
Methylene Chloride	ug/l	3	0.28 UB		0.22 UB
Toluene	ug/l	600		3.6	
VOC Tentatively Identified Compounds (TICs)					
1-Hexanol, 2-ethyl- - TIC	ug/l	200			3.1 NJ
3-Hydroxymandelic acid, ethyl ester, di- - TIC	ug/l				5.4 NJ
Isopropyl alcohol - TIC	ug/l			20 J	
Unknown - TIC	ug/l			14 NJ	5.2 NJ
SVOC Parameter					
Phenol	ug/l	2000		3.0 J	
SVOC Tentatively Identified Compounds (TICs)					
1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TI	ug/l			27 NJ	14 NJ
2(3H)-Furanone, 5-heptyldihydro- - TIC	ug/l			31 NJ	
2H-Pyran-2-one, 6-heptyltetrahydro- - TIC	ug/l			36 NJ	
2-Mercaptobenzothiazole - TIC	ug/l			30 NJ	
2-Methyl-4-hydroxybenzoxazole - TIC	ug/l			27 NJ	
2-Propanone, dimethylhydrazone - TIC	ug/l			18 NJ	
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TI	ug/l			20 NJ	
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	ug/l			9.0 NJ	
Acetamide, N-(1-dimethylaminomethylene-2	ug/l			29 NJ	
Benzenesulfonamide, N-butyl- - TIC	ug/l			18 NJ	
Benzothiazole - TIC	ug/l			12 NJ	
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	ug/l		29 NJ		
Diethylene glycol monododecyl ether - TIC	ug/l				16 NJ
Ethanol, 2-(2-butoxyethoxy)- - TIC	ug/l			28 NJ	20 NJ
Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]- - TIC	ug/l				8.2 NJ
n-Hexadecanoic acid - TIC	ug/l				19 NJ
Octadecanoic acid - TIC	ug/l			60 NJ	9.8 NJ
Octanoic acid, 8-[(tetrahydro-2H-pyran-2 - TI	ug/l			13 NJ	
Phenol, 4-(1,1,3,3-tetramethylbutyl)- - TIC	ug/l				18 NJ
PCBs					
None					
See Table 12 for validation qualifiers.					
Result exceeds NJGWQS (NJAC 7:9C March 2014)					

TABLE 8B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
SALLY'S POND AREA
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS mg/l	OB-10	OB-10-DUP-03	OB-29	RW-12 (55-65)	RW-12 (130-140)
Aluminum	mg/l	0.2	0.0096 U	0.0096 U	1.7 B	0.28	0.90 B
Aluminum, Dissolved	mg/l	0.2	0.0096 U	0.0096 U	0.84	0.24	0.3
Antimony	mg/l	0.006	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Antimony, Dissolved	mg/l	0.006	0.00051 J	0.0005 U	0.00073 J	0.0005 U	0.0005 U
Arsenic	mg/l	0.003	0.0013 UB	0.0013 UB	0.0015 UB	0.013	0.013 B
Arsenic, Dissolved	mg/l	0.003	0.0005 U	0.0005 U	0.012	0.012	0.0005 U
Barium	mg/l	6	0.0068	0.0069	0.013	0.025	0.015
Barium, Dissolved	mg/l	6	0.0065	0.0062	0.015	0.024	0.0089
Beryllium	mg/l	0.001	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Beryllium, Dissolved	mg/l	0.001	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Cadmium	mg/l	0.004	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Cadmium, Dissolved	mg/l	0.004	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Calcium	mg/l		13.4	13.9	13.9	72.7	44.7
Calcium, Dissolved	mg/l		14	13.7	47.4	57.7	14.2
Chromium	mg/l	0.07	0.0005 U	0.0005 U	0.0018 J	0.0005 U	0.0005 U
Chromium, Dissolved	mg/l	0.07	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00054 J
Cobalt	mg/l	0.1	0.0005 U	0.0005 U	0.00075 J	0.0005 U	0.0005 U
Cobalt, Dissolved	mg/l	0.1	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Copper	mg/l	1.3	0.0005 U	0.0005 U	0.0031	0.0005 U	0.0005 U
Copper, Dissolved	mg/l	1.3	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00074 J
Cyanide, Total	mg/l	0.1	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U
Iron	mg/l	0.3	0.25	0.29	1.2	0.019 J	0.11
Iron, Dissolved	mg/l	0.3	0.013 J	0.01 U	0.018 J	0.011 J	0.32
Lead	mg/l	0.005	0.0002 U	0.0002 U	0.00054 J	0.0002 U	0.0002 U
Lead, Dissolved	mg/l	0.005	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Magnesium	mg/l		3.8	4	4.1	0.13 U	0.14 J
Magnesium, Dissolved	mg/l		4.1	4.1	0.13 U	0.13 U	4
Manganese	mg/l	0.05	0.029	0.033	0.036 B	0.0005 U	0.0027 B
Manganese, Dissolved	mg/l	0.05	0.00078 J	0.00064 J	0.0005 U	0.00071 J	0.0067
Mercury	mg/l	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Mercury, Dissolved	mg/l	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Nickel	mg/l	0.1	0.0005 U	0.0013 J	0.0022	0.0033	0.0024
Nickel, Dissolved	mg/l	0.1	0.0005 U	0.0005 U	0.00097 J	0.0022	0.0005 U
Potassium	mg/l		1.2	1.3	1.3	39.3	10.4
Potassium, Dissolved	mg/l		1.2	1.2	10.8	34.8	1.3
Selenium	mg/l	0.04	0.00080 J	0.0006 U	0.0006 U	0.0099	0.0038

TABLE 8B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
SALLY'S POND AREA
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS mg/l	OB-10	OB-10-DUP-03	OB-29	RW-12 (55-65)	RW-12 (130-140)
Selenium, Dissolved	mg/l	0.04	0.0006 U	0.0006 U	0.0038	0.0088	0.0006 U
Silver	mg/l	0.04	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Silver, Dissolved	mg/l	0.04	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l	50	3.1	3.3	3.2	170	98.8
Sodium, Dissolved	mg/l	50	3.4	3.3	131	155 E	3.9
Thallium	mg/l	0.002	0.00024 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Thallium, Dissolved	mg/l	0.002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Vanadium	mg/l		0.0010 UB	0.0011 UB	0.0028 B	0.0068 B	0.015 B
Vanadium, Dissolved	mg/l		0.0016 UB	0.0016 UB	0.015 B	0.0048 B	0.0022 B
Zinc	mg/l	2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc, Dissolved	mg/l	2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Wet Chemistry							
Bicarbonate Alkalinity as	mg/l		43.9	43.6	44.6	5 U	5 U
Total Alkalinity as CaCO3	mg/l		43.9	43.6	44.6	101	159
Chloride	mg/l	250	3.43	3.39	3.22	47.2	21.5
Sulfate	mg/l	250	5.88	5.85	5.38	299	145
Total Alkalinity as CaCO3	mg/l		43.9	43.6	44.6	101	159

See Table 12 for validation qualifiers.

Result exceeds NJGWQS (NJAC 7:9C March 2014)

TABLE 8C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
SALLY'S POND AREA
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-10	OB-10-DUP-03	OB-29	RW-12 (55-65)	RW-12 (130-140)
1,1,1-Trichloroethane	ug/l	30	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	ug/l	1	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2-Trichloroethane	ug/l	3	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	ug/l	50	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1-Dichloroethene	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane	ug/l	0.03	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene	ug/l	9	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	ug/l	0.02	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
1,2-Dibromoethane	ug/l	0.03	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichlorobenzene	ug/l	600	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,2-Dichloroethane	ug/l	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dichlorobenzene	ug/l	600	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,4-Dichlorobenzene	ug/l	75	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,4-Dioxane	ug/l	10	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
2-Butanone (MEK)	ug/l	300	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
2-Hexanone	ug/l	300	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methyl-2-pentanone (MIBK)	ug/l		0.81 U	0.81 U	0.81 U	1.0 J	0.81 U
Acetone	ug/l	6000	2.7 U	2.7 U	2.7 U	8.3 UB	2.7 U
Benzene	ug/l	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/l	4	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Bromomethane	ug/l	10	0.35 UJ	0.35 UJ	0.35 U	0.35 U	0.35 U
Carbon disulfide	ug/l	700	0.22 U	0.22 U	0.22 U	3.4	0.27 J
Carbon tetrachloride	ug/l	1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorobenzene	ug/l	50	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorodibromomethane	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chloroethane	ug/l	5	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroform	ug/l	70	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloromethane	ug/l		0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
cis-1,2-Dichloroethene	ug/l	70	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,3-Dichloropropene	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Cyclohexane	ug/l		0.13 U	0.13 U	0.13 U	0.17 J	0.66 J
Dichlorobromomethane	ug/l	1	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dichlorodifluoromethane	ug/l	1000	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	ug/l	700	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Ethylene Dibromide	ug/l	0.03	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U

TABLE 8C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
SALLY'S POND AREA
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-10	OB-10-DUP-03	OB-29	RW-12 (55-65)	RW-12 (130-140)
Freon-113	ug/l		0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l	700	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methyl acetate	ug/l	7000	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Methyl tert-butyl ether	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l		0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Methylene Chloride	ug/l	3	0.22 U	0.22 U	0.28 UB	0.22 U	0.22 UB
Styrene	ug/l	100	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	1	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	600	0.17 U	0.17 U	0.17 U	3.6	0.17 U
trans-1,2-Dichloroethene	ug/l	100	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l	2000	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Xylenes, Total	ug/l	1000	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Tentatively Identified Compounds (TICs)							
1-Hexanol, 2-ethyl- - TIC	ug/l	200					3.1 NJ
3-Hydroxymandelic acid, ethyl ester, di- - TIC	ug/l						5.4 NJ
Isopropyl alcohol - TIC	ug/l					20 J	
Unknown - TIC	ug/l					14 NJ	5.2 NJ
See Table 12 for validation qualifiers.							
Result exceeds NJGWQS (NJAC 7:9C March 2014)							

TABLE 8D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
SALLY'S POND AREA
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-10	OB-10-DUP-03	OB-29	RW-12 (55-65)	RW-12 (130-140)
1,2,4,5-Tetrachlorobenzene	ug/l		2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
2,2'-oxybis[1-chloropropane]	ug/l	300	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
2,3,4,6-Tetrachlorophenol	ug/l	200	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U
2,4,5-Trichlorophenol	ug/l	700	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U
2,4,6-Trichlorophenol	ug/l	20	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U
2,4-Dichlorophenol	ug/l	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
2,4-Dimethylphenol	ug/l	100	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U
2,4-Dinitrophenol	ug/l	40	5.9 U	5.9 U	5.9 U	5.9 U	5.9 U
2,4-Dinitrotoluene	ug/l		3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
2,6-Dinitrotoluene	ug/l		2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
2-Chloronaphthalene	ug/l	600	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
2-Chlorophenol	ug/l	40	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
2-Methylnaphthalene	ug/l	30	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Methylphenol	ug/l		2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
2-Nitroaniline	ug/l		3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
2-Nitrophenol	ug/l		5.3 U	5.3 U	5.3 U	5.3 U	5.3 U
3 & 4 Methylphenol	ug/l		2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
3,3'-Dichlorobenzidine	ug/l	30	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
3-Nitroaniline	ug/l		2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
4,6-Dinitro-2-methylphenol	ug/l	1	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U
4-Bromophenyl phenyl ether	ug/l		2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
4-Chloro-3-methylphenol	ug/l	100	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
4-Chloroaniline	ug/l		4.2 U	4.2 U	4.2 U	4.2 U	4.2 U
4-Chlorophenyl phenyl ether	ug/l		2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
4-Nitroaniline	ug/l		3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
4-Nitrophenol	ug/l		5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
Acenaphthene	ug/l	400	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Acenaphthylene	ug/l	100	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Acetophenone	ug/l	700	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Anthracene	ug/l	2000	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Atrazine	ug/l	3	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Benzaldehyde	ug/l		5.7 U	5.7 U	5.7 U	5.7 U	5.7 U
Benzo[a]anthracene	ug/l	0.1	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzo[a]pyrene	ug/l	0.1	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzo[b]fluoranthene	ug/l	0.2	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzo[g,h,i]perylene	ug/l	100	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
Benzo[k]fluoranthene	ug/l	0.5	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U

TABLE 8D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
SALLY'S POND AREA
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-10	OB-10-DUP-03	OB-29	RW-12 (55-65)	RW-12 (130-140)
Bis(2-chloroethoxy)methane	ug/l		3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Bis(2-chloroethyl)ether	ug/l	7	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Bis(2-ethylhexyl) phthalate	ug/l	3	6 U	6 U	6 U	6 U	6 U
Butyl benzyl phthalate	ug/l	100	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Caprolactam	ug/l	5000	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Carbazole	ug/l		2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Chrysene	ug/l	5	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Dibenz(a,h)anthracene	ug/l	0.3	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
Dibenzofuran	ug/l		2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Diethyl phthalate	ug/l	6000	3 U	3 U	3 U	3 U	3 U
Dimethyl phthalate	ug/l	100	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Di-n-butyl phthalate	ug/l	700	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Di-n-octyl phthalate	ug/l	100	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Diphenyl	ug/l	400	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Fluoranthene	ug/l	300	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Fluorene	ug/l	300	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Hexachlorobenzene	ug/l	0.02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Hexachlorobutadiene	ug/l	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Hexachlorocyclopentadiene	ug/l	40	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Hexachloroethane	ug/l	7	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Indeno[1,2,3-cd]pyrene	ug/l	0.2	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Isophorone	ug/l	40	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Naphthalene	ug/l	300	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Nitrobenzene	ug/l	6	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
N-Nitrosodimethylamine	ug/l	0.8	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
N-Nitrosodi-n-propylamine	ug/l	10	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U
N-Nitrosodiphenylamine	ug/l	10	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U
Pentachlorophenol	ug/l	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenanthrene	ug/l	100	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Phenol	ug/l	2000	1.5 U	1.5 U	1.5 U	3.0 J	1.5 U
Pyrene	ug/l	200	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Tentatively Identified Compounds (TICs)							
1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	ug/l					27 NJ	14 NJ
2(3H)-Furanone, 5-heptyldihydro- - TIC	ug/l					31 NJ	
2H-Pyran-2-one, 6-heptyltetrahydro- - TIC	ug/l					36 NJ	
2-Mercaptobenzothiazole - TIC	ug/l					30 NJ	
2-Methyl-4-hydroxybenzoxazole - TIC	ug/l					27 NJ	

TABLE 8D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
SALLY'S POND AREA
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-10	OB-10-DUP-03	OB-29	RW-12 (55-65)	RW-12 (130-140)
2-Propanone, dimethylhydrazone - TIC	ug/l					18 NJ	
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	ug/l					20 NJ	
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	ug/l					9.0 NJ	
Acetamide, N-(1-dimethylaminomethylene-2 - TIC	ug/l					29 NJ	
Benzenesulfonamide, N-butyl- - TIC	ug/l					18 NJ	
Benzothiazole - TIC	ug/l					12 NJ	
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	ug/l		29 NJ				
Diethylene glycol monododecyl ether - TIC	ug/l						16 NJ
Ethanol, 2-(2-butoxyethoxy)- - TIC	ug/l					28 NJ	20 NJ
Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]- - TIC	ug/l						8.2 NJ
n-Hexadecanoic acid - TIC	ug/l						19 NJ
Octadecanoic acid - TIC	ug/l					60 NJ	9.8 NJ
Octanoic acid, 8-[(tetrahydro-2H-pyran-2 - TIC	ug/l					13 NJ	
Phenol, 4-(1,1,3,3-tetramethylbutyl)- - TIC	ug/l						18 NJ
See Table 12 for validation qualifiers.							
Result exceeds NJGWQS (NJAC 7:9C March 2014)							

TABLE 8E
SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBs) IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-10	OB-10-DUP-03	OB-29	RW-12 (55-65)	RW-12 (130-140)
PCB-1016	ug/l		0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
PCB-1221	ug/l		0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
PCB-1232	ug/l		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1242	ug/l		0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
PCB-1248	ug/l		0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
PCB-1254	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
PCB-1260	ug/l		0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Polychlorinated biphenyls, Total	ug/l	0.5	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
See Table 12 for validation qualifiers.							
Result exceeds NJGWQS (NJAC 7:9C March 2014)							

TABLE 9A
SUMMARY OF ORGANIC COMPOUNDS IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

VOC Parameter	Result Unit	NJGWQS ug/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft-180	PM Air Shaft-230
1,1-Dichloroethane	ug/l	50					0.39 J	
1,2-Dichlorobenzene	ug/l	600						0.42 J
1,3-Dichlorobenzene	ug/l	600						1.4
1,4-Dichlorobenzene	ug/l	75					0.29 J	3.6
1,4-Dioxane	ug/l	10		0.47 J	0.54 J		12	140 D
Benzene	ug/l	1					4.1	25
Chlorobenzene	ug/l	50					0.81 J	15
Chloroethane	ug/l	5					14	7.7
Chloromethane	ug/l		0.41 J			0.40 J		
cis-1,2-Dichloroethene	ug/l	70					0.27 J	
Cyclohexane	ug/l						0.79 J	1.7 J
Isopropylbenzene	ug/l	700					1.1	7.4
Methylcyclohexane	ug/l						0.17 J	0.27 J
Toluene	ug/l	600					0.18 J	0.24 J
Vinyl chloride	ug/l	1					0.25 J	
Xylenes, Total	ug/l	1000						0.85 J
VOC Tentatively Identified Compounds (TICs)								
1,2,3-Trimethylbenzene - TIC	ug/l						0.17 J	0.41 J
1,2,4-Trimethylbenzene - TIC	ug/l							0.20 J
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	ug/l							4.6 NJ
Cyclopentane, methyl- - TIC	ug/l							5.2 NJ
Dichlorofluoromethane - TIC	ug/l						0.27 J	
Ethyl ether - TIC	ug/l	1000						1.0 J
Hexane - TIC	ug/l	30					0.23 J	0.16 J
Indane - TIC	ug/l						4.6 NJ	7.3 NJ
Naphthalene - TIC	ug/l	300					0.58 UB	4.6 J
N-Propylbenzene - TIC	ug/l							1
Tetrahydrofuran - TIC	ug/l	10					1.6 J	4.3 J
Total Alkanes - TIC	ug/l							0.16 NJ
Total Alkanes TIC - TIC	ug/l						0.23 NJ	
SVOC Parameter								
None								
SVOC Tentatively Identified Compounds (TICs)								
1,4-Dioxane - TIC	ug/l	10						6.7 J
Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	ug/l							3.5 NJ

TABLE 9A
SUMMARY OF ORGANIC COMPOUNDS IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

VOC Parameter	Result Unit	NJGWQS ug/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft-180	PM Air Shaft-230
Cyclic octaatomic sulfur - TIC	ug/l			43 NJ				
Cyclohexanamine, N-cyclohexyl- - TIC	ug/l							4.0 NJ
Hexadecane - TIC	ug/l						4.0 NJ	
Sulfur - TIC	ug/l			3.2 NJ				
Tetradecanoic acid - TIC	ug/l						3.7 NJ	
PCBs								
None								
See Table 12 for validation qualifiers.								
Result exceeds NJGWQS (NJAC 7:9C March 2014)								

TABLE 9B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS mg/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
Aluminum	mg/l	0.2	0.0096 U	0.014 J	0.011 J	0.086	0.050 B	0.05	0.035
Aluminum, Dissolved	mg/l	0.2	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.016 J	0.0096 U	0.0096 U
Antimony	mg/l	0.006	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00061 UB	0.0005 U	0.0005 U
Antimony, Dissolved	mg/l	0.006	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00053 J	0.0005 U	0.0005 U
Arsenic	mg/l	0.003	0.0023 B	0.0016 J	0.0017 J	0.0032 B	0.0013 UB	0.0012 J	0.0030 B
Arsenic, Dissolved	mg/l	0.003	0.0005 U	0.0005 U	0.0005 U	0.00054 J	0.0005 U	0.0005 U	0.00058 J
Barium	mg/l	6	0.12	0.11	0.12	0.12	0.0093	0.41	0.54
Barium, Dissolved	mg/l	6	0.083	0.095	0.092	0.088	0.0094	0.31	0.29
Beryllium	mg/l	0.001	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Beryllium, Dissolved	mg/l	0.001	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Cadmium	mg/l	0.004	0.0004 U	0.0004 U	0.00085 J	0.0064	0.0004 U	0.0004 U	0.0004 U
Cadmium, Dissolved	mg/l	0.004	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Calcium	mg/l		81.3	83.4	85	83.2	6.4	44.5	98.9
Calcium, Dissolved	mg/l		83.7	82.6	76.8	82.9	6.1	42.3	149
Chromium	mg/l	0.07	0.0021	0.0018 J	0.0026	0.016	0.00076 J	0.0025	0.0088
Chromium, Dissolved	mg/l	0.07	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Cobalt	mg/l	0.1	0.0005 U	0.0005 U	0.0005 U	0.00094 J	0.0005 U	0.00064 J	0.0016 J
Cobalt, Dissolved	mg/l	0.1	0.0005 U	0.0005 U	0.0005 U	0.00055 J	0.0005 U	0.0005 U	0.0010 J
Copper	mg/l	1.3	0.0015 J	0.0021	0.0027	0.018	0.0024	0.0017 J	0.0061
Copper, Dissolved	mg/l	1.3	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0017 J	0.0005 U	0.0005 U
Cyanide, Total	mg/l	0.1	0.007 UJ	0.007 U	0.007 U	0.007 U	0.007 U	0.007 UJ	0.007 U
Iron	mg/l	0.3	20	18.5	19	25.5	0.47	79.3	126
Iron, Dissolved	mg/l	0.3	5.1	0.01 U	0.01 U	0.014 J	0.14	0.01 U	0.01 U
Lead	mg/l	0.005	0.00039 J	0.00029 J	0.0078	0.091	0.0045	0.024	0.98
Lead, Dissolved	mg/l	0.005	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00082 J	0.0002 U	0.0002 U
Magnesium	mg/l		22.7	22.4	22.7	22.8	1.8	4.4	11.4
Magnesium, Dissolved	mg/l		24	23.3	21.7	24	1.8	4.4	11.9
Manganese	mg/l	0.05	1.2	1.3 B	1.4 B	1.3	0.017 B	0.81 B	2.1
Manganese, Dissolved	mg/l	0.05	1.4	1.2	1.2	1.4 B	0.0094	0.75	2.9
Mercury	mg/l	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Mercury, Dissolved	mg/l	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Nickel	mg/l	0.1	0.0052	0.0025	0.0023	0.006	0.0088	0.0017 J	0.0029
Nickel, Dissolved	mg/l	0.1	0.0013 J	0.0021	0.0012 J	0.0034	0.0078	0.00062 J	0.0014 J
Potassium	mg/l		4.5	5	5.1	4.7	0.51 J	2	7.9
Potassium, Dissolved	mg/l		4.6	4.8	4.5	4.7	0.47 J	1.9	7.9

TABLE 9B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS mg/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
Selenium	mg/l	0.04	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Selenium, Dissolved	mg/l	0.04	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Silver	mg/l	0.04	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Silver, Dissolved	mg/l	0.04	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l	50	85.7	79.6	79.8	82.7	2.8	4.7	29.6
Sodium, Dissolved	mg/l	50	90.4	83.2	77.3	87.2	2.7	4.8	30.9
Thallium	mg/l	0.002	0.00051 J	0.0002 U	0.0002 U	0.0002 U	0.00067 J	0.0002 U	0.0002 U
Thallium, Dissolved	mg/l	0.002	0.00060 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00030 J	0.0002 U
Vanadium	mg/l		0.0010 UB	0.0024 B	0.0028 B	0.0022 B	0.0016 UB	0.010 B	0.0050 B
Vanadium, Dissolved	mg/l		0.0017 UB	0.00095 UB	0.00095 UB	0.0010 UB	0.0017 UB	0.00084 UB	0.00089 UB
Zinc	mg/l	2	0.96	0.86	2.5	8.2	1.6	4	5.7
Zinc, Dissolved	mg/l	2	0.48	0.15	0.91	2.8	1.6	2.8	4.6
Wet Chemistry									
Bicarbonate Alkalinity as	mg/l		229	240	248	249	24	191	506
Total Alkalinity as CaCO3	mg/l		229	240	248	249	24	191	506
Chloride	mg/l	250	191 J	175	172	183 J	1.13	1.76	11.2
Sulfate	mg/l	250	3.36	3.46	2.85	3.46	4.35	1.99	0.6 U

See Table 12 for validation qualifiers.

Result exceeds NJGWQS (NJAC 7:9C March 2014)

TABLE 9C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
1,1,1-Trichloroethane	ug/l	30	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	ug/l	1	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2-Trichloroethane	ug/l	3	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	ug/l	50	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.39 J	0.24 U
1,1-Dichloroethene	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane	ug/l	0.03	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene	ug/l	9	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	ug/l	0.02	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
1,2-Dibromoethane	ug/l	0.03	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichlorobenzene	ug/l	600	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.42 J
1,2-Dichloroethane	ug/l	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dichlorobenzene	ug/l	600	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	1.4
1,4-Dichlorobenzene	ug/l	75	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.29 J	3.6
1,4-Dioxane	ug/l	10	0.27 U	0.47 J	0.54 J	0.27 U	0.27 U	12	140 D
2-Butanone (MEK)	ug/l	300	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
2-Hexanone	ug/l	300	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methyl-2-pentanone (MIBK)	ug/l		0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Acetone	ug/l	6000	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Benzene	ug/l	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	4.1	25
Bromoform	ug/l	4	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Bromomethane	ug/l	10	0.35 UJ	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Carbon disulfide	ug/l	700	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Carbon tetrachloride	ug/l	1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorobenzene	ug/l	50	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.81 J	15
Chlorodibromomethane	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chloroethane	ug/l	5	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	14	7.7
Chloroform	ug/l	70	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloromethane	ug/l		0.41 J	0.36 U	0.36 U	0.40 J	0.36 U	0.36 U	0.36 U
cis-1,2-Dichloroethene	ug/l	70	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.27 J	0.21 U
cis-1,3-Dichloropropene	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Cyclohexane	ug/l		0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.79 J	1.7 J
Dichlorobromomethane	ug/l	1	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dichlorodifluoromethane	ug/l	1000	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	ug/l	700	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U

TABLE 9C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
Ethylene Dibromide	ug/l	0.03	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U
Freon-113	ug/l		0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l	700	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.1	7.4
Methyl acetate	ug/l	7000	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Methyl tert-butyl ether	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l		0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.17 J	0.27 J
Methylene Chloride	ug/l	3	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Styrene	ug/l	100	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	1	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	600	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.18 J	0.24 J
trans-1,2-Dichloroethene	ug/l	100	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l	2000	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.25 J	0.18 U
Xylenes, Total	ug/l	1000	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.85 J
Tentatively Identified Compounds (TICs)									
1,2,3-Trimethylbenzene - TIC	ug/l							0.17 J	0.41 J
1,2,4-Trimethylbenzene - TIC	ug/l								0.20 J
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	ug/l								4.6 NJ
Cyclopentane, methyl- - TIC	ug/l								5.2 NJ
Dichlorofluoromethane - TIC	ug/l							0.27 J	
Ethyl ether - TIC	ug/l	1000							1.0 J
Hexane - TIC	ug/l	30						0.23 J	0.16 J
Indane - TIC	ug/l							4.6 NJ	7.3 NJ
Naphthalene - TIC	ug/l	300						0.58 UB	4.6 J
N-Propylbenzene - TIC	ug/l								1
Tetrahydrofuran - TIC	ug/l	10						1.6 J	4.3 J
Total Alkanes - TIC	ug/l								0.16 NJ
Total Alkanes TIC - TIC	ug/l							0.23 NJ	

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

TABLE 9D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
1,2,4,5-Tetrachlorobenzene	ug/l		2.1 U	2.1 U	2.1 U	2 U	2.1 U	2.1 U	2 U
2,2'-oxybis[1-chloropropane]	ug/l	300	2.8 U	2.8 U	2.8 U	2.7 U	2.8 U	2.8 U	2.7 U
2,3,4,6-Tetrachlorophenol	ug/l	200	6.9 U	6.9 U	6.9 U	6.6 U	6.9 U	6.9 U	6.6 U
2,4,5-Trichlorophenol	ug/l	700	7.1 U	7.1 U	7.1 U	6.8 U	7.1 U	7.1 U	6.8 U
2,4,6-Trichlorophenol	ug/l	20	6.8 U	6.8 U	6.8 U	6.5 U	6.8 U	6.8 U	6.5 U
2,4-Dichlorophenol	ug/l	20	5.6 U	5.6 U	5.6 U	5.4 U	5.6 U	5.6 U	5.4 U
2,4-Dimethylphenol	ug/l	100	4.2 U	4.2 U	4.2 U	4 U	4.2 U	4.2 U	4 U
2,4-Dinitrophenol	ug/l	40	5.9 U	5.9 U	5.9 U	5.7 U	5.9 U	5.9 U	5.7 U
2,4-Dinitrotoluene	ug/l		3.2 U	3.2 U	3.2 U	3.1 U	3.2 U	3.2 U	3.1 U
2,6-Dinitrotoluene	ug/l		2.3 U	2.3 U	2.3 U	2.2 U	2.3 U	2.3 U	2.2 U
2-Chloronaphthalene	ug/l	600	2.8 U	2.8 U	2.8 U	2.7 U	2.8 U	2.8 U	2.7 U
2-Chlorophenol	ug/l	40	4.8 U	4.8 U	4.8 U	4.6 U	4.8 U	4.8 U	4.6 U
2-Methylnaphthalene	ug/l	30	0.4 U	0.4 U	0.4 U	0.38 U	0.4 U	0.4 U	0.38 U
2-Methylphenol	ug/l		2.3 U	2.3 U	2.3 U	2.2 U	2.3 U	2.3 U	2.2 U
2-Nitroaniline	ug/l		3.7 U	3.7 U	3.7 U	3.6 U	3.7 U	3.7 U	3.6 U
2-Nitrophenol	ug/l		5.3 U	5.3 U	5.3 U	5.1 U	5.3 U	5.3 U	5.1 U
3 & 4 Methylphenol	ug/l		2.2 U	2.2 U	2.2 U	2.1 U	2.2 U	2.2 U	2.1 U
3,3'-Dichlorobenzidine	ug/l	30	3.3 U	3.3 U	3.3 U	3.2 U	3.3 U	3.3 U	3.2 U
3-Nitroaniline	ug/l		2.7 U	2.7 U	2.7 U	2.6 U	2.7 U	2.7 U	2.6 U
4,6-Dinitro-2-methylphenol	ug/l	1	9.3 U	9.3 U	9.3 U	8.9 U	9.3 U	9.3 U	8.9 U
4-Bromophenyl phenyl ether	ug/l		2.7 U	2.7 U	2.7 U	2.6 U	2.7 U	2.7 U	2.6 U
4-Chloro-3-methylphenol	ug/l	100	4.5 U	4.5 U	4.5 U	4.3 U	4.5 U	4.5 U	4.3 U
4-Chloroaniline	ug/l		4.2 U	4.2 U	4.2 U	4 U	4.2 U	4.2 U	4 U
4-Chlorophenyl phenyl ether	ug/l		2.8 U	2.8 U	2.8 U	2.7 U	2.8 U	2.8 U	2.7 U
4-Nitroaniline	ug/l		3.1 U	3.1 U	3.1 U	3 U	3.1 U	3.1 U	3 U
4-Nitrophenol	ug/l		5.4 U	5.4 U	5.4 U	5.2 U	5.4 U	5.4 U	5.2 U
Acenaphthene	ug/l	400	0.32 U	0.32 U	0.32 U	0.31 U	0.32 U	0.32 U	0.31 U
Acenaphthylene	ug/l	100	0.35 U	0.35 U	0.35 U	0.34 U	0.35 U	0.35 U	0.34 U
Acetophenone	ug/l	700	2.3 U	2.3 U	2.3 U	2.2 U	2.3 U	2.3 U	2.2 U
Anthracene	ug/l	2000	0.38 U	0.38 U	0.38 U	0.37 U	0.38 U	0.38 U	0.37 U
Atrazine	ug/l	3	2.9 U	2.9 U	2.9 U	2.8 U	2.9 U	2.9 U	2.8 U
Benzaldehyde	ug/l		5.7 U	5.7 U	5.7 U	5.5 U	5.7 U	5.7 U	5.5 U
Benzo[a]anthracene	ug/l	0.1	0.025 U	0.023 U	0.025 U	0.023 U	0.025 U	0.025 U	0.023 U
Benzo[a]pyrene	ug/l	0.1	0.025 U	0.023 U	0.025 U	0.023 U	0.025 U	0.025 U	0.023 U
Benzo[b]fluoranthene	ug/l	0.2	0.025 U	0.023 U	0.025 U	0.023 U	0.025 U	0.025 U	0.023 U

TABLE 9D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
Benzo[g,h,i]perylene	ug/l	100	0.62 U	0.62 U	0.62 U	0.6 U	0.62 U	0.62 U	0.6 U
Benzo[k]fluoranthene	ug/l	0.5	0.37 U	0.37 U	0.37 U	0.36 U	0.37 U	0.37 U	0.36 U
Bis(2-chloroethoxy)methane	ug/l		3.1 U	3.1 U	3.1 U	3 U	3.1 U	3.1 U	3 U
Bis(2-chloroethyl)ether	ug/l	7	2.8 U	2.8 U	2.8 U	2.7 U	2.8 U	2.8 U	2.7 U
Bis(2-ethylhexyl) phthalate	ug/l	3	6 U	6 U	6 U	5.8 U	6 U	6 U	5.8 U
Butyl benzyl phthalate	ug/l	100	2.5 U	2.5 U	2.5 U	2.4 U	2.5 U	2.5 U	2.4 U
Caprolactam	ug/l	5000	2.4 U	2.4 U	2.4 U	2.3 U	2.4 U	2.4 U	2.3 U
Carbazole	ug/l		2.8 U	2.8 U	2.8 U	2.7 U	2.8 U	2.8 U	2.7 U
Chrysene	ug/l	5	0.33 U	0.33 U	0.33 U	0.32 U	0.33 U	0.33 U	0.32 U
Dibenz(a,h)anthracene	ug/l	0.3	0.45 U	0.45 U	0.45 U	0.43 U	0.45 U	0.45 U	0.43 U
Dibenzofuran	ug/l		2.9 U	2.9 U	2.9 U	2.8 U	2.9 U	2.9 U	2.8 U
Diethyl phthalate	ug/l	6000	3 U	3 U	3 U	2.9 U	3 U	3 U	2.9 U
Dimethyl phthalate	ug/l	100	3.1 U	3.1 U	3.1 U	3 U	3.1 U	3.1 U	3 U
Di-n-butyl phthalate	ug/l	700	2.5 U	2.5 U	2.5 U	2.4 U	2.5 U	2.5 U	2.4 U
Di-n-octyl phthalate	ug/l	100	2.5 U	2.5 U	2.5 U	2.4 U	2.5 U	2.5 U	2.4 U
Diphenyl	ug/l	400	2.2 U	2.2 U	2.2 U	2.1 U	2.2 U	2.2 U	2.1 U
Fluoranthene	ug/l	300	0.32 U	0.32 U	0.32 U	0.31 U	0.32 U	0.32 U	0.31 U
Fluorene	ug/l	300	0.32 U	0.32 U	0.32 U	0.31 U	0.32 U	0.32 U	0.31 U
Hexachlorobenzene	ug/l	0.02	0.014 U	0.013 U	0.014 U	0.013 U	0.014 U	0.014 U	0.013 U
Hexachlorobutadiene	ug/l	1	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U
Hexachlorocyclopentadiene	ug/l	40	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U
Hexachloroethane	ug/l	7	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U
Indeno[1,2,3-cd]pyrene	ug/l	0.2	0.41 U	0.41 U	0.41 U	0.39 U	0.41 U	0.41 U	0.39 U
Isophorone	ug/l	40	3.1 U	3.1 U	3.1 U	3 U	3.1 U	3.1 U	3 U
Naphthalene	ug/l	300	0.37 U	0.37 U	0.37 U	0.36 U	0.37 U	0.37 U	0.36 U
Nitrobenzene	ug/l	6	2.7 U	2.7 U	2.7 U	2.6 U	2.7 U	2.7 U	2.6 U
N-Nitrosodimethylamine	ug/l	0.8	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U
N-Nitrosodi-n-propylamine	ug/l	10	3.4 U	3.4 U	3.4 U	3.3 U	3.4 U	3.4 U	3.3 U
N-Nitrosodiphenylamine	ug/l	10	3.6 U	3.6 U	3.6 U	3.5 U	3.6 U	3.6 U	3.5 U
Pentachlorophenol	ug/l	0.3	0.1 U	0.093 U	0.1 U	0.093 U	0.1 U	0.1 U	0.093 U
Phenanthrene	ug/l	100	0.42 U	0.42 U	0.42 U	0.4 U	0.42 U	0.42 U	0.4 U
Phenol	ug/l	2000	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1.5 U	1.4 U
Pyrene	ug/l	200	0.35 U	0.35 U	0.35 U	0.34 U	0.35 U	0.35 U	0.34 U
Tentatively Identified Compounds (TICs)									
1,4-Dioxane - TIC	ug/l	10						6.7 J	

TABLE 9D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	ug/l							3.5 NJ	
Cyclic octaatomic sulfur - TIC	ug/l			43 NJ					
Cyclohexanamine, N-cyclohexyl- - TIC	ug/l							4.0 NJ	
Hexadecane - TIC	ug/l						4.0 NJ		
Sulfur - TIC	ug/l			3.2 NJ					
Tetradecanoic acid - TIC	ug/l						3.7 NJ		
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 9E
SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBs) IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
PCB-1016	ug/l		0.43 U	0.4 U	0.43 U	0.38 U	0.43 U	0.43 U	0.41 U
PCB-1221	ug/l		0.34 U	0.31 U	0.34 U	0.3 U	0.34 U	0.34 U	0.33 U
PCB-1232	ug/l		0.4 U	0.37 U	0.4 U	0.36 U	0.4 U	0.4 U	0.38 U
PCB-1242	ug/l		0.22 U	0.2 U	0.22 U	0.2 U	0.22 U	0.22 U	0.21 U
PCB-1248	ug/l		0.15 U	0.14 U	0.15 U	0.13 U	0.15 U	0.15 U	0.14 U
PCB-1254	ug/l		0.17 U	0.16 U	0.17 U	0.15 U	0.17 U	0.17 U	0.16 U
PCB-1260	ug/l		0.18 U	0.17 U	0.18 U	0.16 U	0.18 U	0.18 U	0.17 U
Polychlorinated biphenyls, Total	ug/l	0.5	0.43 U	0.4 U	0.43 U	0.38 U	0.43 U	0.43 U	0.41 U
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 10A
SUMMARY OF DETECTED ORGANIC COMPOUNDS IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

VOC Parameter	Result Unit	NJSWQS ug/l	PMP-Pond	SR-3 Pond	SR-3 Seep 1	SR-3 Seep 2	SW-03	SW-11	SW-MRB-00	SW-MRB-02	SW-MRB-03
1,4-Dioxane	ug/l			1.6 J	2.0 J	1.3 J					
Acetone	ug/l		9.0 UB								
Benzene	ug/l	0.15			0.33 J	0.67 J					
Chloroethane	ug/l				0.83 J	1.8					
cis-1,2-Dichloroethene	ug/l					0.26 J					
Toluene	ug/l	1300								0.33 J	
VOC Tentatively Identified Compounds (TICs)											
None											
SVOC Parameter											
Pentachlorophenol	ug/l	0.27						0.11 J			
SVOC Tentatively Identified Compounds (TICs)											
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	ug/l										
1,2-Benzenedicarboxylic acid, diisooctyl - TIC	ug/l										
2,6,10,14,18,22-Tetracosahexaene, 2,6,10 - TIC	ug/l										
9-Octadecenoic acid, (E)- - TIC	ug/l						3.2 NJ				
Acetic acid, chloro-, octadecyl ester - TIC	ug/l										
Cholestan-3-ol, 4-methyl-, (3.beta.,4.al - TIC	ug/l		3.7 NJ								
Diethylene glycol dibenzoate - TIC	ug/l							8.1 NJ			
Diethyltoluamide - TIC	ug/l			3.3 NJ					17 NJ		
Heptadecane - TIC	ug/l										
n-Hexadecanoic acid - TIC	ug/l				4.0 NJ	4.3 NJ					
Octadecanoic acid - TIC	ug/l			5.3 NJ	3.5 NJ	4.1 NJ					3.8 NJ
Octaethylene glycol monododecyl ether - TIC	ug/l										
Oleic Acid - TIC	ug/l		5.0 NJ					6.9 NJ		5.8 NJ	
Oxirane, heptadecyl- - TIC	ug/l										
Tetradecanoic acid - TIC	ug/l		4.2 NJ								
Tridecanoic acid - TIC	ug/l			5.8 NJ						4.8 NJ	
PCBs											
None											

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

TABLE 10A
SUMMARY OF DETECTED ORGANIC COMPOUNDS IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

VOC Parameter	Result Unit	SW-PAB-00	SW-PAB-01	SW-PAB-01A	SW-PAB-02	SW-PAB-03	SW-PAB-04	SW-PAB-04_DUP-04-081915	SW-PMB-01	SW-PMB-02
1,4-Dioxane	ug/l			2.1 J	0.79 J	0.29 J		0.44 J	0.73 J	2.3 J
Acetone	ug/l									
Benzene	ug/l									
Chloroethane	ug/l									
cis-1,2-Dichloroethene	ug/l									
Toluene	ug/l									
VOC Tentatively Identified Compounds (TICs)										
None										
SVOC Parameter										
Pentachlorophenol	ug/l									
SVOC Tentatively Identified Compounds (TICs)										
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	ug/l				4.6 NJ					
1,2-Benzenedicarboxylic acid, diisooctyl - TIC	ug/l			3.3 NJ						
2,6,10,14,18,22-Tetracosahexaene, 2,6,10 - TIC	ug/l				3.2 NJ					
9-Octadecenoic acid, (E)- - TIC	ug/l			6.5 NJ						
Acetic acid, chloro-, octadecyl ester - TIC	ug/l				4.1 NJ					
Cholestan-3-ol, 4-methyl-, (3.beta.,4.al - TIC	ug/l									
Diethylene glycol dibenzoate - TIC	ug/l									
Diethyltoluamide - TIC	ug/l									
Heptadecane - TIC	ug/l		4.2 NJ							
n-Hexadecanoic acid - TIC	ug/l									
Octadecanoic acid - TIC	ug/l			3.2 NJ		3.8 NJ			3.0 NJ	
Octaethylene glycol monododecyl ether - TIC	ug/l			3.1 NJ						
Oleic Acid - TIC	ug/l	5.7 NJ			14 NJ					
Oxirane, heptadecyl- - TIC	ug/l				3.2 NJ					
Tetradecanoic acid - TIC	ug/l						3.4 NJ			
Tridecanoic acid - TIC	ug/l			4.9 NJ					4.8 NJ	
PCBs										
None										

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

TABLE 10B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJSWQS mg/l	PMP-Pond	SR-3 Pond	SR-3 Seep 1	SR-3 Seep 2	SW-03	SW-11	SW-MRB-00	SW-MRB-01	SW-MRB-02	SW-MRB-03
Aluminum	mg/l		0.028	0.0096 U	0.6	0.063	0.010 J	0.065	0.47	0.16	0.22	0.027
Aluminum, Dissolved	mg/l		0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.016 J	0.078	0.011 J	0.010 J	0.0096 U
Antimony	mg/l	0.0056	0.0005 U	0.0005 U	0.0013 J	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Antimony, Dissolved	mg/l	0.0056	0.0016 J	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0011 J	0.0015 J	0.0019 J	0.0032	0.00094 J
Arsenic	mg/l	0.000017	0.0005 U	0.0018 UB	0.0047 B	0.0027 B	0.0005 U	0.0005 U	0.00065 J	0.00076 J	0.00080 J	0.0005 U
Arsenic, Dissolved	mg/l	0.000017	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00060 J	0.00059 J	0.00054 J	0.0005 U
Barium	mg/l	2	0.086	0.075	0.27	0.22	0.045	0.0081	0.014	0.026	0.018	0.016
Barium, Dissolved	mg/l	2	0.086	0.071	0.15	0.18	0.051	0.0079	0.012	0.022	0.015	0.016
Beryllium	mg/l	0.006	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Beryllium, Dissolved	mg/l	0.006	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Cadmium	mg/l	0.0034	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Cadmium, Dissolved	mg/l	0.0034	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Calcium	mg/l		20.5	27.6	26.1	24.8	45.9	10.2	7.3	9.7	8.7	48.5
Calcium, Dissolved	mg/l		19	26.5	23.5	24.4	46.8	9.8	6.9	9.4	8.4	25.9
Chromium	mg/l	0.092	0.0005 U	0.0005 U	0.0027	0.0021	0.0005 U	0.0005 U	0.00096 J	0.00059 J	0.0011 J	0.0005 U
Chromium, Dissolved	mg/l	0.092	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00078 J	0.0005 U	0.00070 J	0.0005 U	0.0005 U	0.0005 U
Cobalt	mg/l		0.0005 U	0.0005 U	0.0034	0.00069 J	0.0005 U	0.0005 U	0.0005 U	0.0022	0.0013 J	0.0005 U
Cobalt, Dissolved	mg/l		0.0005 U	0.0005 U	0.0012 J	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00060 J	0.00057 J	0.0005 U
Copper	mg/l	1.3	0.0005 U	0.0005 U	0.0061	0.0012 J	0.0005 U	0.0005 U	0.0033	0.0016 J	0.00061 J	0.00085 J
Copper, Dissolved	mg/l	1.3	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0011 J	0.00077 J	0.0027	0.0015 J	0.0005 U	0.00077 J
Cyanide, Total	mg/l	0.14	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U F	0.011	0.007 U	0.007 U	0.007 U
Iron	mg/l		3.8	0.54	74.4	43.2	0.24	0.17	1.3	3.1	8.7	0.42
Iron, Dissolved	mg/l		0.7	0.062	0.01 U	0.018 J	0.066	0.063	0.33	0.32	0.84	0.036
Lead	mg/l	0.005	0.00058 J	0.00028 J	0.0043	0.00081 J	0.0002 U	0.0002 U	0.00087 J	0.0012 J	0.00091 J	0.00029 J
Lead, Dissolved	mg/l	0.005	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00023 J	0.0002 U	0.0002 U	0.0002 U
Magnesium	mg/l		3.5	4.5	4	3.8	12.6	2.8	2.5	3.1	2.7	12.8
Magnesium, Dissolved	mg/l		3.3	4.4	3.7	3.9	13.4	2.9	2.5	3.2	2.8	8.8
Manganese	mg/l		0.097	0.052	1.1	0.81	0.39	0.022	0.11	1.3	0.98	0.23
Manganese, Dissolved	mg/l		0.056	0.02	0.84	0.84	0.39	0.015	0.045	0.64	0.5	0.17
Mercury	mg/l	0.00005	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Mercury, Dissolved	mg/l	0.00005	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Nickel	mg/l	0.5	0.0005 U	0.00071 J	0.0046	0.0012 J	0.0005 U	0.0005 U	0.00073 J	0.0017 J	0.00063 J	0.0005 U
Nickel, Dissolved	mg/l	0.5	0.00089 J	0.0005 U	0.00092 J	0.0005 U	0.00086 J	0.00052 J	0.00079 J	0.0018 J	0.0005 U	0.00062 J
Potassium	mg/l		5.7	1.7	1.6	1.6	2	0.58 J	1.1	0.64 J	0.28 J	3.8

TABLE 10B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJSWQS mg/l	PMP-Pond	SR-3 Pond	SR-3 Seep 1	SR-3 Seep 2	SW-03	SW-11	SW-MRB-00	SW-MRB-01	SW-MRB-02	SW-MRB-03
Potassium, Dissolved	mg/l		5.2	1.6	1.3	1.5	2.1	0.58 J	1.1	0.64 J	0.27 J	1.3
Selenium	mg/l	0.17	0.0006 U	0.0006 U	0.00098 UB	0.0006 U	0.0006 U	0.0006 U	0.00062 UB	0.0006 U	0.00093 UB	0.00097 UB
Selenium, Dissolved	mg/l	0.17	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Silver	mg/l	0.17	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Silver, Dissolved	mg/l	0.17	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l		2.4	6.3	3.5	4.7	284 E	3.6	2.5	3.8	5.7	49.7
Sodium, Dissolved	mg/l		2.3	10.9	3.4	3.5	309	3.6	2.5	3.2	4.3	57.6
Thallium	mg/l	0.00024	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00079 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Thallium, Dissolved	mg/l	0.00024	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00068 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Vanadium	mg/l		0.0015 UB	0.00093 UB	0.0048 B	0.0040 B	0.0015 UB	0.0018 UB	0.0032 B	0.0027 B	0.0025 B	0.0015 UB
Vanadium, Dissolved	mg/l		0.0011 UB	0.0010 UB	0.00095 UB	0.00097 UB	0.00092 UB	0.0011 UB	0.0019 UB	0.0013 UB	0.0010 UB	0.0011 UB
Zinc	mg/l	7.4	0.01 U	0.01 U	0.039	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc, Dissolved	mg/l	7.4	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.018 J	0.01 U	0.01 U
Wet Chemistry												
Bicarbonate Alkalinity as	mg/l		74.9	79.4	82.5	91.4	47	30.6	22.4	37.1	30	38.7
Total Alkalinity as CaCO3	mg/l		74.9	79.4	82.5	91.4	47	30.6	22.4	37.1	30	38.7
Chloride	mg/l	250	1.61	4.2	1.58	1.54	520	1.08	1.62	1.16	3.27	126
Sulfate	mg/l		0.6 U	1.12	0.95 J	1.52	14.1	7	5.05	1.61	1.38	6.4

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

TABLE 10B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	SW-NOB-02	SW-PAB-00	SW-PAB-01	SW-PAB-01A	SW-PAB-02	SW-PAB-03	SW-PAB-04	SW-PAB-04_DUP-04-081915	SW-PMB-01	SW-PMB-02
Aluminum	mg/l	0.53	0.18	0.033	0.051	0.010 J	0.0096 U	0.2	0.2	0.071	0.013 J
Aluminum, Dissolved	mg/l	0.018 J	0.016 J	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U
Antimony	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Antimony, Dissolved	mg/l	0.00057 J	0.00050 J	0.0010 J	0.00084 J	0.0010 J	0.00098 J	0.0005 U	0.0005 U	0.00091 J	0.00060 J
Arsenic	mg/l	0.0015 UB	0.0005 U	0.00052 J	0.0013 J	0.00056 J	0.00054 J	0.0020 B	0.0019 UB	0.0010 J	0.0005 U
Arsenic, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U	0.00062 J	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00065 J	0.0005 U
Barium	mg/l	0.015	0.0098	0.044	0.065	0.073	0.062	0.041	0.039	0.055	0.015
Barium, Dissolved	mg/l	0.0064	0.0086	0.047	0.05	0.067	0.06	0.03	0.029	0.046	0.018
Beryllium	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Beryllium, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Cadmium	mg/l	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Cadmium, Dissolved	mg/l	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Calcium	mg/l	12	10.8	9.8	28.8	29.4	25.3	27.5	27.3	49.4	26.7
Calcium, Dissolved	mg/l	11.1	10.2	8.8	27	27.3	22.1	27.3	26.4	49.3	46.9
Chromium	mg/l	0.0012 J	0.00057 J	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0037	0.00053 J	0.0005 U	0.0005 U
Chromium, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.003	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Cobalt	mg/l	0.0005 U	0.0005 U	0.0005 U	0.00070 J	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.00055 J	0.0005 U
Cobalt, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Copper	mg/l	0.0018 J	0.0005 U	0.00056 J	0.0005 U	0.0005 U	0.0005 U	0.0012 J	0.0011 J	0.0005 U	0.0005 U
Copper, Dissolved	mg/l	0.0005 U	0.00074 J	0.00073 J	0.00053 J	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0013 J
Cyanide, Total	mg/l	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 UJ	0.007 U	0.007 U	0.007 U
Iron	mg/l	1.1	0.23	3.1	7.3	2.8	3.7	2	1.9	7.8	0.25
Iron, Dissolved	mg/l	0.16	0.035	0.34	0.81	0.082	0.073	0.042	0.037	0.56	0.023 J
Lead	mg/l	0.0012 J	0.00036 J	0.00061 J	0.00028 J	0.0002 U	0.0002 U	0.00049 J	0.00044 J	0.00049 J	0.0002 U
Lead, Dissolved	mg/l	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Magnesium	mg/l	5	3	2.2	5	5	4.1	5.7	5.6	9.1	8.7
Magnesium, Dissolved	mg/l	4.7	2.9	2.1	5.1	4.9	3.8	5.8	5.6	9.5	13.1
Manganese	mg/l	0.093	0.028	0.3	2.0 E	0.98	0.76	0.36	0.31	1.8	0.22
Manganese, Dissolved	mg/l	0.015	0.0026	0.3	1.5	0.6	0.69	0.023	0.034	1.1	0.16
Mercury	mg/l	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Mercury, Dissolved	mg/l	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Nickel	mg/l	0.0017 J	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0011 J	0.0010 J	0.00053 J	0.0005 U
Nickel, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U	0.00052 J	0.00053 J	0.0005 U	0.0005 U	0.0005 U	0.00065 J	0.0087
Potassium	mg/l	1.1	0.64 J	0.74 J	1.7	1.4	0.58 J	1.2	1.2	8.4	1.3

TABLE 10B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	SW-NOB-02	SW-PAB-00	SW-PAB-01	SW-PAB-01A	SW-PAB-02	SW-PAB-03	SW-PAB-04	SW-PAB-04_DUP-04-081915	SW-PMB-01	SW-PMB-02
Potassium, Dissolved	mg/l	0.94 J	0.59 J	0.68 J	1.7	1.4	0.52 J	1.1	1.1	8.3	3.8
Selenium	mg/l	0.0006 U	0.0006 U	0.00074 J	0.00063 J	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.00062 UB	0.0006 U
Selenium, Dissolved	mg/l	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Silver	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Silver, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l	3.3	4.5	3.5	4.5	5.4	7.1	20.9	12.1	61.7	56.3
Sodium, Dissolved	mg/l	12.6	4.2	3.2	3.6	5.3	6.4	6	5.7	64.3	51
Thallium	mg/l	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00033 J	0.0011 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Thallium, Dissolved	mg/l	0.0002 U	0.0002 U	0.0002 U	0.00020 J	0.00040 J	0.00088 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Vanadium	mg/l	0.0030 B	0.0020 B	0.0016 UB	0.0017 UB	0.0014 UB	0.0014 UB	0.0015 UB	0.0015 UB	0.0016 UB	0.0015 UB
Vanadium, Dissolved	mg/l	0.0020 B	0.0013 UB	0.00090 UB	0.00079 UB	0.00079 UB	0.00078 UB	0.0011 UB	0.0010 UB	0.00090 UB	0.0011 UB
Zinc	mg/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc, Dissolved	mg/l	0.01 U	0.01 U	0.01 U	0.01 U	0.023 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Wet Chemistry											
Bicarbonate Alkalinity as	mg/l	43.3	31.4	32.4	92.1	88.4	65.6	83	83	147	138
Total Alkalinity as CaCO3	mg/l	43.3	31.4	32.4	92.1	88.4	65.6	83	83	147	138
Chloride	mg/l	1.42	1.01	1.07	1.75	3.88	8.42	6.41	6.11	112	87
Sulfate	mg/l	6.2	8.15	4.78	1.74	0.78 J	5.04	3.95	3.98	1.76	7.16

See Table 12 for validation qualifiers

Result exceeds NJGWQS (NJAC 7:9

TABLE 10C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJSWQS ug/l	PMP-Pond	SR-3 Pond	SR-3 Seep 1	SR-3 Seep 2	SW-03	SW-11	SW-MRB-00
1,1,1-Trichloroethane	ug/l	120	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	ug/l	4.7	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2-Trichloroethane	ug/l	13	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	ug/l		0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1-Dichloroethene	ug/l	4.7	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane	ug/l		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene	ug/l	21	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	ug/l		0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
1,2-Dibromoethane	ug/l		0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichlorobenzene	ug/l	2000	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,2-Dichloroethane	ug/l	0.29	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	ug/l	0.5	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dichlorobenzene	ug/l	2200	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,4-Dichlorobenzene	ug/l	550	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,4-Dioxane	ug/l		0.27 U	1.6 J	2.0 J	1.3 J	0.27 U	0.27 U	0.27 U
2-Butanone (MEK)	ug/l		2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
2-Hexanone	ug/l		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methyl-2-pentanone (MIBK)	ug/l		0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Acetone	ug/l		9.0 UB	2.7 U	2.7 U	2.7 U	2.7 UJ	2.7 UJ	2.7 UJ
Benzene	ug/l	0.15	0.2 U	0.2 U	0.33 J	0.67 J	0.2 U	0.2 U	0.2 U
Bromoform	ug/l	4.3	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Bromomethane	ug/l	47	0.35 U	0.35 U	0.35 U	0.35 U	0.35 UJ	0.35 UJ	0.35 UJ
Carbon disulfide	ug/l		0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Carbon tetrachloride	ug/l	0.33	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorobenzene	ug/l	210	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorodibromomethane	ug/l	0.4	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chloroethane	ug/l		0.36 U	0.36 U	0.83 J	1.8	0.36 U	0.36 U	0.36 U
Chloroform	ug/l	68	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloromethane	ug/l		0.36 UJ	0.36 U	0.36 U	0.36 U	0.36 UJ	0.36 UJ	0.36 UJ
cis-1,2-Dichloroethene	ug/l		0.21 U	0.21 U	0.21 U	0.26 J	0.21 U	0.21 U	0.21 U
cis-1,3-Dichloropropene	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Cyclohexane	ug/l		0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U F	0.13 U
Dichlorobromomethane	ug/l	0.55	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dichlorodifluoromethane	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U

TABLE 10C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJSWQS ug/l	PMP-Pond	SR-3 Pond	SR-3 Seep 1	SR-3 Seep 2	SW-03	SW-11	SW-MRB-00
Ethylbenzene	ug/l	530	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Ethylene Dibromide	ug/l		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Freon-113	ug/l		0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l		0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methyl acetate	ug/l		0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ
Methyl tert-butyl ether	ug/l	70	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l		0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Methylene Chloride	ug/l	2.5	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Styrene	ug/l		0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	0.34	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	1300	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
trans-1,2-Dichloroethene	ug/l	590	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l		0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l		0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	0.082	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Xylenes, Total	ug/l		0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Tentatively Identified Compounds (TICs)									
None									

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

TABLE 10C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	SW-MRB-01	SW-MRB-02	SW-MRB-03	SW-NOB-02	SW-PAB-00	SW-PAB-01	SW-PAB-01A	SW-PAB-02
1,1,1-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	ug/l	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1-Dichloroethene	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	ug/l	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
1,2-Dibromoethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichlorobenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,2-Dichloroethane	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dichlorobenzene	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,4-Dichlorobenzene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,4-Dioxane	ug/l	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	2.1 J	0.79 J
2-Butanone (MEK)	ug/l	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
2-Hexanone	ug/l	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methyl-2-pentanone (MIBK)	ug/l	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Acetone	ug/l	2.7 UJ	2.7 UJ	2.7 UJ	2.7 U	2.7 UJ	2.7 UJ	2.7 UJ	2.7 UJ
Benzene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/l	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Bromomethane	ug/l	0.35 UJ	0.35 UJ	0.35 UJ	0.35 U	0.35 UJ	0.35 UJ	0.35 UJ	0.35 UJ
Carbon disulfide	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Carbon tetrachloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorobenzene	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorodibromomethane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chloroethane	ug/l	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroform	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloromethane	ug/l	0.36 UJ	0.36 UJ	0.36 UJ	0.36 U	0.36 UJ	0.36 UJ	0.36 UJ	0.36 UJ
cis-1,2-Dichloroethene	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Cyclohexane	ug/l	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorobromomethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dichlorodifluoromethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U

TABLE 10C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	SW-MRB-01	SW-MRB-02	SW-MRB-03	SW-NOB-02	SW-PAB-00	SW-PAB-01	SW-PAB-01A	SW-PAB-02
Ethylbenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Ethylene Dibromide	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Freon-113	ug/l	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methyl acetate	ug/l	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ
Methyl tert-butyl ether	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Methylene Chloride	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Styrene	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	0.17 U	0.33 J	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
trans-1,2-Dichloroethene	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Xylenes, Total	ug/l	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Tentatively Identified Compounds (TICs)									
None									

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

TABLE 10C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	SW-PAB-03	SW-PAB-04	SW-PAB-04_DUP-04-081915	SW-PMB-01	SW-PMB-02
1,1,1-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	ug/l	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1-Dichloroethene	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	ug/l	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
1,2-Dibromoethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichlorobenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,2-Dichloroethane	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dichlorobenzene	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,4-Dichlorobenzene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,4-Dioxane	ug/l	0.29 J	0.27 U	0.44 J	0.73 J	2.3 J
2-Butanone (MEK)	ug/l	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
2-Hexanone	ug/l	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methyl-2-pentanone (MIBK)	ug/l	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Acetone	ug/l	2.7 UJ	2.7 U	2.7 U	2.7 UJ	2.7 UJ
Benzene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/l	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Bromomethane	ug/l	0.35 UJ	0.35 U	0.35 U	0.35 UJ	0.35 UJ
Carbon disulfide	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Carbon tetrachloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorobenzene	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorodibromomethane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chloroethane	ug/l	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroform	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloromethane	ug/l	0.36 UJ	0.36 U	0.36 U	0.36 UJ	0.36 UJ
cis-1,2-Dichloroethene	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Cyclohexane	ug/l	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorobromomethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dichlorodifluoromethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U

TABLE 10C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	SW-PAB-03	SW-PAB-04	SW-PAB-04_DUP-04-081915	SW-PMB-01	SW-PMB-02
Ethylbenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Ethylene Dibromide	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Freon-113	ug/l	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methyl acetate	ug/l	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ
Methyl tert-butyl ether	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Methylene Chloride	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Styrene	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
trans-1,2-Dichloroethene	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Xylenes, Total	ug/l	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Tentatively Identified Compounds (TICs)						
None						

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

TABLE 10D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJSWQS ug/l	PMP-Pond	SR-3 Pond	SR-3 Seep 1	SR-3 Seep 2	SW-03	SW-11	SW-MRB-00
1,2,4,5-Tetrachlorobenzene	ug/l	0.97	1.8 U	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U
2,2'-oxybis[1-chloropropane]	ug/l	1400	2.4 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2,3,4,6-Tetrachlorophenol	ug/l		5.9 U	6.2 U	6.2 U	6.2 U	6.1 U	6.3 U	6.2 U
2,4,5-Trichlorophenol	ug/l	1800	6.1 U	6.3 U	6.3 U	6.3 U	6.2 U	6.5 U	6.3 U
2,4,6-Trichlorophenol	ug/l	0.58	5.9 U	6.1 U	6.1 U	6.1 U	6 U	6.2 U	6.1 U
2,4-Dichlorophenol	ug/l	77	4.8 U	5 U	5 U	5 U	4.9 U	5.1 U	5 U
2,4-Dimethylphenol	ug/l	380	3.6 U	3.8 U	3.8 U	3.8 U	3.7 U	3.8 U	3.8 U
2,4-Dinitrophenol	ug/l	69	5.1 U	5.3 U	5.3 U	5.3 U	5.2 U	5.4 U	5.3 U
2,4-Dinitrotoluene	ug/l	0.11	2.8 U	2.9 U	2.9 U	2.9 U	2.8 U	2.9 U	2.9 U
2,6-Dinitrotoluene	ug/l		2 U	2.1 U	2.1 U	2.1 U	2 U	2.1 U	2.1 U
2-Chloronaphthalene	ug/l	1000	2.4 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Chlorophenol	ug/l	81	4.1 U	4.3 U	4.3 U	4.3 U	4.2 U	4.4 U	4.3 U
2-Methylnaphthalene	ug/l		0.34 U	0.36 U	0.36 U	0.36 U	0.35 U	0.36 U	0.36 U
2-Methylphenol	ug/l		2 U	2.1 U	2.1 U	2.1 U	2 U	2.1 U	2.1 U
2-Nitroaniline	ug/l		3.2 U	3.3 U	3.3 U	3.3 U	3.2 U	3.4 U	3.3 U
2-Nitrophenol	ug/l		4.6 U	4.7 U	4.7 U	4.7 U	4.6 U	4.8 U	4.7 U
3 & 4 Methylphenol	ug/l		1.9 U	2 U	2 U	2 U	1.9 U	2 U	2 U
3,3'-Dichlorobenzidine	ug/l	0.021	2.8 U	2.9 U	2.9 U	2.9 U	2.9 U	3 U	2.9 U
3-Nitroaniline	ug/l		2.3 U	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
4,6-Dinitro-2-methylphenol	ug/l	13	8 U	8.3 U	8.3 U	8.3 U	8.2 U	8.5 U	8.3 U
4-Bromophenyl phenyl ether	ug/l		2.3 U	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
4-Chloro-3-methylphenol	ug/l		3.9 U	4 U	4 U	4 U	3.9 U	4.1 U	4 U
4-Chloroaniline	ug/l		3.6 U	3.8 U	3.8 U	3.8 U	3.7 U	3.8 U	3.8 U
4-Chlorophenyl phenyl ether	ug/l		2.4 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Nitroaniline	ug/l		2.7 U	2.8 U	2.8 U	2.8 U	2.7 U	2.8 U	2.8 U
4-Nitrophenol	ug/l		4.7 U	4.8 U	4.8 U	4.8 U	4.7 U	4.9 U	4.8 U
Acenaphthene	ug/l	670	0.28 U	0.29 U	0.29 U	0.29 U	0.28 U	0.29 U	0.29 U
Acenaphthylene	ug/l		0.3 U	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U
Acetophenone	ug/l		2 U	2.1 U	2.1 U	2.1 U	2 U	2.1 U	2.1 U
Anthracene	ug/l	8300	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U	0.35 U	0.34 U
Atrazine	ug/l		2.5 U	2.6 U	2.6 U	2.6 U	2.5 U	2.6 U	2.6 U
Benzaldehyde	ug/l		4.9 U	5.1 U	5.1 U	5.1 U	5 U	5.2 U	5.1 U
Benzo[a]anthracene	ug/l	0.038	0.025 U	0.022 U	0.023 U	0.024 U	0.025 U	0.025 R	0.025 U
Benzo[a]pyrene	ug/l	0.0038	0.025 U	0.022 U	0.023 U	0.024 U	0.025 U	0.025 R	0.025 U
Benzo[b]fluoranthene	ug/l	0.038	0.025 U	0.022 U	0.023 U	0.024 U	0.025 U	0.025 R	0.025 U
Benzo[g,h,i]perylene	ug/l		0.53 U	0.55 U	0.55 U	0.55 U	0.54 U	0.56 U	0.55 U
Benzo[k]fluoranthene	ug/l	0.38	0.32 U	0.33 U	0.33 U	0.33 U	0.32 U	0.34 U	0.33 U

TABLE 10D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJSWQS ug/l	PMP-Pond	SR-3 Pond	SR-3 Seep 1	SR-3 Seep 2	SW-03	SW-11	SW-MRB-00
Bis(2-chloroethoxy)methane	ug/l		2.7 U	2.8 U	2.8 U	2.8 U	2.7 U	2.8 U	2.8 U
Bis(2-chloroethyl)ether	ug/l	0.03	2.4 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bis(2-ethylhexyl) phthalate	ug/l	1.2	5.2 U	5.4 U	5.4 U	5.4 U	5.3 U	5.5 U	5.4 U
Butyl benzyl phthalate	ug/l	150	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.3 U	2.2 U
Caprolactam	ug/l		2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.2 U	2.1 U
Carbazole	ug/l		2.4 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chrysene	ug/l	3.8	0.28 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U	0.29 U
Dibenz(a,h)anthracene	ug/l	0.0038	0.39 U	0.4 U	0.4 U	0.4 U	0.39 U	0.41 U	0.4 U
Dibenzofuran	ug/l		2.5 U	2.6 U	2.6 U	2.6 U	2.5 U	2.6 U	2.6 U
Diethyl phthalate	ug/l	17000	2.6 U	2.7 U	2.7 U	2.7 U	2.6 U	2.7 U	2.7 U
Dimethyl phthalate	ug/l		2.7 U	2.8 U	2.8 U	2.8 U	2.7 U	2.8 U	2.8 U
Di-n-butyl phthalate	ug/l	2000	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.3 U	2.2 U
Di-n-octyl phthalate	ug/l		2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.3 U	2.2 U
Diphenyl	ug/l		1.9 U	2 U	2 U	2 U	1.9 U	2 U	2 U
Fluoranthene	ug/l	130	0.28 U	0.29 U	0.29 U	0.29 U	0.28 U	0.29 U	0.29 U
Fluorene	ug/l	1100	0.28 U	0.29 U	0.29 U	0.29 U	0.28 U	0.29 U	0.29 U
Hexachlorobenzene	ug/l	0.00028	0.014 U	0.012 U	0.013 U	0.013 U	0.014 U	0.014 R	0.014 U
Hexachlorobutadiene	ug/l	0.44	0.2 U	0.18 U	0.18 U	0.19 U	0.2 U	0.2 R	0.2 U
Hexachlorocyclopentadiene	ug/l	40	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Hexachloroethane	ug/l	1.4	1.6 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Indeno[1,2,3-cd]pyrene	ug/l	0.038	0.35 U	0.37 U	0.37 U	0.37 U	0.36 U	0.37 U	0.37 U
Isophorone	ug/l	35	2.7 U	2.8 U	2.8 U	2.8 U	2.7 U	2.8 U	2.8 U
Naphthalene	ug/l		0.32 U	0.33 U	0.33 U	0.33 U	0.32 U	0.34 U	0.33 U
Nitrobenzene	ug/l	17	2.3 U	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
N-Nitrosodimethylamine	ug/l	0.00069	0.2 U	0.18 U	0.18 U	0.19 U	0.2 U	0.2 R	0.2 U
N-Nitrosodi-n-propylamine	ug/l	0.005	2.9 U	3 U	3 U	3 U	3 U	3.1 U	3 U
N-Nitrosodiphenylamine	ug/l	3.3	3.1 U	3.2 U	3.2 U	3.2 U	3.2 U	3.3 U	3.2 U
Pentachlorophenol	ug/l	0.27	0.1 U	0.088 U	0.091 U	0.094 U	0.1 U	0.11 J	0.1 U
Phenanthrene	ug/l		0.36 U	0.38 U	0.38 U	0.38 U	0.37 U	0.38 U	0.38 U
Phenol	ug/l	10000	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U
Pyrene	ug/l	830	0.3 U	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U
Tentatively Identified Compounds (TICs)									
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	ug/l								
1,2-Benzenedicarboxylic acid, diisooctyl - TIC	ug/l								
2,6,10,14,18,22-Tetracosahexaene, 2,6,10 - TI	ug/l								
9-Octadecenoic acid, (E)- - TIC	ug/l						3.2 NJ		
Acetic acid, chloro-, octadecyl ester - TIC	ug/l								

TABLE 10D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJSWQS ug/l	PMP-Pond	SR-3 Pond	SR-3 Seep 1	SR-3 Seep 2	SW-03	SW-11	SW-MRB-00
Cholestan-3-ol, 4-methyl-, (3.beta.,4.al - TIC	ug/l		3.7 NJ						
Diethylene glycol dibenzoate - TIC	ug/l							8.1 NJ	
Diethyltoluamide - TIC	ug/l			3.3 NJ					17 NJ
Heptadecane - TIC	ug/l								
n-Hexadecanoic acid - TIC	ug/l				4.0 NJ	4.3 NJ			
Octadecanoic acid - TIC	ug/l			5.3 NJ	3.5 NJ	4.1 NJ			
Octaethylene glycol monododecyl ether - TIC	ug/l								
Oleic Acid - TIC	ug/l		5.0 NJ					6.9 NJ	
Oxirane, heptadecyl- - TIC	ug/l								
Tetradecanoic acid - TIC	ug/l		4.2 NJ						
Tridecanoic acid - TIC	ug/l			5.8 NJ					

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

TABLE 10D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	SW-MRB-01	SW-MRB-02	SW-MRB-03	SW-NOB-02	SW-PAB-00	SW-PAB-01	SW-PAB-01A	SW-PAB-02
1,2,4,5-Tetrachlorobenzene	ug/l	1.9 U	1.8 U	1.8 U	2.1 U	1.8 U	1.8 U	1.9 U	1.9 U
2,2'-oxybis[1-chloropropane]	ug/l	2.5 U	2.5 U	2.5 U	2.8 U	2.5 U	2.5 U	2.5 U	2.5 U
2,3,4,6-Tetrachlorophenol	ug/l	6.2 U	6.1 U	6.1 U	6.9 U	6.1 U	6.1 U	6.3 U	6.3 U
2,4,5-Trichlorophenol	ug/l	6.3 U	6.2 U	6.2 U	7.1 U	6.2 U	6.2 U	6.5 U	6.5 U
2,4,6-Trichlorophenol	ug/l	6.1 U	6 U	6 U	6.8 U	6 U	6 U	6.2 U	6.2 U
2,4-Dichlorophenol	ug/l	5 U	4.9 U	4.9 U	5.6 U	4.9 U	4.9 U	5.1 U	5.1 U
2,4-Dimethylphenol	ug/l	3.8 U	3.7 U	3.7 U	4.2 U	3.7 U	3.7 U	3.8 U	3.8 U
2,4-Dinitrophenol	ug/l	5.3 U	5.2 U	5.2 U	5.9 U	5.2 U	5.2 U	5.4 U	5.4 U
2,4-Dinitrotoluene	ug/l	2.9 U	2.8 U	2.8 U	3.2 U	2.8 U	2.8 U	2.9 U	2.9 U
2,6-Dinitrotoluene	ug/l	2.1 U	2 U	2 U	2.3 U	2 U	2 U	2.1 U	2.1 U
2-Chloronaphthalene	ug/l	2.5 U	2.5 U	2.5 U	2.8 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Chlorophenol	ug/l	4.3 U	4.2 U	4.2 U	4.8 U	4.2 U	4.2 U	4.4 U	4.4 U
2-Methylnaphthalene	ug/l	0.36 U	0.35 U	0.35 U	0.4 U	0.35 U	0.35 U	0.36 U	0.36 U
2-Methylphenol	ug/l	2.1 U	2 U	2 U	2.3 U	2 U	2 U	2.1 U	2.1 U
2-Nitroaniline	ug/l	3.3 U	3.2 U	3.2 U	3.7 U	3.2 U	3.2 U	3.4 U	3.4 U
2-Nitrophenol	ug/l	4.7 U	4.6 U	4.6 U	5.3 U	4.6 U	4.6 U	4.8 U	4.8 U
3 & 4 Methylphenol	ug/l	2 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U	2 U	2 U
3,3'-Dichlorobenzidine	ug/l	2.9 U	2.9 U	2.9 U	3.3 U	2.9 U	2.9 U	3 U	3 U
3-Nitroaniline	ug/l	2.4 U	2.4 U	2.4 U	2.7 U	2.4 U	2.4 U	2.5 U	2.5 U
4,6-Dinitro-2-methylphenol	ug/l	8.3 U	8.2 U	8.2 U	9.3 U	8.2 U	8.2 U	8.5 U	8.5 U
4-Bromophenyl phenyl ether	ug/l	2.4 U	2.4 U	2.4 U	2.7 U	2.4 U	2.4 U	2.5 U	2.5 U
4-Chloro-3-methylphenol	ug/l	4 U	3.9 U	3.9 U	4.5 U	3.9 U	3.9 U	4.1 U	4.1 U
4-Chloroaniline	ug/l	3.8 U	3.7 U	3.7 U	4.2 U	3.7 U	3.7 U	3.8 U	3.8 U
4-Chlorophenyl phenyl ether	ug/l	2.5 U	2.5 U	2.5 U	2.8 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Nitroaniline	ug/l	2.8 U	2.7 U	2.7 U	3.1 U	2.7 U	2.7 U	2.8 U	2.8 U
4-Nitrophenol	ug/l	4.8 U	4.7 U	4.7 U	5.4 U	4.7 U	4.7 U	4.9 U	4.9 U
Acenaphthene	ug/l	0.29 U	0.28 U	0.28 U	0.32 U	0.28 U	0.28 U	0.29 U	0.29 U
Acenaphthylene	ug/l	0.31 U	0.31 U	0.31 U	0.35 U	0.31 U	0.31 U	0.32 U	0.32 U
Acetophenone	ug/l	2.1 U	2 U	2 U	2.3 U	2 U	2 U	2.1 U	2.1 U
Anthracene	ug/l	0.34 U	0.33 U	0.33 U	0.38 U	0.33 U	0.33 U	0.35 U	0.35 U
Atrazine	ug/l	2.6 U	2.5 U	2.5 U	2.9 U	2.5 U	2.5 U	2.6 U	2.6 U
Benzaldehyde	ug/l	5.1 U	5 U	5 U	5.7 U	5 U	5 U	5.2 U	5.2 U
Benzo[a]anthracene	ug/l	0.025 U	0.025 U	0.025 U	0.024 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzo[a]pyrene	ug/l	0.025 U	0.025 U	0.025 U	0.024 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzo[b]fluoranthene	ug/l	0.025 U	0.025 U	0.025 U	0.024 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzo[g,h,i]perylene	ug/l	0.55 U	0.54 U	0.54 U	0.62 U	0.54 U	0.54 U	0.56 U	0.56 U
Benzo[k]fluoranthene	ug/l	0.33 U	0.32 U	0.32 U	0.37 U	0.32 U	0.32 U	0.34 U	0.34 U

TABLE 10D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	SW-MRB-01	SW-MRB-02	SW-MRB-03	SW-NOB-02	SW-PAB-00	SW-PAB-01	SW-PAB-01A	SW-PAB-02
Bis(2-chloroethoxy)methane	ug/l	2.8 U	2.7 U	2.7 U	3.1 U	2.7 U	2.7 U	2.8 U	2.8 U
Bis(2-chloroethyl)ether	ug/l	2.5 U	2.5 U	2.5 U	2.8 U	2.5 U	2.5 U	2.5 U	2.5 U
Bis(2-ethylhexyl) phthalate	ug/l	5.4 U	5.3 U	5.3 U	6 U	5.3 U	5.3 U	5.5 U	5.5 U
Butyl benzyl phthalate	ug/l	2.2 U	2.2 U	2.2 U	2.5 U	2.2 U	2.2 U	2.3 U	2.3 U
Caprolactam	ug/l	2.1 U	2.1 U	2.1 U	2.4 U	2.1 U	2.1 U	2.2 U	2.2 U
Carbazole	ug/l	2.5 U	2.5 U	2.5 U	2.8 U	2.5 U	2.5 U	2.5 U	2.5 U
Chrysene	ug/l	0.29 U	0.29 U	0.29 U	0.33 U	0.29 U	0.29 U	0.3 U	0.3 U
Dibenz(a,h)anthracene	ug/l	0.4 U	0.39 U	0.39 U	0.45 U	0.39 U	0.39 U	0.41 U	0.41 U
Dibenzofuran	ug/l	2.6 U	2.5 U	2.5 U	2.9 U	2.5 U	2.5 U	2.6 U	2.6 U
Diethyl phthalate	ug/l	2.7 U	2.6 U	2.6 U	3 U	2.6 U	2.6 U	2.7 U	2.7 U
Dimethyl phthalate	ug/l	2.8 U	2.7 U	2.7 U	3.1 U	2.7 U	2.7 U	2.8 U	2.8 U
Di-n-butyl phthalate	ug/l	2.2 U	2.2 U	2.2 U	2.5 U	2.2 U	2.2 U	2.3 U	2.3 U
Di-n-octyl phthalate	ug/l	2.2 U	2.2 U	2.2 U	2.5 U	2.2 U	2.2 U	2.3 U	2.3 U
Diphenyl	ug/l	2 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U	2 U	2 U
Fluoranthene	ug/l	0.29 U	0.28 U	0.28 U	0.32 U	0.28 U	0.28 U	0.29 U	0.29 U
Fluorene	ug/l	0.29 U	0.28 U	0.28 U	0.32 U	0.28 U	0.28 U	0.29 U	0.29 U
Hexachlorobenzene	ug/l	0.014 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U	0.014 U	0.014 U
Hexachlorobutadiene	ug/l	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U
Hexachlorocyclopentadiene	ug/l	1.6 U	1.6 U	1.6 U	1.8 U	1.6 U	1.6 U	1.6 U	1.6 U
Hexachloroethane	ug/l	1.7 U	1.7 U	1.7 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U
Indeno[1,2,3-cd]pyrene	ug/l	0.37 U	0.36 U	0.36 U	0.41 U	0.36 U	0.36 U	0.37 U	0.37 U
Isophorone	ug/l	2.8 U	2.7 U	2.7 U	3.1 U	2.7 U	2.7 U	2.8 U	2.8 U
Naphthalene	ug/l	0.33 U	0.32 U	0.32 U	0.37 U	0.32 U	0.32 U	0.34 U	0.34 U
Nitrobenzene	ug/l	2.4 U	2.4 U	2.4 U	2.7 U	2.4 U	2.4 U	2.5 U	2.5 U
N-Nitrosodimethylamine	ug/l	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U
N-Nitrosodi-n-propylamine	ug/l	3 U	3 U	3 U	3.4 U	3 U	3 U	3.1 U	3.1 U
N-Nitrosodiphenylamine	ug/l	3.2 U	3.2 U	3.2 U	3.6 U	3.2 U	3.2 U	3.3 U	3.3 U
Pentachlorophenol	ug/l	0.1 U	0.1 U	0.1 U	0.096 U	0.1 U	0.1 R	0.1 U	0.1 U
Phenanthrene	ug/l	0.38 U	0.37 U	0.37 U	0.42 U	0.37 U	0.37 U	0.38 U	0.38 U
Phenol	ug/l	1.3 U	1.3 U	1.3 U	1.5 U	1.3 U	1.3 U	1.4 U	1.4 U
Pyrene	ug/l	0.31 U	0.31 U	0.31 U	0.35 U	0.31 U	0.31 U	0.32 U	0.32 U
Tentatively Identified Compounds (TICs)									
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	ug/l								4.6 NJ
1,2-Benzenedicarboxylic acid, diisooctyl - TIC	ug/l							3.3 NJ	
2,6,10,14,18,22-Tetracosahexaene, 2,6,10 - TI	ug/l								3.2 NJ
9-Octadecenoic acid, (E)- - TIC	ug/l							6.5 NJ	
Acetic acid, chloro-, octadecyl ester - TIC	ug/l								4.1 NJ

TABLE 10D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	SW-MRB-01	SW-MRB-02	SW-MRB-03	SW-NOB-02	SW-PAB-00	SW-PAB-01	SW-PAB-01A	SW-PAB-02
Cholestan-3-ol, 4-methyl-, (3.beta.,4.al - TIC	ug/l								
Diethylene glycol dibenzoate - TIC	ug/l								
Diethyltoluamide - TIC	ug/l								
Heptadecane - TIC	ug/l						4.2 NJ		
n-Hexadecanoic acid - TIC	ug/l								
Octadecanoic acid - TIC	ug/l			3.8 NJ				3.2 NJ	
Octaethylene glycol monododecyl ether - TIC	ug/l							3.1 NJ	
Oleic Acid - TIC	ug/l		5.8 NJ			5.7 NJ			14 NJ
Oxirane, heptadecyl- - TIC	ug/l								3.2 NJ
Tetradecanoic acid - TIC	ug/l								
Tridecanoic acid - TIC	ug/l		4.8 NJ					4.9 NJ	
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

TABLE 10D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	SW-PAB-03	SW-PAB-04	SW-PAB-04_DUP-04-081915	SW-PMB-01	SW-PMB-02
1,2,4,5-Tetrachlorobenzene	ug/l	1.9 U	2.1 U	2.1 U	1.9 U	1.9 U
2,2'-oxybis[1-chloropropane]	ug/l	2.5 U	2.8 U	2.8 U	2.5 U	2.5 U
2,3,4,6-Tetrachlorophenol	ug/l	6.2 U	6.9 U	6.9 U	6.2 U	6.2 U
2,4,5-Trichlorophenol	ug/l	6.3 U	7.1 U	7.1 U	6.3 U	6.3 U
2,4,6-Trichlorophenol	ug/l	6.1 U	6.8 U	6.8 U	6.1 U	6.1 U
2,4-Dichlorophenol	ug/l	5 U	5.6 U	5.6 U	5 U	5 U
2,4-Dimethylphenol	ug/l	3.8 U	4.2 U	4.2 U	3.8 U	3.8 U
2,4-Dinitrophenol	ug/l	5.3 U	5.9 U	5.9 U	5.3 U	5.3 U
2,4-Dinitrotoluene	ug/l	2.9 U	3.2 U	3.2 U	2.9 U	2.9 U
2,6-Dinitrotoluene	ug/l	2.1 U	2.3 U	2.3 U	2.1 U	2.1 U
2-Chloronaphthalene	ug/l	2.5 U	2.8 U	2.8 U	2.5 U	2.5 U
2-Chlorophenol	ug/l	4.3 U	4.8 U	4.8 U	4.3 U	4.3 U
2-Methylnaphthalene	ug/l	0.36 U	0.4 U	0.4 U	0.36 U	0.36 U
2-Methylphenol	ug/l	2.1 U	2.3 U	2.3 U	2.1 U	2.1 U
2-Nitroaniline	ug/l	3.3 U	3.7 U	3.7 U	3.3 U	3.3 U
2-Nitrophenol	ug/l	4.7 U	5.3 U	5.3 U	4.7 U	4.7 U
3 & 4 Methylphenol	ug/l	2 U	2.2 U	2.2 U	2 U	2 U
3,3'-Dichlorobenzidine	ug/l	2.9 U	3.3 U	3.3 U	2.9 U	2.9 U
3-Nitroaniline	ug/l	2.4 U	2.7 U	2.7 U	2.4 U	2.4 U
4,6-Dinitro-2-methylphenol	ug/l	8.3 U	9.3 U	9.3 U	8.3 U	8.3 U
4-Bromophenyl phenyl ether	ug/l	2.4 U	2.7 U	2.7 U	2.4 U	2.4 U
4-Chloro-3-methylphenol	ug/l	4 U	4.5 U	4.5 U	4 U	4 U
4-Chloroaniline	ug/l	3.8 U	4.2 U	4.2 U	3.8 U	3.8 U
4-Chlorophenyl phenyl ether	ug/l	2.5 U	2.8 U	2.8 U	2.5 U	2.5 U
4-Nitroaniline	ug/l	2.8 U	3.1 U	3.1 U	2.8 U	2.8 U
4-Nitrophenol	ug/l	4.8 U	5.4 U	5.4 U	4.8 U	4.8 U
Acenaphthene	ug/l	0.29 U	0.32 U	0.32 U	0.29 U	0.29 U
Acenaphthylene	ug/l	0.31 U	0.35 U	0.35 U	0.31 U	0.31 U
Acetophenone	ug/l	2.1 U	2.3 U	2.3 U	2.1 U	2.1 U
Anthracene	ug/l	0.34 U	0.38 U	0.38 U	0.34 U	0.34 U
Atrazine	ug/l	2.6 U	2.9 U	2.9 U	2.6 U	2.6 U
Benzaldehyde	ug/l	5.1 U	5.7 U	5.7 U	5.1 U	5.1 U
Benzo[a]anthracene	ug/l	0.025 U	0.024 U	0.024 U	0.025 U	0.025 U
Benzo[a]pyrene	ug/l	0.025 U	0.024 U	0.024 U	0.025 U	0.025 U
Benzo[b]fluoranthene	ug/l	0.025 U	0.024 U	0.024 U	0.025 U	0.025 U
Benzo[g,h,i]perylene	ug/l	0.55 U	0.62 U	0.62 U	0.55 U	0.55 U
Benzo[k]fluoranthene	ug/l	0.33 U	0.37 U	0.37 U	0.33 U	0.33 U

TABLE 10D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	SW-PAB-03	SW-PAB-04	SW-PAB-04_DUP-04-081915	SW-PMB-01	SW-PMB-02
Bis(2-chloroethoxy)methane	ug/l	2.8 U	3.1 U	3.1 U	2.8 U	2.8 U
Bis(2-chloroethyl)ether	ug/l	2.5 U	2.8 U	2.8 U	2.5 U	2.5 U
Bis(2-ethylhexyl) phthalate	ug/l	5.4 U	6 U	6 U	5.4 U	5.4 U
Butyl benzyl phthalate	ug/l	2.2 U	2.5 U	2.5 U	2.2 U	2.2 U
Caprolactam	ug/l	2.1 U	2.4 U	2.4 U	2.1 U	2.1 U
Carbazole	ug/l	2.5 U	2.8 U	2.8 U	2.5 U	2.5 U
Chrysene	ug/l	0.29 U	0.33 U	0.33 U	0.29 U	0.29 U
Dibenz(a,h)anthracene	ug/l	0.4 U	0.45 U	0.45 U	0.4 U	0.4 U
Dibenzofuran	ug/l	2.6 U	2.9 U	2.9 U	2.6 U	2.6 U
Diethyl phthalate	ug/l	2.7 U	3 U	3 U	2.7 U	2.7 U
Dimethyl phthalate	ug/l	2.8 U	3.1 U	3.1 U	2.8 U	2.8 U
Di-n-butyl phthalate	ug/l	2.2 U	2.5 U	2.5 U	2.2 U	2.2 U
Di-n-octyl phthalate	ug/l	2.2 U	2.5 U	2.5 U	2.2 U	2.2 U
Diphenyl	ug/l	2 U	2.2 U	2.2 U	2 U	2 U
Fluoranthene	ug/l	0.29 U	0.32 U	0.32 U	0.29 U	0.29 U
Fluorene	ug/l	0.29 U	0.32 U	0.32 U	0.29 U	0.29 U
Hexachlorobenzene	ug/l	0.014 U	0.013 U	0.013 U	0.014 U	0.014 U
Hexachlorobutadiene	ug/l	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U
Hexachlorocyclopentadiene	ug/l	1.6 U	1.8 U	1.8 U	1.6 U	1.6 U
Hexachloroethane	ug/l	1.7 U	1.9 U	1.9 U	1.7 U	1.7 U
Indeno[1,2,3-cd]pyrene	ug/l	0.37 U	0.41 U	0.41 U	0.37 U	0.37 U
Isophorone	ug/l	2.8 U	3.1 U	3.1 U	2.8 U	2.8 U
Naphthalene	ug/l	0.33 U	0.37 U	0.37 U	0.33 U	0.33 U
Nitrobenzene	ug/l	2.4 U	2.7 U	2.7 U	2.4 U	2.4 U
N-Nitrosodimethylamine	ug/l	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U
N-Nitrosodi-n-propylamine	ug/l	3 U	3.4 U	3.4 U	3 U	3 U
N-Nitrosodiphenylamine	ug/l	3.2 U	3.6 U	3.6 U	3.2 U	3.2 U
Pentachlorophenol	ug/l	0.1 U	0.096 U	0.096 U	0.1 U	0.1 U
Phenanthrene	ug/l	0.38 U	0.42 U	0.42 U	0.38 U	0.38 U
Phenol	ug/l	1.3 U	1.5 U	1.5 U	1.3 U	1.3 U
Pyrene	ug/l	0.31 U	0.35 U	0.35 U	0.31 U	0.31 U
Tentatively Identified Compounds (TICs)						
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	ug/l					
1,2-Benzenedicarboxylic acid, diisooctyl - TIC	ug/l					
2,6,10,14,18,22-Tetracosahexaene, 2,6,10 - TI	ug/l					
9-Octadecenoic acid, (E)- - TIC	ug/l					
Acetic acid, chloro-, octadecyl ester - TIC	ug/l					

TABLE 10D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	SW-PAB-03	SW-PAB-04	SW-PAB-04_DUP-04-081915	SW-PMB-01	SW-PMB-02
Cholestan-3-ol, 4-methyl-, (3.beta.,4.al - TIC	ug/l					
Diethylene glycol dibenzoate - TIC	ug/l					
Diethyltoluamide - TIC	ug/l					
Heptadecane - TIC	ug/l					
n-Hexadecanoic acid - TIC	ug/l					
Octadecanoic acid - TIC	ug/l	3.8 NJ			3.0 NJ	
Octaethylene glycol monododecyl ether - TIC	ug/l					
Oleic Acid - TIC	ug/l					
Oxirane, heptadecyl- - TIC	ug/l					
Tetradecanoic acid - TIC	ug/l		3.4 NJ			
Tridecanoic acid - TIC	ug/l				4.8 NJ	
See Table 12 for validation qualifiers.						
Result exceeds NJGWQS (NJAC 7:9C March 2014)						

TABLE 10E
SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBs) IN SURFACE WATER
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	PMP-Pond	SR-3 Pond	SR-3 Seep 1	SR-3 Seep 2	SW-03	SW-11	SW-MRB-00
PCB-1016	ug/l		0.4 U	0.38 U	0.43 U	0.43 U	0.37 U	0.37 U	0.4 U
PCB-1221	ug/l		0.31 U	0.3 U	0.34 U	0.34 U	0.29 U	0.29 U	0.31 U
PCB-1232	ug/l		0.37 U	0.36 U	0.4 U	0.4 U	0.34 U	0.34 U	0.37 U
PCB-1242	ug/l		0.2 U	0.2 U	0.22 U	0.22 U	0.19 U	0.19 U	0.2 U
PCB-1248	ug/l		0.14 U	0.13 U	0.15 U	0.15 U	0.13 U	0.13 U	0.14 U
PCB-1254	ug/l		0.16 U	0.15 U	0.17 U	0.17 U	0.15 U	0.15 U	0.16 U
PCB-1260	ug/l		0.17 U	0.16 U	0.18 U	0.18 U	0.16 U	0.16 U	0.17 U
Polychlorinated biphenyls, Total	ug/l	0.000064	0.4 U	0.38 U	0.43 U	0.43 U	0.37 U	0.37 U	0.4 U

Parameter	Result Unit	SW-MRB-01	SW-MRB-02	SW-MRB-03	SW-NOB-02	SW-PAB-00	SW-PAB-01	SW-PAB-01A	SW-PAB-02
PCB-1016	ug/l	0.4 U	0.4 U	0.43 U	0.43 U	0.43 U	0.37 U	0.38 U	0.38 U
PCB-1221	ug/l	0.31 U	0.31 U	0.34 U	0.34 U	0.34 U	0.29 U	0.3 U	0.3 U
PCB-1232	ug/l	0.37 U	0.37 U	0.4 U	0.4 U	0.4 U	0.34 U	0.36 U	0.36 U
PCB-1242	ug/l	0.2 U	0.2 U	0.22 U	0.22 U	0.22 U	0.19 U	0.2 U	0.2 U
PCB-1248	ug/l	0.14 U	0.14 U	0.15 U	0.15 U	0.15 U	0.13 U	0.13 U	0.13 U
PCB-1254	ug/l	0.16 U	0.16 U	0.17 U	0.17 U	0.17 U	0.15 U	0.15 U	0.15 U
PCB-1260	ug/l	0.17 U	0.17 U	0.18 U	0.18 U	0.18 U	0.16 U	0.16 U	0.16 U
Polychlorinated biphenyls, Total	ug/l	0.4 U	0.4 U	0.43 U	0.43 U	0.43 U	0.37 U	0.38 U	0.38 U

Parameter	Result Unit	SW-PAB-03	SW-PAB-04	SW-PAB-04_DUP-04-081915	SW-PMB-01	SW-PMB-02			
PCB-1016	ug/l	0.4 U	0.43 U	0.43 U	0.37 U	0.38 U			
PCB-1221	ug/l	0.31 U	0.34 U	0.34 U	0.29 U	0.3 U			
PCB-1232	ug/l	0.37 U	0.4 U	0.4 U	0.34 U	0.36 U			
PCB-1242	ug/l	0.2 U	0.22 U	0.22 U	0.19 U	0.2 U			
PCB-1248	ug/l	0.14 U	0.15 U	0.15 U	0.13 U	0.13 U			
PCB-1254	ug/l	0.16 U	0.17 U	0.17 U	0.15 U	0.15 U			
PCB-1260	ug/l	0.17 U	0.18 U	0.18 U	0.16 U	0.16 U			
Polychlorinated biphenyls, Total	ug/l	0.4 U	0.43 U	0.43 U	0.37 U	0.38 U			

See Table 12 for validation qualifiers.

Result exceeds NJGWQS (NJAC 7:9C March 2014)

TABLE 11A
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN FIELD AND TRIP BLANKS
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	FB-01-082415	FB-02-081115	FB-03-081815	TB-01-080515TB	TB-02-080615	TB-02-080615TB	TB-03-080715TB	TB-05-081115TB
1,1,1-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	ug/l	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1-Dichloroethene	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	ug/l	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
1,2-Dibromoethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichlorobenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,2-Dichloroethane	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dichlorobenzene	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,4-Dichlorobenzene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,4-Dioxane	ug/l	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
2-Butanone (MEK)	ug/l	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
2-Hexanone	ug/l	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methyl-2-pentanone (MIBK)	ug/l	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Acetone	ug/l	35	2.7 U	13 UB	5.9 J	2.7 U	7.5 J	2.7 U	2.7 U
Benzene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/l	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Bromomethane	ug/l	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Carbon disulfide	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Carbon tetrachloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorobenzene	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorodibromomethane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chloroethane	ug/l	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroform	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloromethane	ug/l	0.36 UJ	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
cis-1,2-Dichloroethene	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Cyclohexane	ug/l	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorobromomethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dichlorodifluoromethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U

TABLE 11A
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN FIELD AND TRIP BLANKS
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	FB-01-082415	FB-02-081115	FB-03-081815	TB-01-080515TB	TB-02-080615	TB-02-080615TB	TB-03-080715TB	TB-05-081115TB
Ethylene Dibromide	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Freon-113	ug/l	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methyl acetate	ug/l	0.58 UJ	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Methyl tert-butyl ether	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Methylene Chloride	ug/l	0.53 UB	0.22 U	0.39 J	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Styrene	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
trans-1,2-Dichloroethene	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Xylenes, Total	ug/l	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Tentatively Identified Compounds (TICs)									
Naphthalene - TIC	ug/l								
Silanol, trimethyl- - TIC	ug/l			6.3 NJ					
Total Alkanes - TIC	ug/l				0.00 NJ				
See Table 12 for validation qualifiers.									

TABLE 11A
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN FIELD AND TRIP BLANKS
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	TB-06-081315TB	TB-07-081415TB	TB-08-081815TB	TB-10-082015TB	TB-11-082115TB	TB-12-082115TB	TB-13-082515TB	TB-14-082515TB
1,1,1-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2-Trichloroethane	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	ug/l	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1-Dichloroethene	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	ug/l	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
1,2-Dibromoethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichlorobenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,2-Dichloroethane	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dichlorobenzene	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,4-Dichlorobenzene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,4-Dioxane	ug/l	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
2-Butanone (MEK)	ug/l	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
2-Hexanone	ug/l	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methyl-2-pentanone (MIBK)	ug/l	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Acetone	ug/l	2.7 U	2.7 U	3.7 J	3.5 J	2.7 J	2.7 UJ	2.7 U	3.0 J
Benzene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/l	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Bromomethane	ug/l	0.35 U	0.35 UJ	0.35 U	0.35 U	0.35 U	0.35 UJ	0.35 U	0.35 U
Carbon disulfide	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Carbon tetrachloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorobenzene	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Chlorodibromomethane	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chloroethane	ug/l	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroform	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloromethane	ug/l	0.36 U	0.36 U	0.36 U	0.36 U	0.36 UJ	0.36 UJ	0.36 UJ	0.36 U
cis-1,2-Dichloroethene	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Cyclohexane	ug/l	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorobromomethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dichlorodifluoromethane	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U

TABLE 11A
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN FIELD AND TRIP BLANKS
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	TB-06-081315TB	TB-07-081415TB	TB-08-081815TB	TB-10-082015TB	TB-11-082115TB	TB-12-082115TB	TB-13-082515TB	TB-14-082515TB
Ethylene Dibromide	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Freon-113	ug/l	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methyl acetate	ug/l	0.58 U	0.58 U	0.58 U	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ
Methyl tert-butyl ether	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Methylene Chloride	ug/l	0.22 J	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Styrene	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
trans-1,2-Dichloroethene	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Xylenes, Total	ug/l	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Tentatively Identified Compounds (TICs)									
Naphthalene - TIC	ug/l			0.37 J					
Silanol, trimethyl- - TIC	ug/l								
Total Alkanes - TIC	ug/l								
See Table 12 for validation qualifiers.									

TABLE 11B
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN FIELD BLANKS
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	FB-01-082415	FB-02-081115	FB-03-081815
1,2,4,5-Tetrachlorobenzene	ug/l	1.8 U	0.53 U	2.1 U
2,2'-oxybis[1-chloropropane]	ug/l	2.4 UJ	0.71 U	2.8 U
2,3,4,6-Tetrachlorophenol	ug/l	5.9 U	1.7 U	6.9 U
2,4,5-Trichlorophenol	ug/l	6.1 U	1.8 U	7.1 U
2,4,6-Trichlorophenol	ug/l	5.9 U	1.7 U	6.8 U
2,4-Dichlorophenol	ug/l	4.8 U	1.4 U	5.6 U
2,4-Dimethylphenol	ug/l	3.6 U	1.1 U	4.2 U
2,4-Dinitrophenol	ug/l	5.1 U	1.5 U	5.9 U
2,4-Dinitrotoluene	ug/l	2.8 U	0.81 U	3.2 U
2,6-Dinitrotoluene	ug/l	2 U	0.58 U	2.3 U
2-Chloronaphthalene	ug/l	2.4 U	0.71 U	2.8 U
2-Chlorophenol	ug/l	4.1 U	1.2 U	4.8 U
2-Methylnaphthalene	ug/l	0.34 U	0.1 U	0.4 U
2-Methylphenol	ug/l	2 U	0.58 U	2.3 U
2-Nitroaniline	ug/l	3.2 U	0.93 U	3.7 U
2-Nitrophenol	ug/l	4.6 U	1.3 U	5.3 U
3 & 4 Methylphenol	ug/l	1.9 U	0.56 U	2.2 U
3,3'-Dichlorobenzidine	ug/l	2.8 U	0.83 U	3.3 U
3-Nitroaniline	ug/l	2.3 U	0.68 U	2.7 U
4,6-Dinitro-2-methylphenol	ug/l	8 U	2.3 U	9.3 U
4-Bromophenyl phenyl ether	ug/l	2.3 U	0.68 U	2.7 U
4-Chloro-3-methylphenol	ug/l	3.9 U	1.1 U	4.5 U
4-Chloroaniline	ug/l	3.6 U	1.1 U	4.2 U
4-Chlorophenyl phenyl ether	ug/l	2.4 U	0.71 U	2.8 U
4-Nitroaniline	ug/l	2.7 U	0.78 U	3.1 U
4-Nitrophenol	ug/l	4.7 U	1.4 U	5.4 U
Acenaphthene	ug/l	0.28 U	0.081 U	0.32 U
Acenaphthylene	ug/l	0.3 U	0.088 U	0.35 U
Acetophenone	ug/l	2 U	0.58 U	2.3 U
Anthracene	ug/l	0.33 U	0.096 U	0.38 U
Atrazine	ug/l	2.5 U	0.73 U	2.9 U
Benzaldehyde	ug/l	4.9 U	1.4 U	5.7 U
Benzo[a]anthracene	ug/l	0.023 U	0.025 U	0.025 U
Benzo[a]pyrene	ug/l	0.023 U	0.025 U	0.025 U
Benzo[b]fluoranthene	ug/l	0.023 U	0.025 U	0.025 U
Benzo[g,h,i]perylene	ug/l	0.53 U	0.16 U	0.62 U
Benzo[k]fluoranthene	ug/l	0.32 U	0.093 U	0.37 U
Bis(2-chloroethoxy)methane	ug/l	2.7 U	0.78 U	3.1 U
Bis(2-chloroethyl)ether	ug/l	2.4 U	0.71 U	2.8 U
Bis(2-ethylhexyl) phthalate	ug/l	5.2 U	1.7 J	6 U
Butyl benzyl phthalate	ug/l	2.2 U	0.63 U	2.5 U
Caprolactam	ug/l	2.1 U	0.61 U	2.4 U
Carbazole	ug/l	2.4 U	0.71 U	2.8 U
Chrysene	ug/l	0.28 U	0.083 U	0.33 U
Dibenz(a,h)anthracene	ug/l	0.39 U	0.11 U	0.45 U
Dibenzofuran	ug/l	2.5 U	0.73 U	2.9 U
Diethyl phthalate	ug/l	2.6 U	0.76 U	3 U
Dimethyl phthalate	ug/l	2.7 U	0.78 U	3.1 U
Di-n-butyl phthalate	ug/l	2.2 U	0.63 U	2.5 U
Di-n-octyl phthalate	ug/l	2.2 U	0.63 U	2.5 U

TABLE 11B
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN FIELD BLANKS
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	FB-01-082415	FB-02-081115	FB-03-081815
Diphenyl	ug/l	1.9 U	0.56 U	2.2 U
Fluoranthene	ug/l	0.28 U	0.081 U	0.32 U
Fluorene	ug/l	0.28 U	0.081 U	0.32 U
Hexachlorobenzene	ug/l	0.013 U	0.014 U	0.014 U
Hexachlorobutadiene	ug/l	0.19 U	0.2 U	0.2 U
Hexachlorocyclopentadiene	ug/l	1.6 U	0.45 U	1.8 U
Hexachloroethane	ug/l	1.6 U	0.48 U	1.9 U
Indeno[1,2,3-cd]pyrene	ug/l	0.35 U	0.1 U	0.41 U
Isophorone	ug/l	2.7 U	0.78 U	3.1 U
Naphthalene	ug/l	0.32 U	0.093 U	0.37 U
Nitrobenzene	ug/l	2.3 U	0.68 U	2.7 U
N-Nitrosodimethylamine	ug/l	0.19 U	0.2 U	0.2 U
N-Nitrosodi-n-propylamine	ug/l	2.9 U	0.86 U	3.4 U
N-Nitrosodiphenylamine	ug/l	3.1 U	0.91 U	3.6 U
Pentachlorophenol	ug/l	0.093 U	0.1 U	0.1 U
Phenanthrene	ug/l	0.36 U	0.11 U	0.42 U
Phenol	ug/l	1.3 U	0.38 U	1.5 U
Pyrene	ug/l	0.3 U	0.088 U	0.35 U
Tentatively Identified Compounds (TICs)				
Diethyltoluamide - TIC	ug/l	11 NJ		8.7 NJ
Dodecanoic acid - TIC	ug/l			11 NJ
Hexaethylene glycol monododecyl ether - TI	ug/l			3.2 NJ
Hexagol - TIC	ug/l			3.3 NJ
Octadecanoic acid - TIC	ug/l			6.2 NJ
Tetradecanoic acid - TIC	ug/l			4.7 NJ
Tetraethylene glycol monododecyl ether - TI	ug/l			3.6 NJ
Tridecanoic acid - TIC	ug/l			8.1 NJ
See Table 12 for validation qualifiers.				

TABLE 11C
SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBs) IN FIELD BLANKS
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	FB-01-082415	FB-02-081115	FB-03-081815
PCB-1016	ug/l	0.43 U	0.43 U	0.43 U
PCB-1221	ug/l	0.34 U	0.34 U	0.34 U
PCB-1232	ug/l	0.4 U	0.4 U	0.4 U
PCB-1242	ug/l	0.22 U	0.22 U	0.22 U
PCB-1248	ug/l	0.15 U	0.15 U	0.15 U
PCB-1254	ug/l	0.17 U	0.17 U	0.17 U
PCB-1260	ug/l	0.18 U	0.18 U	0.18 U
Polychlorinated biphenyls, Total	ug/l	0.43 U	0.43 U	0.43 U
See Table 12 for validation qualifiers.				

TABLE 11D
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN FIELD BLANKS
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	FB-01-082415	FB-02-081115	FB-03-081815
Aluminum	mg/l	0.0096 U	0.0096 U	0.0096 U
Aluminum, Dissolved	mg/l	0.0096 U	0.0096 U	0.0096 U
Antimony	mg/l	0.0005 U	0.0005 U	0.0005 U
Antimony, Dissolved	mg/l	0.0011 J	0.00097 J	0.00084 J
Arsenic	mg/l	0.0005 U	0.0005 U	0.00061 J
Arsenic, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U
Barium	mg/l	0.0005 U	0.0005 U	0.0005 U
Barium, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U
Beryllium	mg/l	0.0005 U	0.0005 U ^	0.0005 U
Beryllium, Dissolved	mg/l	0.0005 U	0.0005 U ^	0.0005 U
Cadmium	mg/l	0.0004 U	0.0004 U	0.0004 U
Cadmium, Dissolved	mg/l	0.0004 U	0.0004 U	0.0004 U
Calcium	mg/l	0.13 U	0.13 U	0.13 U
Calcium, Dissolved	mg/l	0.13 U	0.13 U	0.13 U
Chromium	mg/l	0.0005 U	0.0005 U	0.0005 U
Chromium, Dissolved	mg/l	0.0013 J	0.0005 U	0.0036
Cobalt	mg/l	0.0005 U	0.0005 U	0.0005 U
Cobalt, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U
Copper	mg/l	0.0005 U	0.0005 U	0.0005 U
Copper, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U
Cyanide, Total	mg/l	0.007 U	0.007 U	0.007 U
Iron	mg/l	0.01 U	0.01 U	0.01 U
Iron, Dissolved	mg/l	0.01 U	0.01 U	0.023 J
Lead	mg/l	0.0002 U	0.0002 U	0.0002 U
Lead, Dissolved	mg/l	0.0002 U	0.0002 U	0.0002 U
Magnesium	mg/l	0.13 U	0.13 U	0.13 U
Magnesium, Dissolved	mg/l	0.13 U	0.13 U	0.13 U
Manganese	mg/l	0.0005 U	0.0005 U	0.00089 UB
Manganese, Dissolved	mg/l	0.00059 UB	0.0005 U	0.0005 U
Mercury	mg/l	0.00015 U	0.00015 U	0.00015 U
Mercury, Dissolved	mg/l	0.00015 U	0.00015 U	0.00015 U
Nickel	mg/l	0.0005 U	0.0005 U	0.0005 U
Nickel, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U
Potassium	mg/l	0.13 U	0.13 U	0.13 U
Potassium, Dissolved	mg/l	0.13 U	0.13 U	0.13 U
Selenium	mg/l	0.0006 U	0.0006 U	0.0006 U
Selenium, Dissolved	mg/l	0.0006 U	0.0006 U	0.0006 U
Silver	mg/l	0.0005 U	0.0005 U	0.0005 U
Silver, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l	0.13 U	0.13 U	0.13 U
Sodium, Dissolved	mg/l	0.13 U	0.13 U	0.13 U
Thallium	mg/l	0.0002 U	0.0002 U	0.0002 U

TABLE 11D
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN FIELD BLANKS
AUGUST 2015
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	FB-01-082415	FB-02-081115	FB-03-081815
Thallium, Dissolved	mg/l	0.0002 U	0.0002 U	0.0002 U
Vanadium	mg/l	0.0013 UB	0.00093 UB	0.0022 B
Vanadium, Dissolved	mg/l	0.00095 UB	0.00086 UB	0.00090 UB
Zinc	mg/l	0.01 U	0.01 U	0.01 U
Zinc, Dissolved	mg/l	0.01 U	0.01 U	0.01 U
Wet Chemistry				
Bicarbonate Alkalinity as	mg/l	5 U	5 U	5 U
Total Alkalinity as CaCO3	mg/l	5 U	5 U	5 U
Chloride	mg/l	0.7 U	0.7 U	0.7 U
Sulfate	mg/l	0.6 U	0.6 U	0.6 U
See Table 12 for validation qualifiers.				

Table 12
CADENA Data Validation Qualifiers
August 2015

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

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

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

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062	Dissolved Arsenic (USEPA 7062
			NJGWQS	1	10	3	5	3	5	3	3
OB-05	OB-5 (10/15/04)	18-63'	10/15/2004	< 0.50		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-5 (10/2/2006)		10/2/2006	< 0.21		< 1.5	< 2.6	< 1.5	2.6 B	NA	NA
	OB-5(040407)		4/4/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-5(071009)		10/9/2007	< 0.19		< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-5(080428)		4/28/2008	< 0.26		< 1.7	1.5 B	< 1.7	1.4 B	NA	NA
	OB-5(080909)		9/9/2008	< 0.26		< 1.7	1.7 B	< 1.7	< 1.4	NA	NA
	OB-5(070109)		7/1/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-5(102109)		10/21/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-5(052610)		5/26/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-5(051711)		5/17/2011	< 0.26		< 0.92	1.2 B	< 0.92	< 0.94	NA	NA
	OB-5 (041912)		4/19/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-5 (041912) DUP		4/19/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-5(111113)		11/11/2013	< 0.28		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-5(090814)		9/8/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-5(081015)		8/10/2015	<0.2	<0.27	<0.5	<0.2	<0.5	<0.2	NA	NA
OB-06	OB-6 (11/2/04)	10-36'	11/2/2004	< 0.31		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-6 (123004)		12/30/2004	< 0.31		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-6		9/26/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-6(040607)		4/6/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-6(071009)		10/9/2007	< 0.19		< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-6(080501)		5/1/2008	< 0.26		< 1.7	< 1.4	< 1.7	1.9 B	NA	NA
	OB-6(080908)		9/8/2008	< 0.26		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-6(070209)		7/2/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-6 (111513)		11/15/2013	< 0.28 J		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-6(090814)		9/8/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-6(080615)		8/6/2015	<0.2	<0.27	<0.7 B	<0.2	<0.2 B	<0.2	NA	NA
OB-07	OB-7 (101304)	14-42'	10/13/2004	< 0.50		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	REP101304		10/13/2004	< 0.50		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-7		9/28/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB7(041107)		4/11/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-7(071009)		10/9/2007	< 0.19		< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-7(080430)		4/30/2008	< 0.26		< 1.7	2.9 B	2.0 B	1.9 B	NA	NA
	OB-7(080910)		9/10/2008	< 0.26		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-7(080910) DUP		9/10/2008	< 0.26		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-7(070109)		7/1/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-7(102109)		10/21/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-7(052510)		5/25/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-7(052510) DUP		5/25/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-7(051711)		5/17/2011	< 0.26		< 0.92	1.2 B	< 0.92	1.3 B	NA	NA
	OB-7 (041912)		4/19/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	DUP (111213)		11/12/2013	< 0.28		< 3.0 B	< 2.4	< 3.0 B	< 2.4	NA	NA
	OB-7 (111213)		11/12/2013	< 0.28		< 3.0 B	< 2.4	< 3.0 B	< 2.4	NA	NA
	OB-7 (090514)		9/5/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	DUP (090514)		9/5/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-7(082415)		8/24/2015	<0.2	<0.27	<0.57 J	<0.2	<0.5	<0.2	NA	NA
OB-10	OB-10 (10/14/04)	10-20'	10/14/2004	< 0.50		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-10 (10/2/2006)		10/2/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-10 (040207)		4/2/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-10 (071012)		10/12/2007	< 0.19		< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-10(080429)		4/29/2008	< 0.26		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-10(080910)		9/10/2008	< 0.26		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-10(070109)		7/1/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-10(102109)		10/21/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-10(102109) DUP		10/21/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-10(052610)		5/26/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-10(051711)		5/17/2011	< 0.26		< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-10(051711) DUP		5/17/2011	< 0.26		< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-10 (042012)		4/20/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062	Dissolved Arsenic (USEPA 7062
			NJGWQS	1	10	3	5	3	5	3	3
	OB-10 (111413)		11/14/2013	< 0.28 J		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-10(090914)		9/9/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	DUP(090914)		9/9/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-10(081415)		8/14/2015	<0.2	<0.27	<1.3 B	<0.2	<0.5	<0.2	NA	NA
OB-11	OB-11(10/14/04)	25-40'	10/14/2004	1.2		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-11R(061110)		6/11/2010	5.2		24.9	< 1.9	3.8	< 1.9	NA	NA
	OB-11R(051811)		5/18/2011	3.7		23.9	7.4	19.5	2.4 B	NA	NA
	OB-11R (042612)		4/26/2012	3.7		21.0	4.5	7.5 J	3.7 J	NA	NA
	OB-11R (110813)		11/8/2013	4.7		25.3	< 2.4	7.3	< 2.4	NA	NA
OB-11R	OB-11R (091114)	25-40'	9/11/2014	3.5		26.6	< 1.3	6.1	< 1.3	31.2	0.4 J
	DUP (091114)		9/11/2014	NA		NA	NA	NA	NA	31	< 0.2
	OB-11R (032015)		3/20/2015	3.2		NA	NA	NA	NA	NA	NA
	OB-11R (042115)		4/21/2015	2.9		NA	NA	NA	NA	NA	NA
	OB-11R (060115)		6/1/2015	2.9		NA	NA	NA	NA	NA	NA
	OB-11R (080615)		8/6/2015	2.9	4.3J	25 B	<0.2	<0.89 B	<0.2	NA	NA
	OB-12 (1101/04)		11/1/2004	< 1.0		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-12 (123004)		12/30/2004	< 0.31		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-12		9/28/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-12(040307)		4/3/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-12(071008)		10/8/2007	< 0.19		< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-12(080428)		4/28/2008	< 0.26		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-12(080909)		9/9/2008	< 0.26		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
OB-12	OB-12(063009)	9-40'	6/30/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-12(063009)DUP		6/30/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-12(102009)		10/20/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-12(052510)		5/25/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-12(051711)		5/17/2011	< 0.26		< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-12 (041912)		4/19/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-12 (111813)		11/18/2013	< 0.28		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-12(091514)		9/15/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-12(081015)		8/10/2015	<0.2	<0.27	<0.5	<0.2	<0.5	<0.2	NA	NA
	OB-13 (10/13/04)		10/13/2004	< 0.50		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-13		10/3/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-13(040307)		4/3/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-13(071008)		10/8/2007	< 0.19		< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-13(080428)		4/28/2008	< 0.26		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-13(080910)		9/10/2008	< 0.26		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
OB-13	OB-13(070109)	8-60'	7/1/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-13(102109)		10/21/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-13(052510)		5/25/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-13(051711)		5/17/2011	< 0.26		< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-13 (042012)		4/20/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-13 (111313)		11/13/2013	< 0.28		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-13(090814)		9/8/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-13(081015)		8/10/2015	<0.2	<0.27	<0.5	<0.2	<0.5	<0.2	NA	NA
	OB-14A (10/12/04)		10/12/2004	< 0.50		16.7	< 3.0	19.6	< 3.0	NA	NA
	OB-14A		9/27/2006	< 0.21		4.5 J	< 2.6	5.5 J	< 2.6	NA	NA
	OB-14A(040907)		4/9/2007	< 0.21		2.4	3.3	< 1.5	2.9 B	NA	NA
	OB-14A (071011)		10/11/2007	< 0.19		23.1	1.4 B	5.6	< 0.94	NA	NA
	DUP (071011)		10/11/2007	< 0.19		21.6	1 B	5	1.2 B	NA	NA
	OB-14A(080430)		4/30/2008	< 0.26		14.4	4.0	3.8	2.7 B	NA	NA
	OB-14A(080911)		9/11/2008	< 0.26		2.3 BJ	< 1.4	< 1.7	< 1.4	NA	NA
OB-14A	OB-14A(070609)	4-14'	7/6/2009	< 0.23		< 3.0	< 1.7	< 3.0	< 1.7	NA	NA
	OB-14A(102309)		10/23/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-14A(052810)		5/28/2010	< 0.23		1.8 B	< 1.9	< 1.4	< 1.9	NA	NA
	OB-14A(051911)		5/19/2011	< 0.26		< 0.92	3.8 J	< 0.92	< 3.0	NA	NA
	OB-14A(041812)		4/18/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-14A (110613)		11/6/2013	< 0.28		2.8 B	< 3.6 B	< 1.5	< 2.4	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062	Dissolved Arsenic (USEPA 7062
			NJGWQS	1	10	3	5	3	5	3	3
	OB-14A(090314)		9/3/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-14A(091114)		9/11/2014	< 0.21		4.8	< 1.3	3.5	< 1.3	5.2	0.5 J
	OB-14A(081315)		8/13/2015	<0.0.2	<0.27	9.2	0.86 J	1.1 J	<0.2	NA	NA
OB-14B	OB-14B (10/12/04)	25-35'	10/12/2004	< 0.50		< *5.0*	3.6	< *5.0*	< 3.0	NA	NA
	OB-14B		9/27/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-14B(040907)		4/9/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-14B (071011)		10/11/2007	< 0.19		2.8 B	1.1 B	1.6 B	< 0.94	NA	NA
	OB-14B(080430)		4/30/2008	< 0.26		2.1 B	3.2	< 1.7	2.1 B	NA	NA
	OB-14B(080911)		9/11/2008	< 0.26		2 BJ	< 1.4	2.6 BJ	< 1.4	NA	NA
	OB-14B(070609)		7/6/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-14B(102309)		10/23/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-14B(052810)		5/28/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-14B(051911)		5/19/2011	< 0.26		1.6 J	4.8 J	< 0.92	< 3.0	NA	NA
	OB-14B(041812)		4/18/2012	< 0.22		< 3	< 1.7	< 0.97	< 1.7	NA	NA
	OB-14B (110613)		11/6/2013	< 0.28		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-14B(091114)		9/11/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-14B(081315)		8/13/2015	<0.2	<0.27	2.5	<0.2	1.1 J	<0.2	NA	NA
OB-15B	OB-15B (10/12/04)	25-35'	10/12/2004	< 0.50		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-15B		10/3/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-15B(041207)		4/12/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-15B(071016)		10/16/2007	< 0.19		< 1.1	1.0 B	< 1.1	< 0.94	NA	NA
	OB-15B(080502)		5/2/2008	< 0.26		< 1.7	2.6 B	< 1.7	2.1 B	NA	NA
	OB-15B(080916)		9/16/2008	< 0.26		1.7 B	< 1.4	< 1.7	< 1.4	NA	NA
	OB-15B(070609)		7/6/2009	< 0.23		< 3.0	< 1.7	< 2.4	< 1.7	NA	NA
	OB-15B(102609)		10/26/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-15B(061110)		6/11/2010	< 0.23		3.2	2.0 B	< 1.4	< 1.9	NA	NA
	OB-15B(052311)		5/23/2011	< 0.22		1.2 B	2.0 B	< 0.92	< 0.94	NA	NA
	OB-15B(042412)		4/24/2012	< 0.22		1.5 B	< 1.7	1.4 B	< 1.7	NA	NA
	OB-15B (112013)		11/20/2013	< 0.28 J		2.9 B	< 2.4	< 1.5	< 2.4	NA	NA
	OB-15B (090514)		9/5/2014	< 0.21		< 2.6	1.4 B	< 2.6	< 1.3	NA	NA
	OB-15B (082415)		8/24/2015	<0.2	<0.27	1.4 J	<0.63 B	1.1 J	<0.2	NA	NA
OB-16	OB-16 (10/12/04)	5-15'	10/12/2004	< 0.50		7.6	< 3.0	6.3	< 3.0	NA	NA
	OB-16 (9/27/2006)		9/27/2006	< 0.21		6.2	< 2.6	4.2	< 2.6	NA	NA
	OB-16(041007)		4/10/2007	< 0.21		4.4	< 2.8	3.3	< 2.8	NA	NA
	OB-16(071010)		10/10/2007	< 0.19		8.8	< 0.94	3.6	< 0.94	NA	NA
	OB-16(080501)		5/1/2008	< 0.26		4.6	3.7	< 1.7	1.6 B	NA	NA
	OB-16(080911)		9/11/2008	< 0.26		7.4	< 1.4	2.6 BJ	< 1.4	NA	NA
	OB-16(070809)		7/8/2009	< 0.23		5.1	< 1.7	< 2.4	< 1.7	NA	NA
	OB-16(102309)		10/23/2009	NA		6.1	< 1.7	< 2.4	< 1.7	NA	NA
	OB-16		10/29/2009	< 0.23		NA	NA	NA	NA	NA	NA
	OB-16(052710)		5/27/2010	< 0.23		7.8	< 1.9	< 1.4	< 1.9	NA	NA
	OB-16(051911)		5/19/2011	< 0.26		9.1	< 3.0	6.0	< 3.0	NA	NA
	OB-16(041712)		4/17/2012	< 0.22		6.9 J	< 1.7	< 3	1.8 B	NA	NA
	OB-16 (110613)		11/6/2013	< 0.28		9.9	< 2.4	6.4	< 2.4	NA	NA
	OB-16 (091014)		9/10/2014	< 0.21		4.7	1.3 B	< 2.6	1.8 B	12.7	0.8 J
	OB-16 (081315)		8/13/2015	<0.2	<0.27	12	<0.2	2.3	<0.2	NA	NA
OB-17	OB-17(10/11/04)	3-13'	10/11/2004	< 0.50		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-17		9/27/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-17(041007)		4/10/2007	< 0.21		< 1.5	3.5	< 1.5	< 2.8	NA	NA
	OB-17(071010)		10/10/2007	< 0.19		2.5 B	1.7 B	< 1.1	< 0.94	NA	NA
	OB-17(080501)		5/1/2008	< 0.26		< 1.7	2.3 B	< 1.7	2.4 B	NA	NA
	OB-17(080911)		9/11/2008	< 0.26		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-17(070809)		7/8/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-17(102309)		10/23/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-17(052710)		5/27/2010	< 0.23		1.9 B	< 1.9	< 1.4	< 1.9	NA	NA
	OB-17(051911)		5/19/2011	< 0.26		< 0.92	< 3.0	< 0.92	< 3.0	NA	NA
	OB-17(041712)		4/17/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-17 (110613)		11/6/2013	< 0.28		1.9 B	< 2.4	< 1.5	< 2.4	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062	Dissolved Arsenic (USEPA 7062
			NJGWQS	1	10	3	5	3	5	3	3
	OB-17(090314)		9/3/2014	< 0.21		3.5	< 1.3	< 2.6	< 1.3	NA	NA
	OB-17(081315)		8/13/2015	<0.2	17	5.0 B	0.36 J	0.58 J	<0.2	NA	NA
OB-18	OB-18 (10/14/04)	10-20'	10/11/2004	< 0.50		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-18		9/26/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-18(041007)		4/10/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	DUP(041007) (OB-18)		4/10/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-18(071010)		10/10/2007	< 0.19		< 1.1	1.2 B	< 1.1	1.0 B	NA	NA
	OB-18(080501)		5/1/2008	< 0.26		< 1.7	< 1.4	< 1.7	1.8 B	NA	NA
	OB-18(080911)		9/11/2008	< 0.26		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-18(070809)		7/8/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-18(102309)		10/23/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-18(052710)		5/27/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-18(051911)		5/19/2011	< 0.26		< 0.92	< 0.94	< 0.92	< 1.1	NA	NA
	OB-18(041712)		4/17/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-18 (110613)		11/6/2013	< 0.28		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-18(09032014)		9/3/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-18(081315)		8/13/2015	<0.2	<0.27	1.4 J	<0.2	<0.5	<0.2	NA	NA
OB-19	MW-19	5-20'	10/3/2006	0.55 J		3.1	9.4	< 1.5	< 2.6	NA	NA
	OB-19(040907)		4/9/2007	0.59 J		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-19(071015)		10/15/2007	< 0.19		1.9 B	1.3 B	< 1.1	1.1 B	NA	NA
	DUP(071015)		10/15/2007	< 0.19		1.8 B	1.0 B	< 1.1	< 0.94	NA	NA
	OB-19(080429)		4/29/2008	0.56 J		< 1.7	1.4 B	< 1.7	< 1.4	NA	NA
	OB-19(080912)		9/12/2008	0.37 J		4 J	< 1.4	< 1.7	< 1.4	NA	NA
	OB-19(070709)		7/7/2009	1.2		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-19(102709)		10/27/2009	0.39 J		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-19(060110)		6/1/2010	0.29 J		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-19 (052011)		5/20/2011	0.90 J		< 0.92	3.5	< 0.92	1.0 B	NA	NA
	OB-19 (042512)		4/25/2012	0.32 J		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-19(111113)		11/11/2013	< 0.28		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-19 (090414)		9/4/2014	< 0.21		6.0	< 1.3	< 2.6	< 1.3	NA	NA
	OB-19(080515)		8/5/2015	<0.2	<0.27	<1.6 B	<0.44 J	<0.87 B	<0.2	NA	NA
OB-20A	MW-20	5-20'	10/4/2006	0.36 J		13.9	< 2.6	13.1	< 2.6	NA	NA
	OB-20A(040307)		4/3/2007	0.48 J		24.6	< 2.8	20.8	< 2.8	NA	NA
	OB-20A (071011)		10/11/2007	0.36 J		18.6	3	2.4 B	< 0.94	NA	NA
	OB-20A(080429)		4/29/2008	< 0.26		3.7	2.1 B	< 1.7	1.8 B	NA	NA
	OB-20A(080915)		9/15/2008	< 0.26		7.8	< 1.4	5.3	< 1.4	NA	NA
	OB-20A(070909)		7/9/2009	< 0.23		< 3.0	< 1.7	< 3.0	< 1.7	NA	NA
	OB-20A(102809)		10/28/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-20A(060210)		6/2/2010	< 0.23		7.9	1.9 B	< 1.4	< 1.9	NA	NA
	OB-20A(051811)		5/18/2011	< 0.22		< 0.92	5.6	< 0.92	1.0 J	NA	NA
	OB-20A(051811) DUP		5/18/2011	< 0.22		< 0.92	2.8 B	< 0.92	< 0.94	NA	NA
	OB-20A (042712)		4/27/2012	< 0.22		< 3.0	3.0 J	< 3.0	< 1.7	NA	NA
	OB-20A (110813)		11/8/2013	< 0.28		7.2	11.2 J	3.4	< 2.4	NA	NA
	DUP (110813)		11/8/2013	< 0.28		5.7	< 2.4 J	2.2 B	< 2.4	NA	NA
	OB-20A (090514)		9/5/2014	< 0.21		7.7	< 1.3	3.9	< 1.3	NA	NA
	OB-20A (031915)		3/19/2015	<0.21		NA	NA	NA	NA	NA	NA
	OB-20A (042115)		4/21/2015	<0.24		NA	NA	NA	NA	NA	NA
	OB-20A (060115)		6/1/2015	<0.20		NA	NA	NA	NA	NA	NA
	OB-20A (080515)		8/5/2015	<0.2	<0.27	7.1	<0.44 J	2.0 B	<0.2	NA	NA
OB-20B	MW-20 OB-34	24-34'	10/4/2006	2.0		1.5 B	3.1	< 1.5	< 2.6	NA	NA
	REP100406		10/4/2006	1.9		1.9 B	3.5	1.6 B	< 2.6	NA	NA
	OB20B(040507)		4/5/2007	1.4		1.5 B	< 2.8	< 1.5	2.9 B	NA	NA
	DUP(040507) (OB20B)(040507)		4/5/2007	1.5		< 1.5	< 2.8	< 1.5	3.6	NA	NA
	OB-20B (071011)		10/11/2007	1.5		1.2 B	1.1 B	< 1.1	1 B	NA	NA
	OB-20B(080429)		4/29/2008	1.4		< 1.7	3.8	< 1.7	2.4 B	NA	NA
	OB-20B(080915)		9/15/2008	0.90 J		3.8	< 1.4	< 1.7	< 1.4	NA	NA
	OB-20B(070909)		7/9/2009	0.83 J		< 3.0	< 1.7	< 2.4	< 1.7	NA	NA
	OB-20B(102809)		10/28/2009	0.77 J		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-20B(060210)		6/2/2010	1.1		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062	Dissolved Arsenic (USEPA 7062
			NJGWQS	1	10	3	5	3	5	3	3
OB-20B	OB-20B(051811)	24-34	5/18/2011	0.86 J		< 0.92	2.5 B	< 0.92	2.2 B	NA	NA
	OB-20B (042712)		4/27/2012	0.66 J		< 0.97	2.8 J	< 0.97	< 1.7	NA	NA
	OB-20B (110813)		11/8/2013	0.52 J		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-20B (090514)		9/5/2014	0.37 J		2.7 B	< 1.3	2.9 B	< 1.3	NA	NA
	OB-20B(100914)		10/9/2014	0.40 J		3.9	< 1.3	3.1	< 1.3	NA	NA
	OB-20B(100914)		10/9/2014	0.40 J		3.4	< 1.3	3.7	< 1.3	NA	NA
	OB-20B(031915		3/19/2015	0.46J		NA	NA	NA	NA	NA	NA
	OB-20B(042115)		4/21/2015	0.36J		NA	NA	NA	NA	NA	NA
	DUP(100914)		6/1/2015	0.27J		NA	NA	NA	NA	NA	NA
	OB-20B(080515)		8/5/2015	0.27 J	.95J	1.5 J	0.28 J	<1.1 B	<0.2	NA	NA
OB-21	MW-21	6-21'	10/5/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	REP100506		10/5/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-21(040907)		4/9/2007	< 0.21		10.4	29.2	< 1.5	< 2.8	NA	NA
	OB-21(071015)		10/15/2007	< 0.19		9.0 B	27.0	< 1.1	< 0.94	NA	NA
	OB-21(080429)		4/29/2008	< 0.26		< 1.7	2.1 B	< 1.7	< 1.4	NA	NA
	OB-21(080912)		9/12/2008	< 0.26		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-21(070709)		7/7/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-21(070709) DUP		7/7/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-21(102709)		10/27/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-21(060110)		6/1/2010	< 0.23		< 1.4	2.5 B	< 1.4	< 1.9	NA	NA
	OB-21(051811)		5/18/2011	< 0.22		< 0.92	2.8 B	< 0.92	< 0.94	NA	NA
	OB-21(042412)		4/24/2012	< 0.22		< 3.0	< 1.7	< 0.97	< 1.7	NA	NA
	OB-21 (110713)		11/7/2013	< 0.28 J		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-21 (090414)		9/4/2014	< 0.21		2.9 B	< 1.3	< 2.6	< 1.3	NA	NA
	OB-21 (090414)		9/4/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	DUP (090414)		4/20/2015	<0.24		NA	NA	NA	NA	NA	NA
	OB-21(080615)		8/16/2015	<0.2	<0.27	<1.4 B	1.8 J	<0.56 B	0.24 J	NA	NA
OB-22	OB-22	10-20'	11/30/2006	< 0.21		9.5	19.5	< 1.5	< 2.8	NA	NA
	OB-22(040407)		4/4/2007	< 0.21		5.2	9.1	< 1.5	< 2.8	NA	NA
	OB-22(080501)		5/1/2008	< 0.26		< 1.7	2.3 B	< 1.7	< 1.4	NA	NA
	OB-22(070809)		7/8/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-22(052810)		5/28/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-22(051911)		5/19/2011	< 0.26		< 0.92	< 0.94	< 0.92	< 1.1	NA	NA
	OB-22 (041912)		4/19/2012	< 0.22	NA	NA	NA	NA	NA	NA	NA
OB-23	OB-23	10-20'	11/28/2006	< 0.21		1.8 B	< 2.8 J	< 1.5	3.0 J	NA	NA
	OB-23(041107)		4/11/2007	< 0.21		< 1.5	24.1	< 1.5	< 2.8	NA	NA
	OB-23(080502)		5/2/2008	< 0.26		< 1.7	2.5 B	< 1.7	< 1.4	NA	NA
	OB-23(070809)		7/8/2009	< 0.23		< 2.4	7.5	< 2.4	< 1.7	NA	NA
	OB-23(052810)		5/28/2010	< 0.23		2.2 B	2.2 B	< 1.4	< 1.9	NA	NA
	OB-23(051911)		5/19/2011	< 0.26		< 0.92	5.5 J	< 0.92	< 3.0	NA	NA
OB-24	OB-24	5-15'	11/28/2006	< 0.21		< 1.5	2.8 B	< 1.5	< 2.8	NA	NA
	OB-24(041107)		4/11/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-24(071012)		10/12/2007	< 0.19		1.9 B	1.2 BJ	< 1.1	1.5 BJ	NA	NA
	OB-24(080430)		4/30/2008	< 0.26		1.7 B	1.5 B	< 1.7	< 1.4	NA	NA
	DUP-02(080430) (OB-24)		4/30/2008	< 0.26		< 1.7	1.6 B	1.7 B	< 1.4	NA	NA
	OB-24(080911)		9/11/2008	< 0.26		2.5 BJ	< 1.4	< 1.7	< 1.4	NA	NA
	OB-24(070809)		7/8/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-24(102609)		10/26/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-24(052810)		5/28/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-24(051911)		5/19/2011	< 0.26		< 0.92	4.2 J	< 0.92	< 3.0	NA	NA
	OB-24(041812)		4/18/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-24 (110613)		11/6/2013	< 0.28		< 1.5	< 3.0 B	< 1.5	< 2.4	NA	NA
	DUP (110613)		11/6/2013	< 0.28		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-24(090314)		9/3/2014	0.50		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-24(081315)		8/13/2015	<0.2	<0.27	1.8 J	0.24 J	0.64 J	<0.2	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062	Dissolved Arsenic (USEPA 7062
			NJGWQS	1	10	3	5	3	5	3	3
OB-25	OB-25	10-20'	11/30/2006	< 0.21		9.1 J	31.5 J	< 1.5	< 2.8	NA	NA
	REP-061130		11/30/2006	< 0.21		23.1 J	59.3 J	< 1.5	< 2.8	NA	NA
	OB-25(041207)		4/12/2007	< 0.21		7.1	594	< 1.5	< 2.8	NA	NA
	OB-25(071012)		10/12/2007	< 0.19		1.1 B	3.1	< 1.1	1.5 B	NA	NA
	OB-25(080429)		4/29/2008	< 0.26		2.1 B	13.8	< 1.7	< 1.4	NA	NA
	OB-25(080918)		9/18/2008	< 0.26		19.8	45.7	< 1.7	< 1.4	NA	NA
	OB-25(070609)		7/6/2009	< 0.23		8.4 J	19.9	< 2.4	< 1.7	NA	NA
	OB-25(102609)		10/26/2009	< 0.23		< 2.4	4.3	< 2.4	2.0 B	NA	NA
	OB-25(060110)		6/1/2010	< 0.23		1.7 B	53.6	< 1.4	< 1.9	NA	NA
	OB-25 (052011)		5/20/2011	< 0.26		< 0.92	4.2	< 0.92	< 0.94	NA	NA
	OB-25 (042012)		4/20/2012	< 0.22		2.1 J	17.2	< 0.97	< 1.7	NA	NA
	OB-25 (111213)		11/12/2013	< 0.28		9.6 J	40.3	NA	NA	NA	NA
	OB-25 (090914)		9/9/2014	< 0.21		< 2.6	3.8	< 2.6	2.2 B	NA	NA
	OB-25(081215)		8/25/2015	<0.2	<0.27	4.1 B	11	1.0 J	1.0 J	NA	NA
OB-26	OB-26(080509)	9-24'	5/9/2008	< 0.26		< 1.7 B	1.7 B	< 1.7 B	1.5 B	NA	NA
	OB-26(080916)		9/16/2008	< 0.26		2.7 B	< 1.4	< 1.7	< 1.4	NA	NA
	OB-26(070209)		7/2/2009	< 0.23		< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	OB-26(102209)		10/22/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-26(052610)		5/26/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-26(051711)		5/17/2011	< 0.26		< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-26 (042012)		4/20/2012	< 0.22		< 0.97	5.0 J	< 0.97	< 1.7	NA	NA
OB-27	OB-27(060110)	24.5-39.5'	6/1/2010	5.9		20.5	< 1.9	2.9 B	< 1.9	NA	NA
	OB-27(051811)		5/18/2011	6.5		NA	NA	NA	NA	NA	NA
	OB-27 (042512)		4/25/2012	5.5		21.5	< 1.7	18.0	< 1.7	NA	NA
	OB-27(111113)		11/11/2013	3.5		25.5	< 2.4	5.6	< 2.4	NA	NA
	DUP(111113)		11/11/2013	3.5		24.5	< 2.4	9.5	< 2.4	NA	NA
	OB-27 (091014)		9/10/2014	2.6		23.0	1.4 B	4.5	< 1.3	28	0.3 J
	OB-27 (032015)		3/20/2015	2.8		NA	NA	NA	NA	NA	NA
	OB-27 (042115)		4/21/2015	3.1		NA	NA	NA	NA	NA	NA
	OB-27 (060115)		6/1/2015	3.0		NA	NA	NA	NA	NA	NA
	OB-27(080615)		8/6/2015	3.0	6.2J	26 B	<0.2	<0.92 B	<0.2	NA	NA
OB-28	OB-28(052710)	3-18'	5/27/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-28(051911)		5/19/2011	< 0.26		9.8	24.4	< 0.92	4.0 J	NA	NA
	OB-28(041712)		4/17/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-28 (110613)		11/6/2013	< 0.28	.	< 1.5	< 4.2 B	< 1.5	< 2.4	NA	NA
	OB-28 (091014)		9/10/2014	< 0.21		< 2.6	1.7 B	< 2.6	1.5 B	NA	NA
	OB-28 (081315)		8/13/2015	<0.2	<0.27	1.5 J	1.0 J	0.82 J	<0.2	NA	NA
OB-29	OB-29(051112)	18-35'	5/11/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-29 (111413)		11/14/2013	< 0.28 J		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-29(090914)		9/9/2014	< 0.21		< 2.6	< 1.3	< 2.6	1.6 B	NA	NA
	OB-29(081215)		8/12/2015	<0.2	<0.27	<1.5 B	0.54 J	12	<0.2	NA	NA
OB-30A	OB-30A(051012)	8-18'	5/10/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
OB-30B	OB-30B(051112)	21-36'	5/11/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-30B (110713)		11/7/2013	< 0.28		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-30B(090414)		9/4/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-30B (080615)		8/6/2015	<0.2	<0.27	<0.89 B	<0.2	0.58 J	0.33 J	NA	NA
OB-30C	OB-30C (5/9/2012)	40-50'	5/9/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-30C (110713)		11/7/2013	< 0.28		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-30C(090414)		9/4/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-30C (080615)		8/6/2015	<0.0.2	<0.27	2.3 B	1.3 J	1.2 J	<0.2	NA	NA
	RW-1 (110104)	10-31'	11/1/2004	< 1.0		*< 5.0*	< 3.0	*< 5.0*	< 3.0	NA	NA
	RW-1(10-30)(4/1/05)		4/1/2005	< 0.31		*< 5.0*	< 3.0	*< 5.0*	< 3.0	NA	NA
	DUP040105		4/1/2005	< 0.31		*< 5.0*	< 3.0	*< 5.0*	< 3.0	NA	NA
	RW-1 (10-30)		10/9/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-1(10-31)(041807)		4/18/2007	< 0.21		< 1.5	3.8	< 1.5	< 2.8	NA	NA
	RW1(10-31)		10/9/2007	< 0.19		< 1.1	2.5 B	< 1.1	< 0.94	NA	NA
	RW1(11-31) (080506)		5/6/2008	< 0.26		< 1.7	3.4	< 1.7	1.5 B	NA	NA
	RW1(11-31)		9/18/2008	9.8		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA

Table 13A
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Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062	Dissolved Arsenic (USEPA 7062
			NJGWQS	1	10	3	5	3	5	3	3
RW-1	RW-1(10-30)		7/17/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(11-31)		10/20/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(58-78)(4/1/05)	58-79'	4/1/2005	< 0.31		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	RW-1 (58-78)		10/9/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-1(58-79)(041807)		4/18/2007	< 0.21		< 1.5	3.1	< 1.5	< 2.8	NA	NA
	RW1(58-79)		10/10/2007	< 0.19		< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	RW1(59-79) (080506)		5/6/2008	< 0.26		< 1.7	2.0 B	< 1.7	2.2 B	NA	NA
	RW1(59-79)		9/19/2008	8.6		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW1(59-79) DUP		9/19/2008	8.4		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-1(58-78)		7/17/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(59-79)		10/20/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(59-79) DUP		10/20/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
RW-1	RW-1(64-74) (6/30/2010)	64-74'	6/30/2010	< 0.23		4.5	< 1.9	2.2 B	< 1.9	NA	NA
	RW-1(64-74)(052611)		5/26/2011	< 0.22		4.0	< 0.94	3.2	< 3.0	NA	NA
	RW-1 (64-74)(041712)		4/17/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-1(97-117)(4/1/05)	97-118'	4/1/2005	< 0.31		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	RW-1 (97-117)		10/10/2006	< 0.21		< 1.5	< 2.6 J	< 1.5	4.5 J	NA	NA
	RW-1(97-118)(041807)		4/18/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW1(97-118)		10/10/2007	< 0.19		< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	RW-1(98-118) (5/7/2008)		5/7/2008	< 0.26		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	DUP-03(080507) (RW-1(98-118)		5/7/2008	< 0.26		< 1.7	1.9 B	< 1.7	2.6 B	NA	NA
	RW1(98-118)		9/19/2008	2.0		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-1(97-117)		7/17/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(98-118)		10/20/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(125.5-151) (3/30/05)	125-151'	3/30/2005	< 0.31		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	RW-1 (125-145)		10/10/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-1(125-146)(041807)		4/18/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW1(125-146)		10/10/2007	< 0.19		< 1.1	1.2 B	< 1.1	< 0.94	NA	NA
	RW-1(126-146) (5/7/08)		5/7/2008	< 0.26		< 1.7	2.1 B	< 1.7	2.2 B	NA	NA
	RW-1 (126-146)		9/22/2008	6.2		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-1(126-146) (7/17/2009)		7/17/2009	< 0.23		< 2.4	2.3 B	< 2.4	< 1.7	NA	NA
	RW-1(126-146)		10/20/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(131-141) (6/30/2010)	131-141'	6/30/2010	< 0.23		< 1.4	< 1.9	2.5 B	4.9	NA	NA
	RW-1(131-141)(052611)		5/26/2011	< 0.22		2.3 B	< 0.94	1.0 B	< 0.94	NA	NA
	RW-1 (131-141)(041712)		4/17/2012	< 0.22		3 J	< 1.7	< 3	< 1.7	NA	NA
	RW-1(131-141)		6/26/2012	NA		NA	NA	NA	NA	NA	NA
RW-2	RW-2 (19.0-48.5')	19-20'	10/26/2004	< 1.0		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	RW2-(19-49)		10/4/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-2(19-50)((041007)		4/10/2007	< 0.21		< 1.5	4.1	< 1.5	< 2.8	NA	NA
	RW2(19-50)		10/15/2007	< 0.19		< 1.1	1.2 B	< 1.1	< 0.94	NA	NA
	RW-2(20-50) (5/1/2008)		5/1/2008	< 0.26		< 1.7	4.3	< 1.7	2.9 B	NA	NA
	RW2(20-50)		9/16/2008	7.4		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-2(20-50) (7/10/2009)		7/10/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(20-50) DUP		7/10/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(20-50) (10/26/2009)		10/26/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(20-50) (10/26/2009) DUP		10/26/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2 (102.5-132.0')	102-133	10/26/2004	< 1.0		< *5.0*	7.3	< *5.0*	< 3.0	NA	NA
	RW2-(102-132)		10/4/2006	< 0.21		< 1.5	< 2.6	< 1.5	3.2	NA	NA
	RW-2(102-133)(041007)		4/10/2007	< 0.21		< 1.5	11.2	< 1.5	< 2.8	NA	NA
	RW2(102-133)		10/15/2007	< 0.19		< 1.1 J	< 0.94	1.1 BJ	< 0.94	NA	NA
	RW-2(103-133) (5/1/2008)		5/1/2008	< 0.26		< 1.7	5.4	< 1.7	2.1 B	NA	NA
	RW-2 (103-133)		9/17/2008	43.8		1.7 B	< 1.4	< 1.7	< 1.4	NA	NA
	RW-2 (102-133) (7/13/2009)		7/13/2009	< 0.23		< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-2(103-133)		10/27/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062	Dissolved Arsenic (USEPA 7062
			NJGWQS	1	10	3	5	3	5	3	3
RW-2	RW-2 (161.0'-190.5')	161-192'	10/27/2004	< 1.0		< *5.0*	64.6	< *5.0*	< 3.0	NA	NA
	RW-2(161-192)		4/16/2007	< 0.21		< 1.5	14.0	< 1.5	< 2.8	NA	NA
	RW2(161-192)		10/16/2007	< 0.19		< 1.1	1.4 B	< 1.1	< 0.94	NA	NA
	RW-2 (162-192)		7/13/2009	< 0.23		< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-2(162-192)		10/27/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2 (278'-307.5')	278-309'	10/27/2004	< 1.0		< *5.0*	7.6 J	< *5.0*	< 3.0	NA	NA
	REP102704		10/27/2004	< 1.0		< *5.0*	26.4 J	< *5.0*	3.2	NA	NA
	RW-2 (278-308)		10/6/2006	< 0.21		< 1.5	2.8 B	< 1.5	3.6	NA	NA
	RW-2(278-309)(041707)		4/17/2007	< 0.21		< 1.5	5.9	< 1.5	5.2	NA	NA
	RW2(278-309)		10/16/2007	< 0.19		< 1.1	3.2	< 1.1	< 0.94	NA	NA
	RW-2(279-309) (9/11/2008)		9/11/2008	< *6*		< 1.7	21.2	< 1.7	< 1.4	NA	NA
	RW-2 (279-309) (7/13/2009)		7/13/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(279-309)		10/27/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(279-289)		6/29/2010	< 0.23		3.0	< 1.9	3.7	< 1.9	NA	NA
	RW-2(279-289)(052411)		5/24/2011	< 0.22		< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	RW-2(279-289)(050812)		5/8/2012	< 0.22		< 0.97	< 1.7	1.3 J	< 1.7	NA	NA
	RW-2 (279-289)(111913)		11/19/2013	< 0.28		3.8	< 2.4	< 1.5	< 2.4	NA	NA
	RW-2(279-289)(092614)		9/26/2014	< 0.21		5.2	< 1.3	4.1	< 1.3	NA	NA
	RW-2(279-289)(082115)		8/21/2015	0.22 J	10	1.9 J	<0.2	2.1	<0.2	NA	NA
	RW-2 (441-470.5')	441-472'	10/28/2004	< 1.0		6.8	45.5	< *5.0*	9.3	NA	NA
	RW-2(441-472) (4/17/2007)		4/17/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW2(441-472)		10/17/2007	< 0.19		1.3 B	3.3	< 1.1	< 0.94	NA	NA
	RW-2 (442-472)		5/5/2008	< 0.26		< 1.7	22.2	< 1.7	3.9	NA	NA
	RW-2(441-472) (7/14/2009)		7/14/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(441-472)		10/28/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(452-462) (6/29/2010)		6/29/2010	< 0.23		NA	NA	NA	NA	NA	NA
	RW-2(452-462)		6/3/2011	0.24 J		< 3.0	< 3.0	2.2 J	< 3.0	NA	NA
	RW-2(452-462)(051012)		5/10/2012	0.23 J		2.5 B	< 1.7	< 3.0	< 1.7	NA	NA
	RW-2 (452-462)(111913)		11/19/2013	< 0.28		< 1.5	< 2.4	3.4	< 2.4	NA	NA
	RW-2(452-462)(092614)		9/26/2014	< 0.21		8.3	5.8	7.2	1.8 B	NA	NA
	RW-2(452-462)(082515)		8/25/2015	0.24 J	4.7J	5.4	0.2 J	5.6 J	<0.2	NA	NA
RW-3	RW-3 (65-100')	62-100'	10/29/2004	< 1.0		< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	RW-3(65-100)		9/29/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-3(62-98)(040507)		4/5/2007	< 0.21		< 1.5	3.0	< 1.5	< 2.8	NA	NA
	RW3(62-98)		10/12/2007	< 0.19		< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	RW-3(62-98) (4/30/2009)		4/30/2008	< 0.26		< 1.7	4.7	< 1.7	2.3 B	NA	NA
	RW3 (62-98)		9/8/2008	< 0.26		< 1.7	1.6 B	< 1.7	< 1.4	NA	NA
	RW-3(62-98) (7/6/2009)		7/6/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-3(62-98)		10/19/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-3(77-87)		6/28/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-3(052511)		5/25/2011	< 0.22		< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	RW-3 (77-87)(042612)		4/27/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-3(77-87)(111113)		11/11/2013	< 0.28		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-3(77-87)(091514)		9/15/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-3(77-87)(080615)		8/6/2015	<0.2	22	<0.88 B	0.26 J	<0.5	<0.2	NA	NA
RW-3D	RW-3D(140-165)	140-165'	6/9/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-3D(140-165) DUP		6/9/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-3D(140-165)(052411)		5/24/2011	< 0.22		< 0.92	1.5 B	< 0.92	< 0.94	NA	NA
	RW-3D(170-181)	170-181'	6/9/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-3D(170-181)(052411)		5/24/2011	< 0.22		< 0.92	1.9 B	< 0.92	< 0.94	NA	NA
	RW-3D(170-181)(052411) DUP		5/24/2011	< 0.22		1.6 B	1.5 B	< 0.92	< 0.94	NA	NA
RW-3DD	RW-3DD (175-180)(043012)	175-180'	4/30/2012	< 0.22		10.4	< 1.7	5.4	< 1.7	NA	NA
	RW-3DD (175-180)(111213)		11/12/2013	< 0.28		21.4	< 2.4	23.1	< 2.4	NA	NA
	RW-3DD (175-180)(091214)		9/12/2014	1.1		13.6 J	< 1.3	18.7 J	< 4.5 B	19.2	18
	RW-3DD (175-180)(081015)		8/10/2015	0.44 J	20	20	<0.2	19	<0.2	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062	Dissolved Arsenic (USEPA 7062
			NJGWQS	1	10	3	5	3	5	3	3
RW-3DS	RW-3DS (155-160)(043012)	155-160'	4/30/2012	< 0.22		7.4	< 1.7	3.3	< 1.7	NA	NA
	RW-3DS (155-160)(111213)		11/12/2013	< 0.28		< *5.9 B*	3.5	8.1 J	< 3.0 B	NA	NA
	RW-3DS (155-160)(091114)		9/11/2014	< 0.21		9.6	< 1.3	11.8	< 1.3	NA	NA
	RW-3DS (155-160)(082515)		8/25/2015	<0.2	38J	12	<0.2	14	< 1	NA	NA
RW-4	RW-4 (56.5-75.5')	56-77'	10/22/2004	< 0.31		< *5.0*	4.4	< *5.0*	< 3.0	NA	NA
	RW-4 (57-77)		10/2/2006	< 0.21		< 1.5	6.3	< 1.5	< 2.6	NA	NA
	RW-4(56-77)(040607)		4/6/2007	< 0.21		< 1.5	5.0	< 1.5	< 2.8	NA	NA
	RW4 (56-77)		10/11/2007	< 0.19		< 1.1	1.6 B	< 1.1	< 0.94	NA	NA
	RW-4(57-77) (4/28/2008)		4/28/2008	< 0.26		< 1.7	3.4	< 1.7	< 1.4	NA	NA
	RW4(57-77)		9/15/2008	14.3		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-4(56-77)		6/30/2009	< 0.23		< 2.4	3.4 J	< 2.4	< 1.7	NA	NA
	RW-4(57-77)		10/21/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-4 (108-127')	108-129'	10/22/2004	< 0.31		< *5.0*	18.6	< *5.0*	< 3.0	NA	NA
	RW-4 (108-128)		10/2/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-4(108-129)		4/9/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW4 (108-129)		10/11/2007	< 0.19		< 1.1	< 0.94	1.5 B	< 0.94	NA	NA
	RW-4(108-128) (4/29/2008)		4/29/2008	< 0.26		< 1.7	3.1	< 1.7	< 1.4	NA	NA
	RW4(108-128)		9/16/2008	3.3		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-4(108-128) (6/30/2009)		6/30/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-4(108-128)		10/22/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-4 (328-347')	328-349'	10/25/2004	< 0.31		< *5.0*	12.6	< *5.0*	< 3.0	NA	NA
	RW-4 (328-348)		10/3/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-4(328-349)(040907)		4/9/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW4 (328-349)		10/11/2007	< 0.19		< 1.1	2.1 B	< 1.1	< 0.94	NA	NA
	RW-4(328-348) (4/29/2008)		4/29/2008	< 0.26		< 1.7	2.5 B	< 1.7	1.8 B	NA	NA
	RW-4(328-348) (9/9/2008)		9/9/2008	0.30 J		< 1.7	1.8 B	2.7 B	< 1.4	NA	NA
	RW-4(328-349) (7/2/2009)		7/2/2009	< 0.23		< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-4(328-348)		10/23/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-4 (333-343)		6/7/2011	< 0.05		< 0.92	1.3 B	< 0.92	1.4 B	NA	NA
	RW-4 (333-343)(042512)		4/25/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-4(333-343)(111113)		11/11/2013	< 0.28		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-4(333-343) (090914)		9/9/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-4(333-343) (082415)		8/24/2015	<0.2	<0.27	0.9 J	<0.2	1.1 J	<0.2	NA	NA
RW-4	RW-4 (388-407')	388-409'	10/25/2004	< 0.31		< *5.0*	12.5	< *5.0*	3.0	NA	NA
	RW-4 (388-408)		10/3/2006	< 0.21		< 1.5	3.7	< 1.5	< 2.6	NA	NA
	RW-4(388-409)(040907)		4/9/2007	< 0.21		< 1.5	3.0 B	< 1.5	< 2.8	NA	NA
	RW4 (388-409)		10/11/2007	< 0.19		< 1.1	2.4 B	< 1.1	< 0.94	NA	NA
	RW-4(388-408) (4/29/2008)		4/29/2008	< 0.26		< 1.7	3.3	< 1.7	< 1.4	NA	NA
	RW-4(388-408) (9/10/2008)		9/10/2008	< 0.26		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-4(388-408) (7/2/2009)		7/2/2009	< 0.23		< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-4(388-408)		10/23/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-4(393-403) (6/8/2010)		6/8/2010	< 0.23		< 1.4	3.2	< 1.4	< 1.9	NA	NA
	RW-4(393-403) (6/8/2010) DUP		6/8/2010	< 0.23		< 1.4	2.7 B	< 1.4	< 1.9	NA	NA
	RW-4(393-403)		6/25/2010	< 0.23		1.8 B	< 1.9	5.4	< 1.9	NA	NA
	RW-4(393-403) DUP		6/25/2010	< 0.23		2.0 B	2.0 B	2.2 B	< 1.9	NA	NA
	RW-4(393-403)(052511)		5/25/2011	< 0.22		< 3.0	< 3.0	< 0.92	< 3.0	NA	NA
	RW-4 (393-403)(042612)		4/26/2012	< 0.22		< 3.0	< 1.7	< 0.97	< 1.7	NA	NA
	RW-4(393-403)(111113)		11/11/2013	< 0.28		3.6	44.6	< 1.5	< 2.4	NA	NA
	RW-4(393-403) (091014)		9/10/2014	< 0.21		9.6	13.8	< 2.6	2.6 B	NA	NA
	RW-4(393-403) (081015)		8/10/2015	< 0.2	<0.27	0.59 J	1.8 J	< 0.5	< 0.2	NA	NA
RW-4A	RW-4A(62-72) (6/7/2010)	62-72'	6/7/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-4A(62-72)		6/25/2010	< 0.23		1.5 B	< 1.9	< 1.4	< 1.9	NA	NA
	RW-4A(62-72)(052511)		5/25/2011	< 0.22		< 0.92	< 3.0	< 0.92	< 3.0	NA	NA
	RW-4A (62-72)(042512)		4/25/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-4A (62-72)(110813)		11/8/2013	< 0.28		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-4A(62-72)(091014)		9/10/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-4A(62-72)(081015)		8/10/2015	<0.2	<0.27	<0.5	0.44 J	<0.5	<0.2	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062	Dissolved Arsenic (USEPA 7062
			NJGWQS	1	10	3	5	3	5	3	3
RW-4A	RW-4A(113-123) (6/8/2010)	113-123'	6/8/2010	< 0.23		3.0	< 1.9	3.0	< 1.9	NA	NA
	RW-4A(113-123)		6/25/2010	< 0.23		2.6 B	< 1.9	2.0 B	< 1.9	NA	NA
	RW-4A(113-123)(052511)		5/25/2011	< 0.22		< 0.92	< 0.94	< 0.92	< 3.0	NA	NA
	RW-4A (113-123)(042512)		4/25/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-4A (113-123)(110813)		11/8/2013	< 0.28		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-4A(113-123)(091014)		9/10/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-4A(113-123)(082415)		8/24/2015	<0.2	<0.27	<0.5	<0.2	<0.5	<0.2	NA	NA
RW-5	RW-05(40-51)	40-51'	9/27/2006	1.0		1.7 B	68.4	< 1.5	< 2.6	NA	NA
	RW-5(40-51)(041307)		4/13/2007	1.9		< 1.5	44.3	< 0.94	< 2.8	NA	NA
	19BR-(65-75)	64-76'	5/16/2006	3.4		17.7	39.8	NA	NA	NA	NA
	RW-5(64-75)		9/29/2006	< 0.21		< 1.5	24.7	< 1.5	*< 7.8*	NA	NA
	RW-5(65-76)(041207)		4/12/2007	1.5		< 1.5	13.9	NA	NA	NA	NA
RW-5	19BR-(100-120)	99-120'	5/17/2006	3.0		*< 3.1*	3.3	*< 3.1*	< 2.6	NA	NA
	RW-5 (100-120)		10/5/2006	1.8		4.7	32.7	< 1.5	< 2.6	NA	NA
	RW-5(97-118)		4/12/2007	2.6		< 1.5	7.0	< 1.5	4.6	NA	NA
	RW-5(071015)		10/15/2007	1.8		< 1.1	1.5 B	< 1.1	1.0 B	NA	NA
	RW-5(080502)		5/2/2008	0.89 J		4.1	< 1.4	< 1.7	< 1.4	NA	NA
	RW-5 (080917)		9/17/2008	0.41 J		2.4 B	< 1.4	1.8 B	< 1.4	NA	NA
	RW-5 (080917) DUP		9/17/2008	0.42 J		2.3 B	< 1.4	< 1.7	< 1.4	NA	NA
	RW-5(070709)		7/7/2009	0.26 J		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-5(102709)		10/27/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-5(060210)		6/2/2010	NA		2.1 B	< 1.9	< 1.4	< 1.9	NA	NA
	RW-5(060410)		6/4/2010	0.24 J		NA	NA	NA	NA	NA	NA
	RW-5 (052011)		5/20/2011	< 0.26		1.1 B	< 0.94	< 0.92	1.3 B	NA	NA
	RW-5 (042612)		4/26/2012	< 0.22		< 3.0	1.9 J	< 3.0	< 1.7	NA	NA
	RW-5 (111413)		11/14/2013	< 0.28 J		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-5 (090414)		9/4/2014	< 0.21		9.4	4.7	7.9	1.4 B	NA	NA
	RW-5 (080515))		8/5/2015	<0.2	6.75	8.9 B	6.6	7.2 B	2.4	NA	NA
RW-5A	RW-5A(071015)	54-74'	10/15/2007	< 0.19		< 1.1	1.9 B	< 1.1	< 0.94	NA	NA
	RW-SA(080429)		4/29/2008	< 0.26		8.6	2.9 B	11.8	2.5 B	NA	NA
	RW-5A(080912)		9/12/2008	< 0.26		10	2.2 BJ	9.7	< 1.4	NA	NA
	RW-5A(070709)		7/7/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-5A(102809)		10/28/2009	< 0.23		3.5	< 1.7	< 2.4	< 1.7	NA	NA
	RW-5A(060110)		6/1/2010	< 0.23		2.6 B	< 1.9	2.7 B	< 1.9	NA	NA
	RW-5A(060110) DUP		6/1/2010	< 0.23		3.6	< 1.9	2.1 B	< 1.9	NA	NA
	RW-5A(051811)		5/18/2011	< 0.22		2.2 B	1.6 J	1.1 B	< 0.94	NA	NA
	RW-5A (042512)		4/25/2012	< 0.22		4.9 J	< 1.7	5.9 J	< 1.7	NA	NA
	RW-5A (110813)		11/8/2013	< 0.28		6.3	< 2.4	6.7	< 2.4	NA	NA
	RW-5A (091014)		9/10/2014	< 0.21		7.6	2.2 B	4.7	1.8 B	10.5	1 J
	RW-5A (082415)		8/24/2015	1.2	<0.27	3.3	< 0.2	1.1 J	<0.2	NA	NA
RW-6	20BR-(53-64)	53-64'	5/11/2006	2.9		*< 8.0*	3.2	*< 8.0*	< 3.0	NA	NA
	RW-06(53-64) (9/27/2006)		9/27/2006	3.0		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-06(53-64) (040207)		4/2/2007	2.6		1.7 B	4.5	< 1.5	2.9 B	NA	NA
	20BR-(70-81)	70-81'	5/11/2006	2.6		*< 8.0*	< 3.0	*< 8.0*	< 3.0	NA	NA
	RW-06(70-81)		9/27/2006	2.6		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-06(70-81)(040307)		4/3/2007	1.9		< 1.5	32.3 J	< 1.5	< 2.8	NA	NA
RW-6	RW-6 (100-120)	98-120'	10/10/2006	4.0		< 1.5	6.9 J	< 1.5	3.1 J	NA	NA
	RW-6(98-119)(040507)		4/6/2007	2.7		< 1.5	4.6	< 1.5	< 2.8	NA	NA
	RW-6 (071011)		10/11/2007	2.6		2.5 B	< 0.94	1.2 B	1.3 B	NA	NA
	RW-6(080502)		5/2/2008	1.7		3.8	1.5 B	2.5 B	< 1.4	NA	NA
	RW-6(080915)		9/15/2008	2.1		2.4 B	< 1.4	2.1 B	< 1.4	NA	NA
	RW-6(070909)		7/9/2009	2.0		4.1 J	< 1.7	< 2.4	< 1.7	NA	NA
	RW-6(102809)		10/28/2009	1.5		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-6(060210)		6/2/2010	NA		2.1 B	< 1.9	< 1.4	< 1.9	NA	NA
	RW-6(060410)		6/4/2010	1.5		NA	NA	NA	NA	NA	NA
	RW-6(051811)		5/18/2011	1.6		< 0.92	1.8 J	< 0.92	2.2 B	NA	NA
	RW-6 (042712)		4/27/2012	0.74 J		< 3.0	2.3 J	< 0.97	2.6 J	NA	NA
	RW-6 (111813)		11/18/2013	2.3		3.6	4.9	3.2	3.6	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062	Dissolved Arsenic (USEPA 7062
			NJGWQS	1	10	3	5	3	5	3	3
	RW-6 (090514)		9/5/2014	2.1		2.6 B	1.3 B	< 2.6	< 1.3	NA	NA
	RW-6(100914)		10/9/2014	15.7		3.6	< 1.3	3.3	< 1.3	NA	NA
	RW-6(031915)		3/19/2015	344		NA	NA	NA	NA	NA	NA
	RW-6(042215)		4/22/2015	2.2		NA	NA	NA	NA	NA	NA
	RW-6(060215)		6/2/2015	1.7		NA	NA	NA	NA	NA	NA
	RW-6(080515)		8/5/2015	1.2	1.5J	<1.5 B	0.25 J	<1.1 B	<0.2	NA	NA
RW-6A	RW-6A(071016)	58-78'	10/16/2007	5.5		< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	RW-6A(080502)		5/2/2008	1.7		2.9 B	2.8 B	< 1.7	1.8 B	NA	NA
	RW-6A(080915)		9/15/2008	2.9		1.9 B	< 1.4	1.7 B	< 1.4	NA	NA
	RW-6A(070909)		7/9/2009	1.3		< 3.0	< 1.7	< 2.4	< 1.7	NA	NA
	RW-6A (102809)		10/28/2009	2.4		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-6A(060210)		6/2/2010	1.9		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-6A(051811)		5/18/2011	1.5		< 0.92	3.1	< 0.92	2.4 B	NA	NA
	RW-6A (042712)		4/27/2012	2.0		< 0.97	1.8 J	< 0.97	< 1.7	NA	NA
	RW-6A (110813)		11/8/2013	15.0		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-6A (090514)		9/5/2014	88.1		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-6A (100914)		10/9/2014	6.8		< 5.1	< 1.3	< 5.1	< 1.3	NA	NA
	RW-6A (031915)		3/19/2015	13.3		NA	NA	NA	NA	NA	NA
	RW-6A (042115)		4/21/2015	8.7		NA	NA	NA	NA	NA	NA
	RW-6A (042115)		4/21/2015	9.1		NA	NA	NA	NA	NA	NA
	RW-6A (080415)		8/4/2015	7.7	2.7J	<1.4 B	<0.2	<1.1 B	<0.2	NA	NA
RW-7	21BR-(34-45)	34-45'	5/9/2006	< 0.21		< *8.0*	< 3.0 J	< *8.0*	< 3.0 J	NA	NA
	RW-07(34-45)		9/26/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-07(34-45)(040307)		4/3/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	21BR-(49-60)	40-62'	5/9/2006	< 0.21		< *8.0*	< 3.0 J	< *8.0*	< 3.0 J	NA	NA
	RW-07(49-60)		9/26/2006	< 0.21		< 1.5 J	< 2.6	1.8 BJ	< 2.6	NA	NA
	RW-7(49-60) (040407)		4/4/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW-7(071015)		10/15/2007	< 0.19		< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	RW-7 (080505)		5/5/2008	< 0.26		< 1.7	1.5 B	< 1.7	< 1.4	NA	NA
	RW-7(080912)		9/12/2008	< 0.26		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-7(070709)		7/7/2009	< 0.23		< 2.4	5.1	< 2.4	< 1.7	NA	NA
	RW-7(102709)		10/27/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-7(102709) DUP		10/27/2009	0.41 J		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-7(060110)		6/1/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-7(051811)		5/18/2011	< 0.22		< 0.92	5.9	< 0.92	1.1 J	NA	NA
	RW-7(042412)		4/24/2012	< 0.22		1.1 B	< 1.7	< 0.97	< 1.7	NA	NA
	RW-7 (110713)		11/7/2013	< 0.28		< 1.5	< 2.4	< 1.5	< 4.1 B	NA	NA
	RW-7 (090415)		9/4/2014	< 0.21		3.6	2.9 B	3.2	< 1.3	NA	NA
	RW-7 (042015)		4/20/2015	<0.24		NA	NA	NA	NA	NA	NA
	RW-7 (080615)		8/6/2015	<0.2	<0.27	<0.74 B	0.48 J	<0.72 B	<0.2	NA	NA
RW-7	21BR(80-100)	80-101'	5/10/2006	< 0.21		< *8.0*	< 3.0	< *8.0*	< 3.0	NA	NA
	RW-07(80-100)		9/28/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-07(80-101)(040307)		4/3/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	21BR(105-120)	103-120'	5/10/2006	< 0.21		< *8.0*	< 3.0	< *8.0*	3.8	NA	NA
	RW-07(105-120)		9/28/2006	< 0.21		< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-7(103-119) (040407)		4/4/2007	< 0.21		< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW8(42-62)	42-62'	7/31/2008	0.62 J		< 1.7	4.0	< 1.7	1.9 B	NA	NA
	RW-8(42-62)		11/4/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-8(42-62) (7/7/2009)		7/7/2009	< 0.23		< 2.4	17.9	< 2.4	5.0	NA	NA
	RW8(158-178)	158-178'	7/21/2008	< 0.26		4.3	< 1.4	3.2	< 1.4	NA	NA
	RW-8(158-178) (7/7/2009)		7/7/2009	< 0.23		< 2.4	6.0	< 2.4	< 1.7	NA	NA
	RW-8(158-178)		11/4/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-8(163-173) (6/23/2010)	163-173'	6/23/2010	< 0.23		NA	NA	NA	NA	NA	NA
	RW-8(163-173) (6/24/2010)		6/24/2010	NA		NA	NA	NA	NA	NA	NA
	RW-8(163-173) (6/25/2010)		6/25/2010	NA		2.1 B	< 1.9	NA	NA	NA	NA
	RW-8(163-173)(053111)		5/31/2011	< 0.22		2.1 B	< 0.94	1.1 B	< 0.94	NA	NA
	RW-8(163-173)(060111)		6/1/2011	NA		NA	NA	NA	NA	NA	NA
	RW-8(163-173)		5/3/2012	< 0.22		2.0 J	< 1.7	1.7 J	< 1.7	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Arsenic and Lead: 2004-2015
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Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062	Dissolved Arsenic (USEPA 7062
			NJGWQS	1	10	3	5	3	5	3	3
RW-8	RW-8 (163-173)(111513)		11/15/2013	0.34 J		2.4 B	< 3.0 B	2.0 B	< 2.4	NA	NA
	RW-8(163-173)(092214)		9/22/2014	< 0.21		4.2	< 1.3	5.2	< 1.3	NA	NA
	RW-8(163-173) (081815)		8/18/2015	0.27 J	<0.27	3.6 B	<0.2	2.1	<0.2	NA	NA
	RW8(199-219)		7/22/2008	0.38 J		2.5 B	< 1.4	3.6	< 1.4	NA	NA
	RW-8(199-219) (7/7/2009)	199-219'	7/7/2009	< 0.23		< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-8(199-219)		11/4/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-8(204-214) (6/23/2010)		6/23/2010	< 0.23		NA	NA	NA	NA	NA	NA
	RW-8(204-214) (6/25/2010)		6/25/2010	NA		5.9	< 1.9	NA	NA	NA	NA
	RW-8(204-214)(060111)		6/1/2011	< 0.22		5.1	< 0.94	NA	NA	NA	NA
	RW-8 (204-214)(111413)	204-214'	11/14/2013	2.2 J		1.5 B	< 2.4	NA	NA	NA	NA
	RW-8 (204-214)(111513)		11/15/2013	NA		NA	NA	< 1.5	< 2.4	NA	NA
	RW-8(204-214)(092314)		9/23/2014	0.58		3.6	2.3 B	4.2	< 1.3	NA	NA
	RW-8(204-214)(082015)		8/20/2015	0.57 J	<0.27	2	0.97 J	1.9 J	<0.2	NA	NA
RW-9	RW9(20-40)		7/30/2008	7.0		< 1.7	5.2	< 1.7	2.1 B	NA	NA
	RW-9(20-40) (7/15/2009)	20-40'	7/15/2009	< 0.23		< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-9(20-40)		11/2/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW9 (80-100)		7/23/2008	0.93 J		1.7 BJ	< 1.4	< 1.7	< 1.4	NA	NA
	DUP 1 (RW9 (80-100))	80-100'	7/23/2008	1.1		2.1 BJ	< 1.4	2.0 B	< 1.4	NA	NA
	RW-9(80-100) (7/15/2009)		7/15/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-9(80-100)		11/2/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW9 (134-154)		7/23/2008	0.70 J		< 1.7 J	< 1.4	2.1 BJ	< 1.4	NA	NA
	RW-9(134-154) (7/16/2009)		7/16/2009	< 0.23		< 2.4	6.4 J	< 2.4	< 1.7	NA	NA
	RW-9(134-154) DUP	134-154'	7/16/2009	< 0.23		< 2.4	6.4	< 2.4	< 1.7	NA	NA
	RW-9(134-154)		11/2/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-9 (139-149)(112013)		11/20/2013	< 0.28 J		NA	NA	NA	NA	NA	NA
	RW-9 (201-221)		7/24/2008	1.5		< 1.7	< 1.4	2.4 B	< 1.4	NA	NA
	RW-9(201-221) (7/16/2009)	201-221'	7/16/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-9(201-221)		11/3/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
RW-9	RW-9(206-216) (6/23/2010)		6/23/2010	< 0.23		NA	NA	NA	NA	NA	NA
	RW-9(206-216) (6/25/2010)		6/25/2010	NA		NA	NA	NA	NA	NA	NA
	RW-9(206-216)		6/28/2010	NA		4.6 J	< 1.9	NA	NA	NA	NA
	RW-9(206-216)(052611)		5/26/2011	< 0.22		NA	NA	NA	NA	NA	NA
	RW-9(206-216)(052711)	206-216'	5/27/2011	NA		3.3	< 0.94	NA	NA	NA	NA
	RW-9 (206-216)(042012)		4/20/2012	< 0.22		< 3.0	< 1.7	< 0.97	< 1.7	NA	NA
	RW-9 (206-216)(112013)		11/20/2013	< 0.28 J		2.2 B	3.0	< 1.5	< 2.4	NA	NA
	RW-9(206-216)(092514)		9/25/2014	< 0.21		7.3	< 1.3	8.9	< 1.3	NA	NA
	RW-9(206-216)(082115)		8/21/2015	<0.2	<0.27	3	<0.2	NA	NA	NA	NA
RW-9A	RW-9A(85-95)		6/23/2010	0.33 J		NA	NA	NA	NA	NA	NA
	RW-9A(85-95)(060111)		6/1/2011	< 0.22		NA	NA	NA	NA	NA	NA
	RW-9A (85-95)(042012)	85-95'	4/20/2012	0.23 J		2.8 J	< 1.7	2.5 J	< 1.7	NA	NA
	RW-9A (85-95)(112013)		11/20/2013	< 0.28 J		3.4	< 2.4	NA	NA	NA	NA
	RW-9A(85-95)(092314)		9/23/2014	< 0.21		5.3	< 1.3	3.7	< 1.3	NA	NA
	RW-9A(85-95)(082115)		8/21/2015	<0.2	<0.27	3.2	<0.2	3.4	<0.2	NA	NA
	RW-10(22-42) (7/8/2009)	22-42'	7/8/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-10(22-42)		10/29/2009	< 0.23		< 2.4	2.2 B	< 2.4	< 1.7	NA	NA
	RW-10 (46-66)		7/25/2008	< 0.26		2.2 B	2.8 B	2.2 B	1.6 B	NA	NA
	RW-10(46-66) (7/9/2009)	46-66'	7/9/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-10(46-66)		10/29/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW10(70-90)		7/28/2008	0.26 J		2.4 B	7.3	< 1.7	1.6 B	NA	NA
	RW-10(70-90) (7/9/2009)	70-90'	7/9/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-10(70-90)		10/29/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW10 (115-135)		7/28/2008	< 0.26		2.0 B	6.0	< 1.7	1.4 B	NA	NA
	RW-10(115-135) (7/9/2009)		7/9/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-10(115-135)		10/29/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-10(120-130) (6/23/2010)		6/23/2010	< 0.23		NA	NA	NA	NA	NA	NA
	RW-10(120-130) (6/24/2010)		6/24/2010	NA		NA	NA	NA	NA	NA	NA
	RW-10(120-130) (6/25/2010)	115-135'	6/25/2010	NA		4.3	< 1.9	NA	NA	NA	NA
	RW-10(120-130)(053111)		5/31/2011	< 0.22		4.8	2.5 B	NA	NA	NA	NA

Table 13A
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Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062	Dissolved Arsenic (USEPA 7062
			NJGWQS	1	10	3	5	3	5	3	3
RW-10	RW-10(120-130)(060111)		6/1/2011	NA		NA	NA	4.1	2.3 B	NA	NA
	RW-10 (120-130)(041912)		4/19/2012	< 0.22		3.7 J	< 1.7	3.6 J	< 1.7	NA	NA
	RW-10 (120-130)(111513)		11/15/2013	< 0.28 J		9.5	5.0 J	8.0	5.1 J	NA	NA
	RW-10(120-130)(091714)		9/17/2014	< 0.21		8.2	6.3	9.1	< 3.0 B	8.6	8.5
	RW-10(120-130)(081915)		8/19/2015	<0.2	<0.27	7.5 B	<0.2	6.7	<0.2	NA	NA
	RW-10 (180-200)	180-200'	7/29/2008	0.57 J		< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-10(180-200) (7/9/2009)		7/9/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-10(180-200)		10/30/2009	< 0.23		< 2.4	6.0	NA	NA	NA	NA
	RW-10(180-200) DUP		10/30/2009	< 0.23		< 2.4	7.0	< 2.4	< 1.7	NA	NA
	RW-10(180-200)MS		10/30/2009	NA		NA	NA	< 2.4	< 1.7	NA	NA
	RW-10(185-195) (6/9/2010)		6/9/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-10(185-195) (6/23/2010)		6/23/2010	< 0.23		NA	NA	NA	NA	NA	NA
	RW-10(185-195) (6/25/2010)		6/25/2010	NA		2.2 B	< 1.9	NA	NA	NA	NA
	RW-10(185-195) (6/28/2010)		6/28/2010	NA		NA	NA	< 1.4	< 1.9	NA	NA
	RW-10(185-195)(053111)		5/31/2011	< 0.22		< 0.92	1.0 B	< 0.92	1.4 B	NA	NA
	RW-10(185-195)(041812)		4/18/2012	< 0.22		3.6 J	< 1.7	3.6 J	< 1.7	NA	NA
	RW-10 (185-195)(111313)		11/13/2013	< 0.28		7.9	< 4.2 B	6.6	< 3.2 B	NA	NA
	RW-10(185-195)(091714)		9/17/2014	< 0.21		7.9	3.5	9.7	2.5 B	NA	NA
	RW-10(185-195)(081815)		8/18/2015	<0.2	<0.27	6.7 B	<0.2	5.2	<0.2	NA	NA
RW-10A	RW-10A(51-61)(060211)	51-61'	6/2/2011	< 0.22		< 0.92	< 3.0	< 0.92	< 0.94	NA	NA
	RW-10A(51-61)(041812)		4/18/2012	< 0.22		< 3	< 1.7	< 3	< 1.7	NA	NA
	RW-10A (51-61)(111513)		11/15/2013	< 0.28 J		2.1 B	< 3.1 B	NA	NA	NA	NA
	RW-10A(51-61)(091814)		9/18/2014	< 0.21		< 2.6	< 3.0 B	< 2.6	< 3.0 B	NA	NA
	RW-10A(51-61)(082015)		8/20/2015	<0.2	<0.27	2.1	< 0.2	1.5 J	<0.2	NA	NA
	RW-10A(75-85) (6/9/2010)	75-85'	6/9/2010	< 0.23		< 1.4	< 1.9	<0.0002	< 1.9	NA	NA
	RW-10A(75-85) (6/23/2010)		6/23/2010	< 0.23		NA	NA	NA	NA	NA	NA
	RW-10A(75-85)		6/28/2010	NA		< 1.4	4.0 J	< 1.4	< 1.9	NA	NA
	RW-10A(75-85)(060211)		6/2/2011	< 0.22		< 0.92	< 3.0	< 0.92	< 0.94	NA	NA
	RW-10A(75-85)(041812)		4/18/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-10A(75-85)(041812) DUP		4/18/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-10A(75-85)(050712)		5/7/2012	NA		NA	NA	NA	NA	NA	NA
	RW-10A (75-85)(111413)		11/14/2013	< 0.28 J		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-10A(75-85)(091814)		9/18/2014	< 0.21		< 2.6	3.0	< 2.6	< 3.0 B	NA	NA
	RW-10A(75-85)(081815)		8/18/2015	<0.2	<0.27	2 B	0.82 J	<0.5	0.26 J	NA	NA
RW-11	RW-11(100-125) (6/7/2010)	100-125'	6/7/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-11(100-125)		5/26/2011	< 0.22		< 0.92	< 3.0	< 0.92	< 3.0	NA	NA
	RW-11(142-167) (6/7/2010)	142-167'	6/7/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-11(142-167)		5/26/2011	< 0.22		< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	RW-11(221-246) (6/8/2010)	221-246'	6/8/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-11(221-246)		5/25/2011	< 0.22		< 0.92	< 3.0	< 0.92	< 0.94	NA	NA
	RW-11(252-272) (6/8/2010)	252-272'	6/8/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-11(252-272)		5/25/2011	< 0.22		< 0.92	< 3.0	< 0.92	1.7 J	NA	NA
RW-11D	RW-11D (262-267) (050112)	262-267'	5/1/2012	< 0.22		NA	NA	NA	NA	NA	NA
	RW-11D (262-267)(111413)		11/14/2013	0.56 J		< 1.5	3.3	< 1.5	< 2.4	NA	NA
	RW-11D(262-267)(091514)		9/15/2014	2.0		< 3.0 B	< 1.3	< 2.6	< 1.3	NA	NA
	RW-11D(262-267)(082615)		8/26/2015	1.6	26J	2.4	0.69 J	< 2.5	< 1	NA	NA
RW-11S	RW-11S (236-241) (050112)	236-241'	5/1/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-11S (236-241)(111313)		11/13/2013	< 0.28		< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-11S (236-241)(091214)		9/12/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	DUP(091214)		9/12/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-11S (236-241)(081715)		8/17/2015	<0.2	1.1J	1 J	<0.2	<0.5	<0.2	NA	NA
RW-12	RW-12(50-70)	50-70'	5/10/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-12(55-65)(091914)		9/19/2014	< 0.21		< 2.6	< 3.0 B	2.6 B	< 3.0 B	NA	NA
	RW-12(55-65)(081715)		8/17/2015	<0.2		13	<0.2	12	<0.2	NA	NA
	RW-12(96-116)	96-116'	5/10/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-12(125-148)	125-148'	5/11/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-12(130-140)(091914)		9/19/2014	< 0.21		< 2.6	< 3.0 B	< 2.6	< 3.0 B	NA	NA
	RW-12(130-140)(081215)		8/12/2015	<0.2	<0.27	13 B	<0.2	<0.5	<0.2	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062	Dissolved Arsenic (USEPA 7062
			NJGWQS	1	10	3	5	3	5	3	3
RW-13	RW-13(71-91) (090914)	71-91'	9/9/2014	< 0.21		6.3	3.7	4.9	3.7	NA	NA
	RW-13(71-91) (082415)		8/24/2015	<0.2		2.9	2.3	2	<0.2	NA	NA
	RW-13(100-120)(091614)	100-120'	9/16/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-13(100-120)(081315)		8/13/2015	<0.2		3.2	<0.2	2.1	<0.2	NA	NA
	RW-13(150-170)(091614)	150-170'	9/16/2014	< 0.21		< 2.6	1.7 B	2.9 B	< 1.3	NA	NA
	RW-13(150-170)(082115)		8/21/2015	<0.2	<0.27	4.6 B	0.33 J	2	0.31 J	NA	NA
SC-01	SC-1	64.4-70.9'	10/5/2006	< 0.21		< 1.5	< 2.6	1.7 B	< 2.6	NA	NA
	SC1(041107)		4/11/2007	1.4		< 1.5	6.3	< 1.5	< 2.8	NA	NA
	SC-1(071016)		10/16/2007	1.5		< 1.1	8.8	< 1.1	1.6 B	NA	NA
	DUP-01(080430) (SC-1)		4/30/2008	0.93 J		< 1.7	6.6	< 1.7	1.9 B	NA	NA
	SC-1(080430)		4/30/2008	1.1		< 1.7	5.4	< 1.7	< 1.4	NA	NA
	SC-1 (080917)		9/17/2008	0.81 J		< 1.7	6.2	< 1.7	< 1.4	NA	NA
	SC-1(070909)		7/9/2009	0.94 J		< 2.4	7.2 J	< 2.4	< 3.0	NA	NA
	SC-1(102809)		10/28/2009	0.53 J		< 2.4	9.9	< 2.4	< 1.7	NA	NA
	SC-1(060210)		6/2/2010	1.5		< 1.4	6.2	< 1.4	< 1.9	NA	NA
	SC-1(051811)		5/18/2011	0.63 J		< 0.92	5.6	< 0.92	1.5 J	NA	NA
	SC-1 (042712)		4/27/2012	1.2		< 0.97	9.4	< 0.97	< 1.7	NA	NA
	SC-1(111113)		11/11/2013	1.6		< 1.5	8.6	< 1.5	< 2.4	NA	NA
	SC-1 (090514)		9/5/2014	56.0		< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	SC-1 (100914)		10/9/2014	1.6		< 2.6	2.5 B	< 2.6	< 1.3	NA	NA
	SC-1 (031915)		3/19/2015	150		NA	NA	NA	NA	NA	NA
	SC-1 (042215)		4/22/2015	1.8		NA	NA	NA	NA	NA	NA
	SC-1(060215)		6/2/2015	1.6		NA	NA	NA	NA	NA	NA
	SC-1(080415)		8/4/2015	1.3	.39J	1.1 B	13	<0.84 B	2	NA	NA
SC-02	SC-2 (080505)	47-67'	5/5/2008	< 0.26		< 1.7	2.8 B	< 1.7	< 1.4	NA	NA
	SC-2 (080917)		9/17/2008	< 0.26		2.1 B	< 1.4	< 1.7	< 1.4	NA	NA
	SC-2(063009)		6/30/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	SC-2(102009)		10/20/2009	< 0.23		< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	SC-2(052510)		5/25/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	SC-2(051611)		5/16/2011	< 0.26		1.4 B	20.0	< 0.92	< 0.94	NA	NA
	SC-2 (041912)		4/19/2012	< 0.22		< 0.97	2.9 J	< 0.97	< 1.7	NA	NA
	SC-2 (111513)		11/15/2013	< 0.28 J		< 1.5	< 4.0 B	< 1.5	< 2.4	NA	NA
	SC-2(091514)		9/15/2014	< 0.21		< 3.0 B	< 1.3	3.1 J	< 1.3	NA	NA
	SC-2(081215)		8/12/2015	<0.2	<0.27	2.1 B	0.58 J	4.6	<0.2	NA	NA

Notes:
Results for 1,4-dioxane, benzene, lead, and arsenic are presented in this table. See Summary tables for full results.
Results are presented in µg/L unless otherwise noted.
[1] NJGWQS, New Jersey Groundwater Quality Standard NJAC7:9C March 2014
Shaded values exceed NJGWQS.
< = not detected
B (inorganic) = estimated result is between the detection limit and quantification limit
B (organic) = analyte found in associated method blank
ft bgs = feet below ground surface
J = estimated result
NA = not analyzed or not available
R = rejected result
µg/L = micrograms per liter

Table 13B
Summary of Historical and Current Mine Water Results for Benzene, 1,4-dioxane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062
			GWQS[1]	1		3	5	3	5	3
CM SHAFT	CMSHAFT(50)(050712)	50'	5/7/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA
	CM-50 (091214)		9/12/2014	< 0.21		< 2.6	< 3.8 B	< 2.6	< 1.3	NA
	CM-50 (081415)		8/14/2015	<0.2	<0.27	2.3 B	0.39 J	<0.5	<0.2	NA
	CMSHAFT(100)(050712)	100'	5/7/2012	< 0.22		< 0.97	1.7 B	< 0.97	< 1.7	NA
	CM-100(091814)		9/18/2014	< 0.21		R	2.4 J	R	< 1.3	NA
	CMSHAFT(100)(081715)		8/17/2015	<0.2	0.47J	1.6 J	0.29 J	<0.5	<0.2	NA
	CM SHAFT (160)(050912)	160'	5/9/2012	< 0.22		< 0.97	< 3.0	< 0.97	< 1.7	NA
	CM-160(091814)		9/18/2014	< 0.21		< 2.6	13.2 J	< 2.6	< 3.0 B	NA
	CMSHAFT(160)(081715)		8/17/2015	<0.2	.054J	1.7 J	7.8	<0.5	<0.2	NA
	CM SHAFT (275)(050912)	275'	5/9/2012	< 0.22		< 0.97	< 3.0	< 0.97	< 1.7	NA
	CM-275(091914)		9/19/2014	< 0.21		< 2.6	104	< 2.6	< 3.0 B	NA
	CM-275 (081815)		8/18/2015	<0.2	<0.27	3.2 B	91.00	0.54 J	<0.2	NA
PM AIR SHAFT	PM AIR SHAFT-50(042312)	50'	4/23/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA
	PM AIRSHAFT-50(071112)		7/11/2012	< 0.24		< 0.97	< 1.7	< 0.97	< 1.7	NA
	PM AIRSHAFT-50(091614)		9/16/2014	< 0.21		< 2.6	< 1.3	< 2.6	< 1.3	NA
	PM AIRSHAFT-50(042414)		4/24/2015	<0.24		NA	NA	NA	NA	NA
	PMAIRSHAFT-50(060215)		6/2/2015	<0.20		NA	NA	NA	NA	NA
	PM AIRSHAFT-50(082115)		8/21/2015	<0.20	<0.27	< 1.3 B	4.5	<0.5	0.82 J	NA
	PMPAS-180(080507)	180'	5/7/2008	< 0.26		< 1.7	< 1.4	< 1.7	< 1.4	NA
	PM AIRSHAFT-180		9/18/2008	26.4		< 1.7	< 1.4	< 1.7	< 1.4	NA
	PM AIRSHAFT(180)		7/10/2009	7.4		< 2.4	< 3.0	< 2.4	< 1.7	NA
	PMAIR SHAFT-180		10/29/2009	0.60 J		< 2.4	< 1.7	< 2.4	< 1.7	NA
	PM AIRSHAFT 180		6/4/2010	< 0.23		< 1.4	< 1.9	< 1.4	< 1.9	NA
	PM AIRSHAFT-180(052411)		5/24/2011	2.5		< 0.92	2.5 B	< 0.92	< 0.94	NA
	PM AIR SHAFT-180(042312)		4/23/2012	< 0.22		< 0.97	< 1.7	< 0.97	< 1.7	NA
	PM AIRSHAFT-180(071112)		7/11/2012	< 0.24		< 0.97	< 1.7	< 0.97	< 1.7	NA
	PM AIRSHAFT-180(071112) DUP		7/11/2012	< 0.24		< 0.97	< 1.7	< 0.97	< 1.7	NA
	PMAIRSHAFT-180(091614)		9/16/2014	6.6		< 2.6	13.3	< 2.6	1.5 B	NA
	PMAIRSHAFT-180(042415)		4/24/2015	2.3		NA	NA	NA	NA	NA
	PMAIRSHAFT-180(060315)		6/3/2015	5.4		NA	NA	NA	NA	NA
	PM AIRSHAFT 180(081715)		8/17/2015	4.1	12	1.2 J	0.024	<0.5	<0.2	NA
	PMPAS-230(080507)	230'	5/7/2008	31.8		< 1.7	6.4	< 1.7	5.4	NA
	PM AIRSHAFT-230		9/18/2008	29.1		< 1.7	< 1.4	< 1.7	< 1.4	NA
	PM AIRSHAFT(230)		7/10/2009	7.6		< 2.4	< 3.0	< 2.4	< 1.7	NA
	PMAIR SHAFT-230		10/29/2009	31.2		< 2.4	< 1.7	< 2.4	< 1.7	NA
	PM AIRSHAFT 230		6/4/2010	31.0		1.8 B	< 1.9	< 1.4	< 1.9	NA
	PM AIRSHAFT-230(052411)		5/24/2011	33.2		< 0.92	2.2 B	< 0.92	1.3 B	NA
	PM AIR SHAFT-230(042412)		4/24/2012	< 0.22		1.0 B	< 1.7	< 0.97	< 1.7	NA
	PM AIR SHAFT-230(042412) DUP		4/24/2012	< 0.22		< 0.97	1.9 B	< 0.97	< 1.7	NA
	PM AIRSHAFT-230(071112)		7/11/2012	28.5		< 0.97	< 1.7	< 0.97	< 1.7	NA
	PMAIRSHAFT-230(091714)		9/17/2014	32.9		4.2	3.4 J	4.9	2.2 J	NA
	PMAIRSHAFT-230(042415)		4/24/2015	7.8		NA	NA	NA	NA	NA
	PMAIRSHAFT-230(060315)		6/3/2015	25		NA	NA	NA	NA	NA
	PM AIRSHAFT-230(081815)		8/18/2015	25	140	3 B	980	0.58 J	<0.2	NA

Notes:

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

Results are presented in µg/L unless otherwise noted.

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

Shaded values exceed NJGWQS.

< = not detected

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

B (organic) = analyte found in associated method blank

ft bgs = feet below ground surface

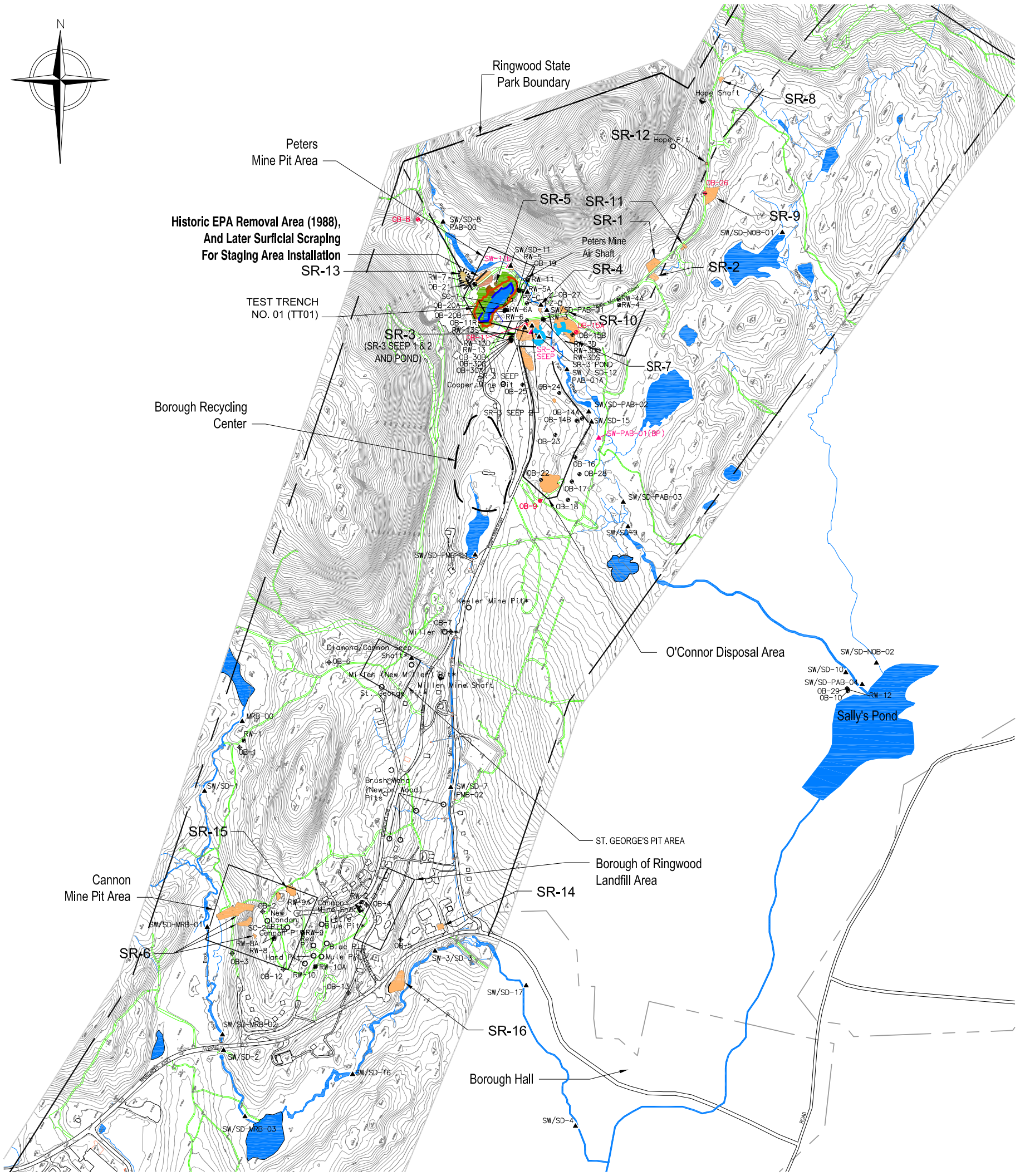
J = estimated result

NA = not analyzed or not available

R = rejected result

µg/L = micrograms per liter

ATTACHMENT A
FIGURES



NOTES:

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

LEGEND

- BEDROCK WELL
- DEEP BEDROCK WELL
- DIRECTIONAL WELL
- UNCONSOLIDATED WELL
- MONITORING WELL DAMAGED OR NOT AVAILABLE FOR SAMPLING
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL, PAINT SLUDGE, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL, DRUMS, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL AND PAINT SLUDGE
- APPROXIMATE LIMITS OF SURFICIAL SOIL SCRAPING
- HISTORICAL FILL AREA SURROUNDING PETERS MINE PIT (AREA 1)
- INDICATES VERNAL CONDITIONS TYPICALLY OBSERVED IN THE SPRING AND FALL SEASONS
- WATER BODY
- SW/SD-2 ▲ SURFACE WATER AND SEDIMENT – SAMPLE LOCATION
- SW/SD-MRB-01 ▲ SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM MINE BROOK
- SW/SD-PMB-01 ▲ SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM PETERS MINE BROOK
- SW/SD-NOB-01 ▲ SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM NORTH BROOK
- SW/SD-PAB-01 ▲ SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM PARK BROOK
- TRAIL/ DIRT ROAD
- STREAM
- INFERRED STREAM
- TOP OF SLOPE TO MINE PIT WITHIN PETERS MINE PIT, ELEVATION 525 FT MSL (1961)
- TOP OF BEDROCK PIT WITHIN PETERS MINE PIT

400 200 0 400 800 1200
SCALE: 1"=400'

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE 11/15
DRAWN BY
DESIGNED BY
CHECKED BY
APPROVED BY

cornerstone environmental

PREPARED BY:
CORNERSTONE ENGINEERING GROUP, LLC

Any modification to this drawing by other than Cornerstone Engineering Group, LLC personnel violates its original purpose and as such renders the drawing void. Cornerstone Engineering Group, LLC will not be held liable for any changes made to this document without the express written consent of the originator.

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

SAMPLING LOCATION PLAN

SHEET NO. 1
PROJECT NO. 150648

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\PMCRD1-F-01-SITE PLAN TOPO.DWG Layout: FIGURE 03 User: larisa.chizhov Nov 23, 2015 - 11:37am

SR-13

(530.41)
OB-21 RW-7

Historic EPA Removal Area (1988),
And Later Surficial Scraping
For Staging Area Installation

TEST TRENCH
NO. 01 (TT01)

SR-5

528
526
524
522
520

PETERS MINE POND

PETERS MINE POND GUAGE

SW/SD-11

528

526

PETERS MINE AIR SHAFT

524

518

SC-1

(517.61)
OB-20B
OB-20A
RW-6
RW-6A

OB-19
(519.47)
RW-5

RW-5A

RW-11D
RW-11S

PZ-C (522.95)

(517.33)
OB-27

522

520

518

516

SR-4

RW-13D
RW-13S
OB-30B
OB-30C
OB-30A
(513.02)

(514.36)
OB-31B

SR-3

SR-3 SEEP 1

SR-3 SEEP 2

PZ-D (515)

514

HISTORIC MINE
STRUCTURE

RW-3DS
RW-3DD
RW-3D
RW-3S

SW/SD-PAB-01

SR-3 POND

SHERMAN DRIVE

OB-2

CB-1

SR-10

(516.01)
OB-25

516
514
512
510
508
506
504
502
500
498
496
494

SW/SD-PAB-01A

OB-15B
(511.63)

SR-7

SW/SD-12/PAB-01A

OB-24
(495.2)

494
496
498
500
502
504
506
508
510
512

LEGEND:

- 530 — EXISTING CONTOUR
- LIMIT OF SURFACE WATER
- OVERHEAD UTILITY LINES
- PROPERTY BOUNDARY
- TREE LINE
- EXISTING DIRT TRAIL/ROAD
- STABILIZED ACCESS ROAD
- PROPOSED SUPPLEMENTAL GROUNDWATER SAMPLING LOCATION
- OB-19 OVERBURDEN MONITORING WELL
- STAFF GAUGE
- RW-5 BEDROCK MONITORING WELL
- VS-1 / RSH-1 MINE SHAFTS
- SC-1 DIRECTIONAL MONITORING WELL
- 601 BLOCK
- 12 LOT
- 505 GROUNDWATER ELEVATION CONTOUR – OVERBURDEN (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION OF OVERBURDEN
- (512.70) GROUNDWATER/SURFACE WATER ELEVATION (FEET MSL) (DATA FROM SEPTEMBER 2014)
- SW/SD-11 SURFACE WATER AND SEDIMENT – SAMPLE LOCATION/ STAFF GUAGE
- SW/SD-PMB-01 SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM PETERS MINE BROOK/ STAFF GUAGE
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL, PAINT SLUDGE, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL, DRUMS, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL AND PAINT SLUDGE
- APPROXIMATE LIMITS OF SURFICIAL SOIL SCRAPING
- HISTORICAL FILL AREA SURROUNDING PETERS MINE POND (AREA 1)
- INDICATES VERNAL CONDITIONS TYPICALLY OBSERVED IN THE SPRING AND FALL SEASONS
- WATER BODY
- STREAM

NOTES:

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

0 60' 120'
GRAPHIC SCALE

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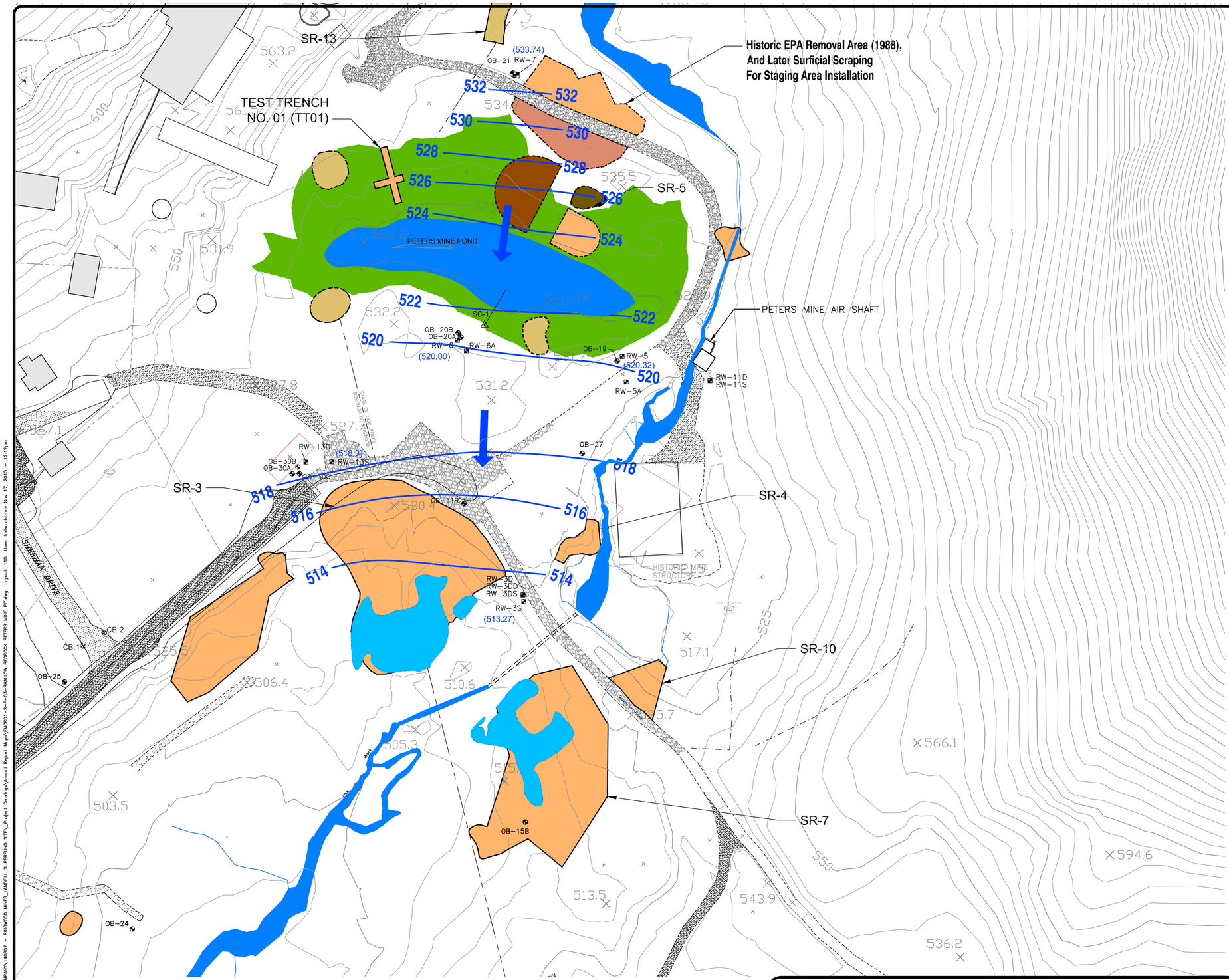
RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER,
AND MINE WATER MONITORING REPORT
OVERBURDEN WELL LOCATIONS AND GROUNDWATER CONTOURS IN THE PETERS MINE PIT - AUGUST 2015

SHEET NO. **2**
PROJECT NO. 140802

1" 1/2" 0" 1"

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMCR01-S-F-02-08 WELL PETERS MINE PIT.DWG Layout: 2 User: larisa.shishov Nov 23, 2015 - 1:26pm



0 60' 120'
GRAPHIC SCALE

LEGEND:

- 530 — EXISTING CONTOUR
- LIMIT OF SURFACE WATER
- OVERHEAD UTILITY LINES
- EXISTING DIRT TRAIL/ROAD
- STABILIZED ACCESS ROAD
- OB-27 — OVERBURDEN MONITORING WELL
- RW-5 — BEDROCK MONITORING WELL
- SC-1 — DIRECTIONAL MONITORING WELL
- 601 — BLOCK
- 12 — LOT
- MSL — MEAN SEA LEVEL
- FT — FEET
- 520 — GROUNDWATER ELEVATION CONTOUR – SHALLOW BEDROCK
- GROUNDWATER FLOW DIRECTION OF SHALLOW BEDROCK INTERVAL 100' (2-FT CONTOUR INTERVAL)
- (520.18) — GROUNDWATER ELEVATION (FEET MSL) (DATA FROM SEPTEMBER 2014)
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL, PAINT SLUDGE, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL, DRUMS, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL AND PAINT SLUDGE
- APPROXIMATE LIMITS OF SURFICIAL SOIL SCRAPING
- HISTORICAL FILL AREA SURROUNDING PETERS MINE POND (AREA 1)
- INDICATES VERNAL CONDITIONS TYPICALLY OBSERVED IN THE SPRING AND FALL SEASONS
- WATER BODY
- STREAM

NOTES:

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

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RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT
WELL LOCATIONS AND SHALLOW BEDROCK GROUNDWATER CONTOURS IN THE PETERS MINE PIT - AUGUST 2015

SHEET NO. 3

PROJECT NO. 140802

1" 1/2" 0" 1"

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 – RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMCRD1-S-F-03-SHALLOW BEDROCK PEEBES MINE PIT.dwg Layout: 11D User: larisa.chizhov Nov 17, 2015 – 12:12pm

BOROUGH RECYCLING CENTER

PETERS MINE ROAD

SHEEHAN DRIVE

SR-3

PARK BROOK

(516.01) OB–25

OB–24 (495.20)

OB–23 (DRY)

(497.63) OB–22

OB–14B (490.61)

OB–14A (490.40)

OB–16 (485.80)

OB–17 (483.97)

(488.87) OB–18

514 512 510 508 506 504 502 500 498 496 494 492 490 488 486 484

0 30 60 90
SCALE IN FEET

LEGEND:

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

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RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT

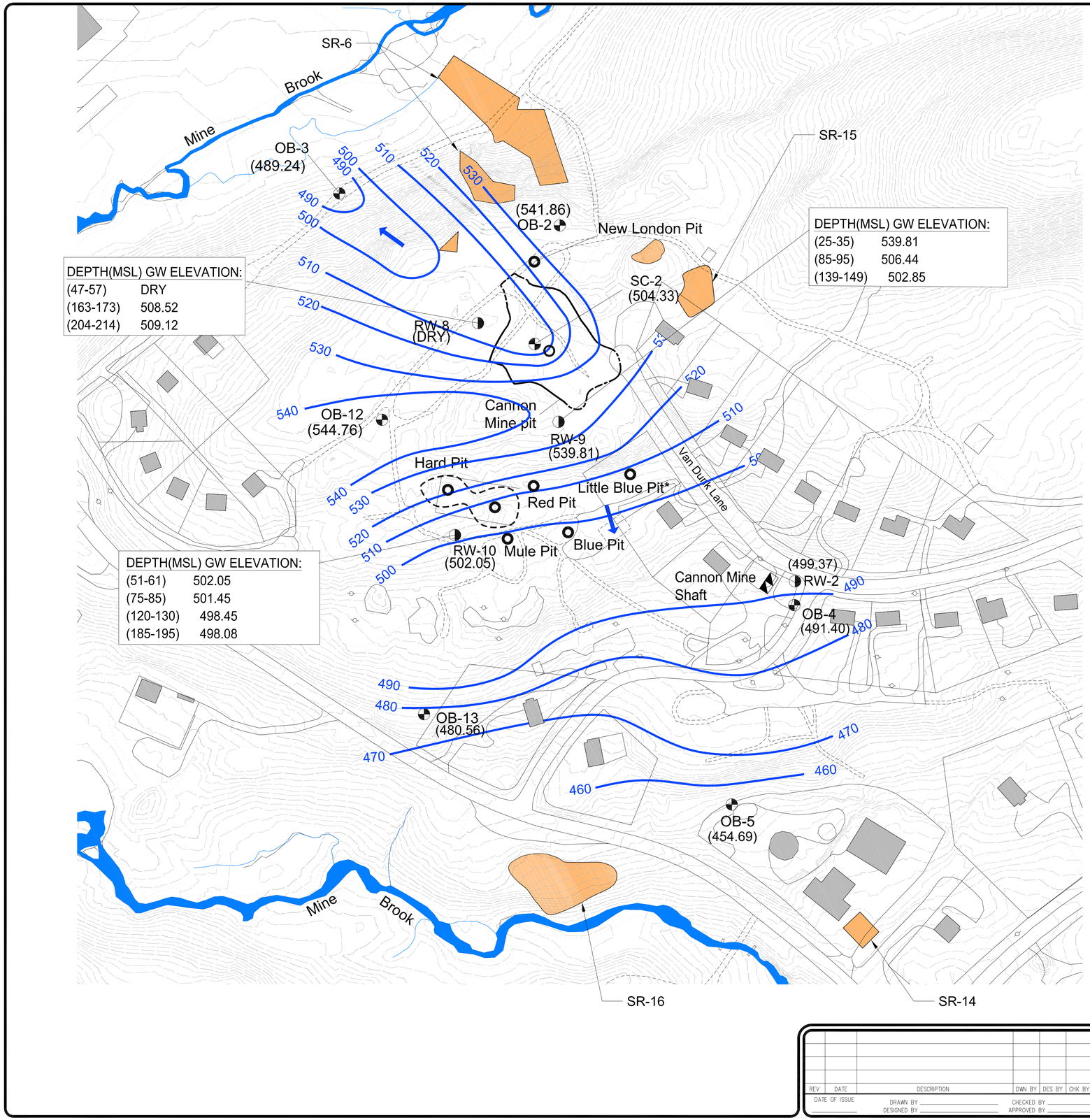
WELL LOCATIONS AND GROUNDWATER ELEVATION CONTOURS IN THE FORMER OCDA - AUGUST 2015

SHEET NO. 4

PROJECT NO. 140802

1" 1/2" 0" 1"

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 – RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMCRD1-S-F-04-DR OCDA.dwg Layout: 15B User: lorisa.shishov Nov 17, 2015 – 12:22pm



0 100 200 300
SCALE IN FEET

	Well ID	bottom screen depth (feet)	top screen depth (feet)	bottom screen depth (MSL)	top screen depth (MSL)	Monitoring Method
Monitors Cannon Mine Pit	SC-2	67	47	497.13	517.13	Low Flow
Shallow Bedrock	OB-2	42	8	520.3	554.3	Low Flow
	OB-3	24	9	472.53	487.53	Low Flow
	OB-4	61	28	449.8	482.8	Low Flow
	OB-5	63	18	395.83	440.83	Low Flow
	OB-12	40	9	518.36	549.36	Low Flow
	OB-13	60	8	440.35	492.35	Low Flow
	RW-8A(47-57)	57	47	512.55	522.55	ZIST Pump
	RW-9A(25-35)	35	25	526.82	536.82	ZIST Pump
	RW-9A(85-95)	95	85	466.73	476.73	ZIST Pump
	RW-10A(51-61)	61	51	478.43	488.43	ZIST Pump
	RW-10A(75-85)	85	75	454.45	464.45	ZIST Pump

LEGEND

- RESIDENCE
- TRAILS
- ROADWAYS
- WATERWAYS, BROOKS
- GROUND SURFACE ELEVATION CONTOUR
- RW-10 (498.79) — BEDROCK MONITORING WELL WITH GROUNDWATER ELEVATION
- 490 — GROUNDWATER CONTOUR LINE RELATIVE TO MEAN SEA LEVEL (SHALLOW BEDROCK)
- GROUNDWATER FLOW DIRECTION OF SHALLOW BEDROCK BEDROCK INTERVAL SEPTEMBER 2014 (FT. MSL.) (10-FT CONTOUR INTERVAL)
- FT. MSL. – FEET ABOVE MEAN SEA LEVEL
- APPROXIMATE LIMITS OF PAINT SLUDGE REMOVAL AREAS
- WATER BODY
- STREAM

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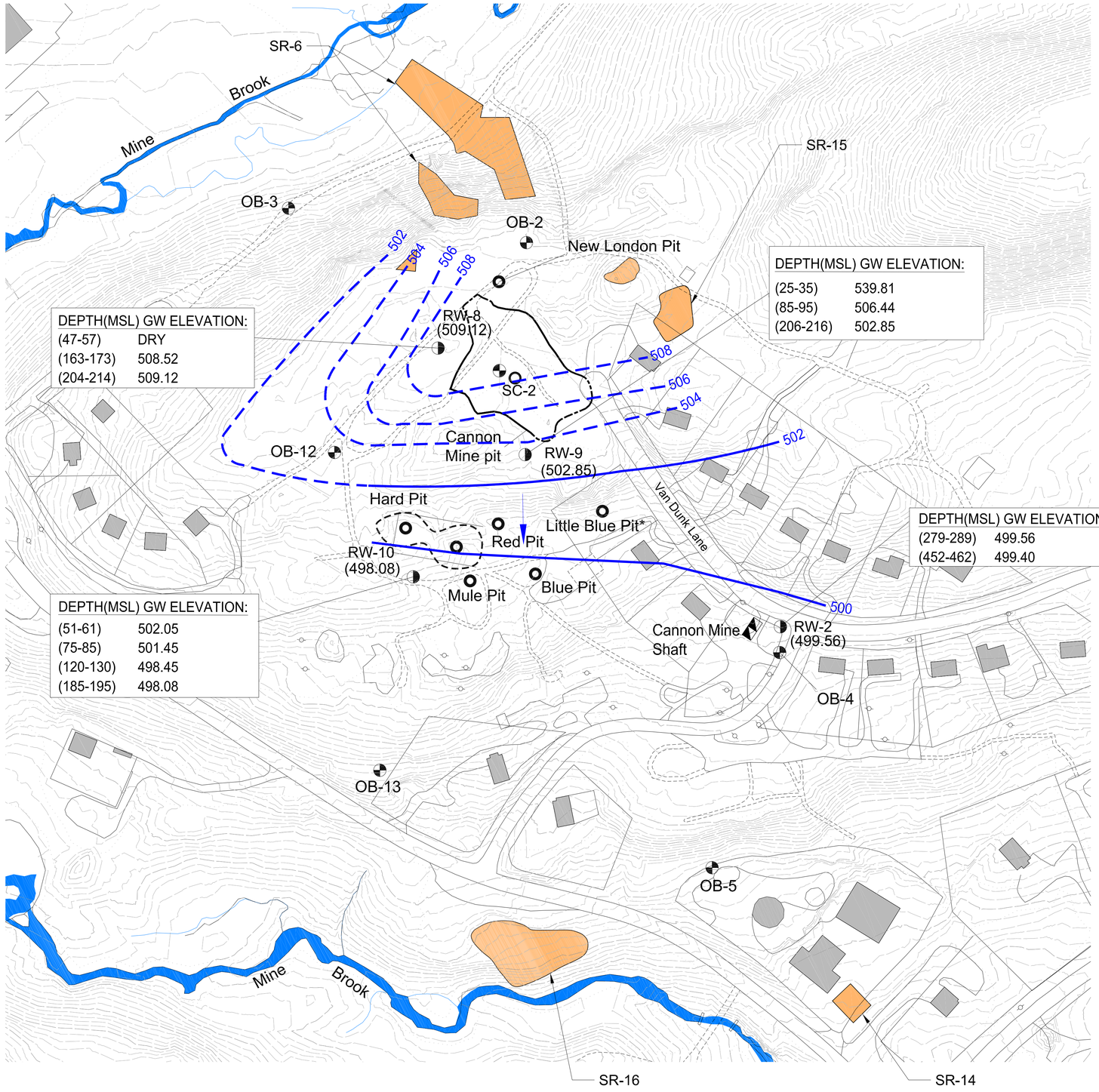
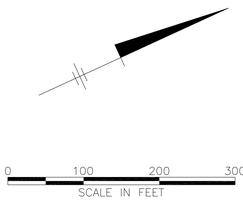
RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT

WELL LOCATIONS AND SHALLOW BEDROCK GROUNDWATER ELEVATION CONTOURS IN THE CMP - AUGUST 2015

SHEET NO.
5

PROJECT NO.
140802





	Well ID	bottom screen depth (feet)	top screen depth (feet)	bottom screen depth (MSL)	top screen depth (MSL)	Monitoring Method
Monitors Cannon Mine Pit	SC-2	67	47	497.13	517.13	Low Flow
Shallow Bedrock	OB-2	42	8	520.3	554.3	Low Flow
	OB-3	24	9	472.53	487.53	Low Flow
	OB-4	61	28	449.8	482.8	Low Flow
	OB-5	63	18	395.83	440.83	Low Flow
	OB-12	40	9	518.36	549.36	Low Flow
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	RW-10A(51-61)	61	51	478.43	488.43	ZIST Pump
	RW-10A(75-85)	85	75	454.45	464.45	ZIST Pump

LEGEND

- RESIDENCE
- TRAILS
- ROADWAYS
- WATERWAYS, BROOKS
- GROUND SURFACE ELEVATION CONTOUR
- RW-10 (497.55) BEDROCK MONITORING WELL WITH GROUNDWATER ELEVATION
- GROUNDWATER CONTOUR LINE RELATIVE TO MEAN SEA LEVEL (DEEP)
- GROUNDWATER FLOW DIRECTION OF DEEP BEDROCK INTERVAL SEPTEMBER 2014 (FT. MSL.) (2-FT CONTOUR INTERVAL)
- FT. MSL. – FEET ABOVE MEAN SEA LEVEL
- APPROXIMATE LIMITS OF PAINT SLUDGE REMOVAL AREAS
- WATER BODY
- STREAM

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RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT

WELL LOCATIONS AND DEEP BEDROCK
GROUNDWATER ELEVATION CONTOURS IN THE CMP - AUGUST 2015

SHEET NO.
6
PROJECT NO.
140802

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

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

ID	BENZENE	1,4 DIOXANE
PMP-POND	ND	ND

WELL ID	BENZENE	1,4 DIOXANE
OB-20A	ND	ND
OB-20B	0.27J	0.95J

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

ID	BENZENE	1,4 DIOXANE
SW-11	ND	ND

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

WELL ID	BENZENE	1,4 DIOXANE
OB-27	3	6.2J

WELL ID	BENZENE	1,4 DIOXANE
OB-11R	2.9	4.3J

ID	BENZENE	1,4 DIOXANE
SR-3 SEEP-1	0.33J	2.0J

ID	BENZENE	1,4 DIOXANE
SR-3 SEEP-2	0.67J	1.3J

ID	BENZENE	1,4 DIOXANE
SR-3 POND	ND	1.6J

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

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

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

ID	BENZENE	1,4 DIOXANE
SW-PAB-01A	ND	2.1J

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

SR-13
SR-5
SR-3
SR-4
SR-10
SR-7
TEST TRENCH NO. 01 (TT01)
Historic EPA Removal Area (1988), And Later Surficial Scraping For Staging Area Installation
PETERS MINE POND GUAGE
PETERS MINE AIR SHAFT
SW/SD-11
SW/SD-PAB-01
SW/SD-PAB-01A
SW/SD-12/PAB-01A
PZ-C
PZ-D
SC-1
OB-21
OB-20A
OB-20B
OB-19
OB-27
OB-11R
OB-30A
OB-30B
OB-30C
OB-25
OB-24
OB-15B
RW-7
RW-6
RW-6A
RW-5
RW-5A
RW-11D
RW-11S
RW-13D
RW-13S
RW-3DS
RW-3DD
RW-3D
RW-3S
SR-3 SEEP 1
SR-3 SEEP 2
SR-3 POND
528
526
524
522
520
518
516
514
512
510
508
506
504
502
500
498
496
494

LEGEND:

- EXISTING CONTOUR
- LIMIT OF SURFACE WATER
- OVERHEAD UTILITY LINES
- PROPERTY BOUNDARY
- TREE LINE
- EXISTING DIRT TRAIL/ROAD
- STABILIZED ACCESS ROAD
- PROPOSED SUPPLEMENTAL GROUNDWATER SAMPLING LOCATION
- OB-19 OVERBURDEN MONITORING WELL
- STAFF GAUGE
- RW-5 BEDROCK MONITORING WELL
- VS-1 / RSH-1 MINE SHAFTS
- SC-1 DIRECTIONAL MONITORING WELL
- 601 BLOCK
- 12 LOT
- 505 GROUNDWATER ELEVATION CONTOUR – OVERBURDEN (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION OF OVERBURDEN
- (512.70) GROUNDWATER/SURFACE WATER ELEVATION (FEET MSL) (DATA FROM SEPTEMBER 2014)
- SW/SD-11 SURFACE WATER AND SEDIMENT – SAMPLE LOCATION/ STAFF GUAGE
- SW/SD-PMB-01 SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM PETERS MINE BROOK/ STAFF GUAGE
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL, PAINT SLUDGE, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL, DRUMS, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL AND PAINT SLUDGE
- APPROXIMATE LIMITS OF SURFICIAL SOIL SCRAPING
- HISTORICAL FILL AREA SURROUNDING PETERS MINE POND (AREA 1)
- INDICATES VERNAL CONDITIONS TYPICALLY OBSERVED IN THE SPRING AND FALL SEASONS
- WATER BODY
- STREAM

NOTES:

1. RW-3S REPRESENTS THE 77-87 FOOT INTERVAL AND RW-3D IS A MULTIPORT WELL.
2. RW-13S REPRESENTS THE 71-91 FOOT INTERVAL AND RW-13D IS A MULTIPORT WELL.
3. "J" = ESTIMATED VALUE
4. "D" = DILUTION

0 60' 120'
GRAPHIC SCALE

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RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT
OVERBURDEN AND SURFACE BENZENE AND 1,4 DIOXANE CONCENTRATIONS IN THE PETERS MINE PIT - AUGUST 2015

SHEET NO. **7**
PROJECT NO. 140802

1" 1/2" 0" 1"

File: K:\PROJECTS\FORD MOTOR COMPANY\140802 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMCR01-S-F-07-BENZENE DIOXANE OB PETERS MINE PIT.DWG Layout: 11B User: lorisa.chizhov Nov 25, 2015 - 8:19am

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

WELL ID	BENZENE	1,4 DIOXANE
SC-1	1.3	0.39J

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

WELL ID	BENZENE	1,4 DIOXANE
RW-6	1.2	1.5J
RW-6A	7.7	2.7J

WELL ID	BENZENE	1,4 DIOXANE
RW-3(77-87)	ND	22
RW-3DS(155-160)	ND	38J
RW-3DD(175-180)	0.44J	20

ID	BENZENE	1,4 DIOXANE
PM AIR SHAFT 50	ND	ND
PM AIR SHAFT 180	4.1	25
PM AIR SHAFT 230	12	140D

WELL ID	BENZENE	1,4 DIOXANE
RW-11S(236-241)	ND	1.1J
11D(262-267)	1.6	26J

WELL ID	BENZENE	1,4 DIOXANE
RW-5	ND	6.7J
RW-5A	0.22J	ND

SR-13
SR-3
SR-4
SR-5
SR-7
SR-10
TEST TRENCH NO. 01 (TT01)
Historic EPA Removal Area (1988), And Later Surficial Scraping For Staging Area Installation
PETERS MINE POND
PETERS MINE AIR SHAFT
HISTORIC MINE STRUCTURE
SHERMAN DRIVE
OB-21
OB-20B
OB-20A
OB-30B
OB-30A
OB-30D
OB-11R
OB-19
OB-27
OB-15B
OB-25
OB-24
CB.1
CB.2
RW-7
RW-6
RW-6A
RW-5
RW-5A
RW-13D
RW-13S
RW-3D
RW-3DD
RW-3DS
RW-3S
RW-11D
RW-11S
SC-1
532
530
528
526
524
522
520
518
516
514

0 60' 120'
GRAPHIC SCALE

LEGEND:

- 530 — EXISTING CONTOUR
- LIMIT OF SURFACE WATER
- OVERHEAD UTILITY LINES
- EXISTING DIRT TRAIL/ROAD
- STABILIZED ACCESS ROAD
- OB-27 OVERBURDEN MONITORING WELL
- RW-5 BEDROCK MONITORING WELL
- SC-1 DIRECTIONAL MONITORING WELL
- 601 BLOCK
- 12 LOT
- MSL MEAN SEA LEVEL
- FT FEET
- 520 GROUNDWATER ELEVATION CONTOUR – SHALLOW BEDROCK
- GROUNDWATER FLOW DIRECTION OF SHALLOW BEDROCK INTERVAL 100' (2-FT CONTOUR INTERVAL)
- GROUNDWATER ELEVATION (FEET MSL) (DATA FROM SEPTEMBER 2014)
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL, PAINT SLUDGE, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL, DRUMS, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL AND PAINT SLUDGE
- APPROXIMATE LIMITS OF SURFICIAL SOIL SCRAPING
- HISTORICAL FILL AREA SURROUNDING PETERS MINE POND (AREA 1)
- INDICATES VERNAL CONDITIONS TYPICALLY OBSERVED IN THE SPRING AND FALL SEASONS
- WATER BODY
- STREAM

NOTES:

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

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RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT

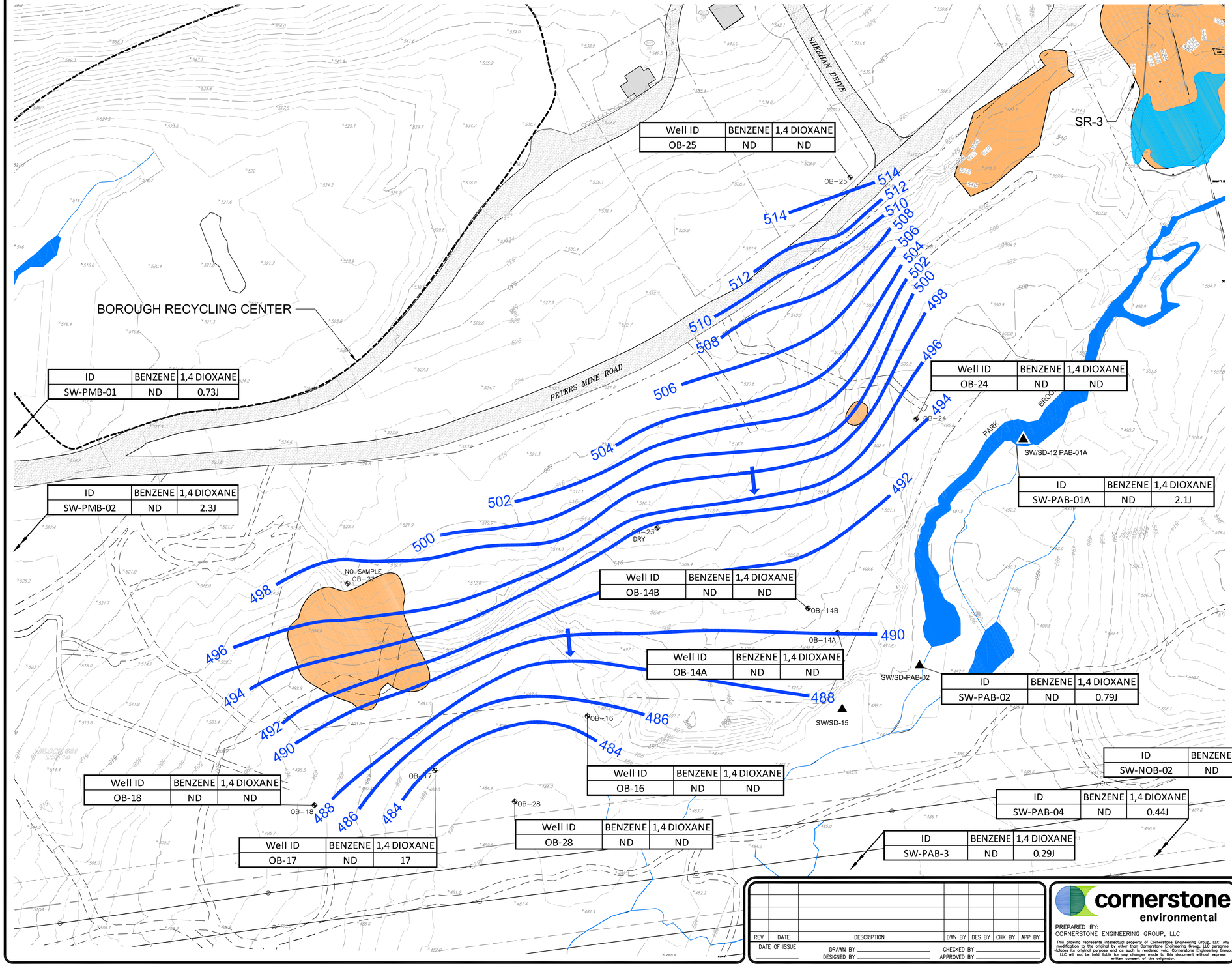
BEDROCK GROUNDWATER AND MINE WATER BENZENE AND 1,4 DIOXANE CONCENTRATIONS IN THE PETERS MINE PIT - AUGUST 2015

SHEET NO. 8

PROJECT NO. 140802

1" 1" 1/2" 0"

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 - RINGWOOD MINES_LANDFILL_SUPERFUND SITE_Project Drawings\Annual Report Maps\FMCR01-1-S-F-08-BENZENE_DIOXANE_SHALLOW_PETERS_MINE_PIT.dwg Layout: 11 User: lavlas.chizhov Nov 23, 2015 - 10:40am



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

ID	BENZENE	1,4 DIOXANE
SW-PMB-01	ND	0.73J

ID	BENZENE	1,4 DIOXANE
SW-PMB-02	ND	2.3J

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

ID	BENZENE	1,4 DIOXANE
SW-PAB-01A	ND	2.1J

Well ID	BENZENE	1,4 DIOXANE
OB-14B	ND	ND

Well ID	BENZENE	1,4 DIOXANE
OB-14A	ND	ND

ID	BENZENE	1,4 DIOXANE
SW-PAB-02	ND	0.79J

Well ID	BENZENE	1,4 DIOXANE
OB-16	ND	ND

Well ID	BENZENE	1,4 DIOXANE
OB-18	ND	ND

Well ID	BENZENE	1,4 DIOXANE
OB-17	ND	17

Well ID	BENZENE	1,4 DIOXANE
OB-28	ND	ND

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

ID	BENZENE	1,4 DIOXANE
SW-PAB-04	ND	0.44J

ID	BENZENE	1,4 DIOXANE
SW-PAB-3	ND	0.29J

0 30 60 90
SCALE IN FEET

LEGEND:

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

NOTES:

1. "J" = ESTIMATED VALUE
2. "D" = DILUTION

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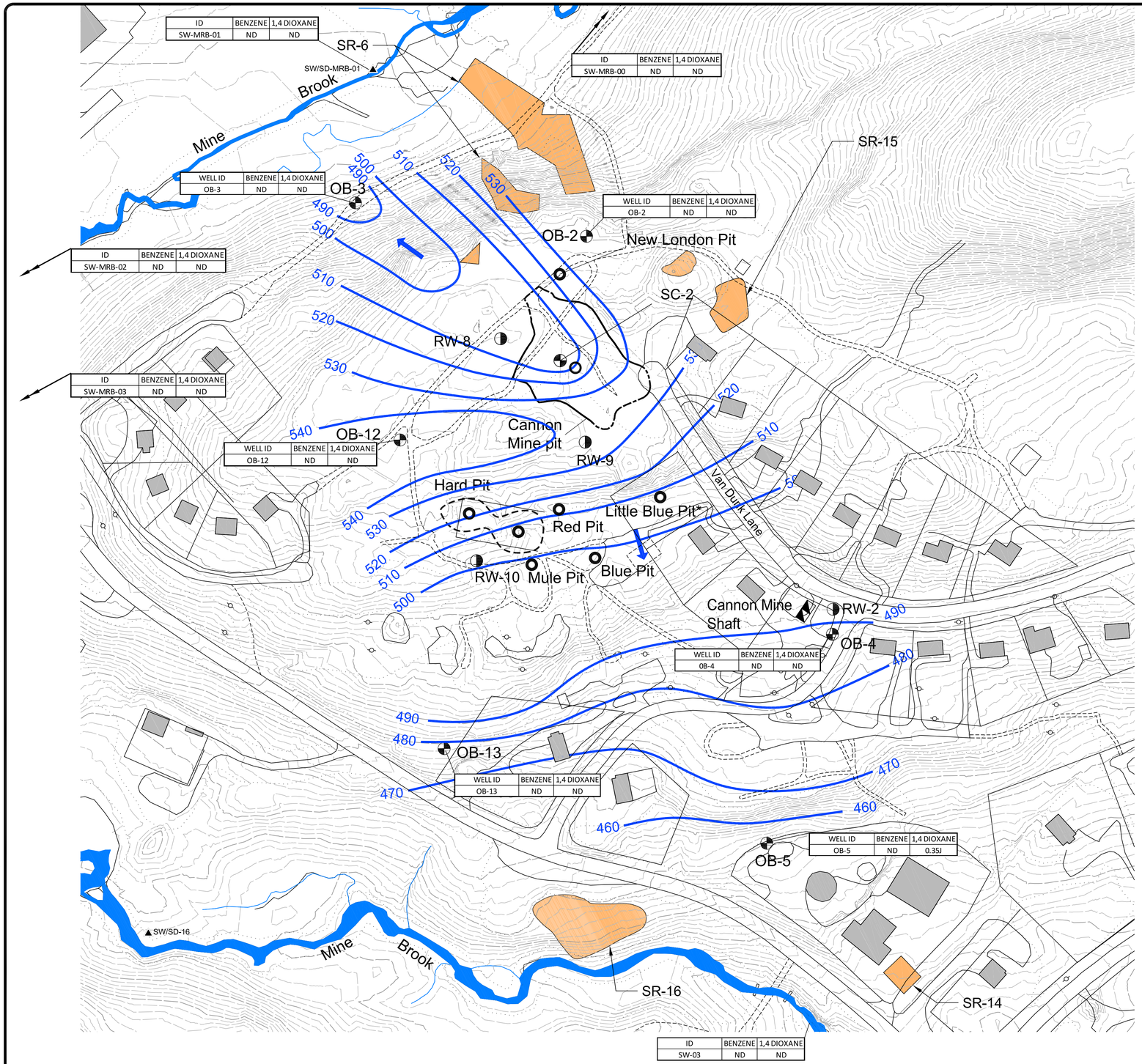
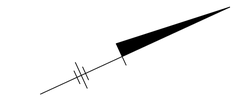
RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT
BENZENE AND 1,4 DIOXANE CONCENTRATIONS IN THE FORMER OCDA - AUGUST 2015

SHEET NO. 9
PROJECT NO. 140802

1" 1/2" 0" 1"

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMCRD1-5-F-09-BENZENE DIOXANE GW OCDA.dwg Layout: 15B User: larisa.chizhov Nov 25, 2015 – 8:16am





	Well ID	bottom screen depth (feet)	top screen depth (feet)	bottom screen depth (MSL)	top screen depth (MSL)	Monitoring Method
Monitors Cannon Mine Pit	SC-2	67	47	497.13	517.13	Low Flow
Shallow Bedrock	OB-2	42	8	520.3	554.3	Low Flow
	OB-3	24	9	472.53	487.53	Low Flow
	OB-4	61	28	449.8	482.8	Low Flow
	OB-5	63	18	395.83	440.83	Low Flow
	OB-12	40	9	518.36	549.36	Low Flow
	OB-13	60	8	440.35	492.35	Low Flow
	RW-8A(47-57)	57	47	512.55	522.55	ZIST Pump
	RW-9A(25-35)	35	25	526.82	536.82	ZIST Pump
	RW-9A(85-95)	95	85	466.73	476.73	ZIST Pump
	RW-10A(51-61)	61	51	478.43	488.43	ZIST Pump
	RW-10A(75-85)	85	75	454.45	464.45	ZIST Pump

LEGEND

- RESIDENCE
- TRAILS
- ROADWAYS
- WATERWAYS, BROOKS
- GROUND SURFACE ELEVATION CONTOUR
- RW-10 (498.79) — BEDROCK MONITORING WELL WITH GROUNDWATER ELEVATION
- 490 — GROUNDWATER CONTOUR LINE RELATIVE TO MEAN SEA LEVEL (SHALLOW BEDROCK)
- GROUNDWATER FLOW DIRECTION OF SHALLOW BEDROCK BEDROCK INTERVAL SEPTEMBER 2014 (FT. MSL.) (10-FT CONTOUR INTERVAL)
- FT. MSL. – FEET ABOVE MEAN SEA LEVEL
- APPROXIMATE LIMITS OF PAINT SLUDGE REMOVAL AREAS
- WATER BODY
- STREAM

NOTES:

1. "J" = ESTIMATED VALUE
2. "D" = DILUTION

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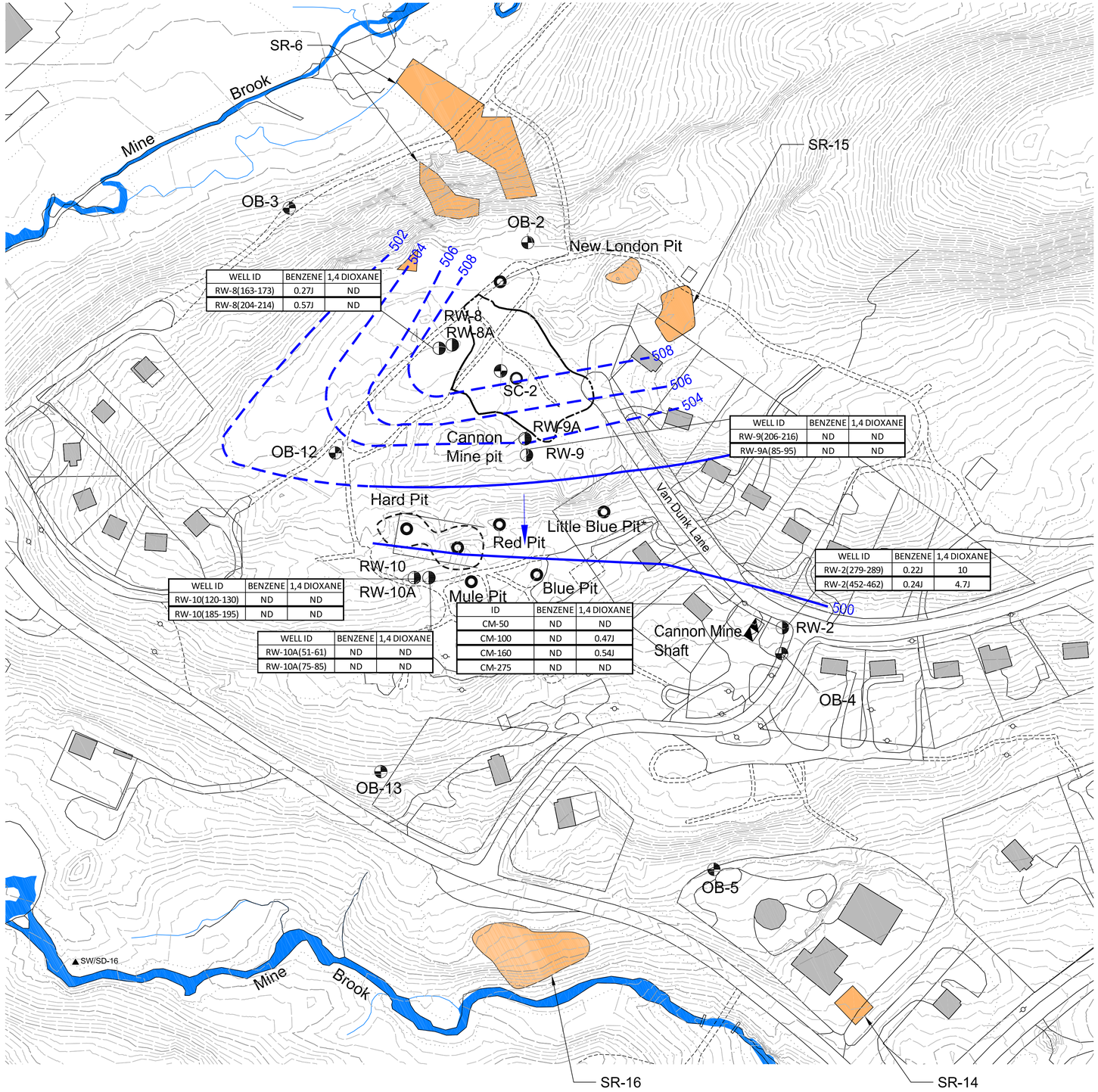
RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT

SHALLOW BEDROCK AND SURFACE WATER BENZENE AND 1,4 DIOXANE CONCENTRATIONS IN THE CMP - AUGUST 2015

SHEET NO. **10**

PROJECT NO. 140802

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\MACRO1-S-F-10-BENZENE DIOXANE SHALLOW CMP.dwg Layout: 1:38 User: ioniss.chizhov Nov 25, 2015 - 8:44am



WELL ID	BENZENE	1,4 DIOXANE
RW-8(163-173)	0.27J	ND
RW-8(204-214)	0.57J	ND

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

WELL ID	BENZENE	1,4 DIOXANE
RW-2(279-289)	0.22J	10
RW-2(452-462)	0.24J	4.7J

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

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

ID	BENZENE	1,4 DIOXANE
CM-50	ND	ND
CM-100	ND	0.47J
CM-160	ND	0.54J
CM-275	ND	ND

0 100 200 300
SCALE IN FEET

	Well ID	bottom screen depth (feet)	top screen depth (feet)	bottom screen depth (MSL)	top screen depth (MSL)	Monitoring Method
Monitors Cannon Mine Pit	SC-2	67	47	497.13	517.13	Low Flow
Shallow Bedrock	OB-2	42	8	520.3	554.3	Low Flow
	OB-3	24	9	472.53	487.53	Low Flow
	OB-4	61	28	449.8	482.8	Low Flow
	OB-5	63	18	395.83	440.83	Low Flow
	OB-12	40	9	518.36	549.36	Low Flow
	OB-13	60	8	440.35	492.35	Low Flow
	RW-8A(47-57)	57	47	512.55	522.55	ZIST Pump
	RW-9A(25-35)	35	25	526.82	536.82	ZIST Pump
	RW-9A(85-95)	95	85	466.73	476.73	ZIST Pump
	RW-10A(51-61)	61	51	478.43	488.43	ZIST Pump
	RW-10A(75-85)	85	75	454.45	464.45	ZIST Pump

LEGEND

- RESIDENCE
- TRAILS
- ROADWAYS
- WATERWAYS, BROOKS
- GROUND SURFACE ELEVATION CONTOUR
- RW-10 (497.55) — BEDROCK MONITORING WELL WITH GROUNDWATER ELEVATION
- GROUNDWATER CONTOUR LINE RELATIVE TO MEAN SEA LEVEL (DEEP)
- GROUNDWATER FLOW DIRECTION OF DEEP BEDROCK INTERVAL SEPTEMBER 2014 (FT. MSL.) (2–FT CONTOUR INTERVAL)
- FT. MSL. – FEET ABOVE MEAN SEA LEVEL
- APPROXIMATE LIMITS OF PAINT SLUDGE REMOVAL AREAS
- WATER BODY
- STREAM

NOTES:

1. "J" = ESTIMATED VALUE
2. "D" = DILUTION

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RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT
DEEP BEDROCK GROUNDWATER AND MINE WATER BENZENE AND 1,4 DIOXANE CONCENTRATIONS IN THE CMP - AUGUST 2015

SHEET NO. **11**
PROJECT NO. 140802

1" 1/2" 0" 1"

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMC801-S-F-11-BENZENE DIOXANE DEEP CMP.dwg Layout: 11D User: ianka.shishov Nov 23, 2015 - 10:43am

ATTACHMENT B

FIELD SAMPLING DATA SHEETS (ON COMPACT DISC)

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-1
Date:	8/3/15	Sampled By:			
Sampling Time:		Recorded By:			
Weather:	sunny/hot/humid/ 80F	Replicate/Split:			

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

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

FIELD PARAMETERS

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

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-2
Date:	8/12/15	Sampled By:	RJL		
Sampling Time:	12:55	Recorded By:	DJM		
Weather:	sunny / hot / 80F	Replicate/Split:	NA		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low flow bladder pump**		
Casing Diameter:	6"	Screen Interval:	8' to 42'		
Total Depth:	42.35	Pump intake depth:	40'		
Depth to Water:	20.95				
Water Column:	21.40	Total Volume Purged:	1.59 gallons		
Gallons/Foot:	1.470	Pump on:	12:20	Off:	13:15
Gallons in Well:	31.46				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
12:20	0	200	0.00	68.1	48.4	7.51	0.701	23.50	20.95	8.40	
12:25	5	200	0.26	4.80	170.4	6.13	0.126	15.60	20.87	7.28	
12:30	10	200	0.53	6.50	189.0	6.08	0.125	15.20	20.90	7.12	
12:35	15	200	0.79	10.10	210.6	6.05	0.125	15.10	20.90	7.02	
12:40	20	200	1.06	12.20	214.6	6.05	0.125	15.40	20.87	7.02	
12:45	25	200	1.32	14.10	218.1	6.03	0.125	15.50	20.87	7.01	
12:50	30	200	1.59	16.40	224.8	6.05	0.124	14.70	20.90	7.00	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-3
Date:	8/10/15	Sampled By:	RJL/DM		
Sampling Time:	11:50	Recorded By:	RJL/DM		
Weather:	partly sunny / warm / 77F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	Steel	Purge Method:	**Low - Flow Bladder Pump**		
Casing Diameter:	6"	Screen Interval:	9' to 24'		
Total Depth:	23.45	Pump intake depth:	22'		
Depth to Water:	9.88				
Water Column:	13.57	Total Volume Purged:	1.59 gallons		
Gallons/Foot:	1.470	Pump on:	11:10	Off:	12:25
Gallons in Well:	19.95				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:15	0	200	0.00	442.0	7.8	7.12	0.750	20.30	7.95	5.44	
11:20	5	200	0.26	52.70	63.4	6.40	0.750	16.00	7.95	5.14	
11:25	10	200	0.53	53.30	70.7	6.39	0.749	16.00	7.95	5.20	
11:30	15	200	0.79	30.10	74.4	6.38	0.749	16.10	7.95	5.16	
11:35	20	200	1.06	31.60	80.3	6.38	0.749	15.90	7.95	5.13	
11:40	25	200	1.32	28.30	83.0	6.38	0.749	15.70	7.95	5.16	
11:45	30	200	1.59	28.60	84.1	6.39	0.749	15.80	7.95	5.13	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-4
Date:	8/10/15	Sampled By:	DW		
Sampling Time:	14:30	Recorded By:	DW		
Weather:	overcast /warm / 79F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE 013626	Solinist	Horbia U-52	XE9T6BJC

PURGING INFORMATION

Casing Material:	Steel	Purge Method:	**Low-Flow- Bladder Pump**
Casing Diameter:	6"	Screen Interval:	28 to 61
Total Depth:	60.45	Pump intake depth:	45
Depth to Water:	19.55		
Water Column:	40.90	Total Volume Purged:	2.85 gallons
Gallons/Foot:	1.470	Pump on:	0:00 Off: 0:00
Gallons in Well:	60.12		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:45	5	240	0.32	0.0	-67.0	6.74	1.040	14.45	19.60	13.00	
13:50	10	240	0.63	0.00	-71.0	6.72	1.040	13.82	19.85	13.88	
13:55	15	240	0.95	0.00	-73.0	6.72	1.040	13.81	19.90	7.30	
14:00	20	240	1.27	0.00	-73.0	6.70	1.040	13.83	20.04	6.40	
14:05	25	240	1.59	0.00	-74.0	6.71	1.050	13.70	20.11	5.20	
14:10	30	240	1.90	0.00	-75.0	6.71	1.050	13.75	20.25	4.65	
14:15	35	240	2.22	0.00	-77.0	6.70	1.050	13.73	20.30	4.00	
14:20	40	240	2.54	0.00	-80.0	6.72	1.050	13.75	20.35	3.85	
14:25	45	240	2.85	0.00	-83.0	6.71	1.050	13.72	20.42	3.70	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-5
Date:	8/10/15	Sampled By:	DW		
Sampling Time:	10:25	Recorded By:	DW		
Weather:	partly sunny / warm / 77F	Replicate/Split:	MS / MSD		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE 013626	Solinist	Horbia U-52	XE9T6BJC

PURGING INFORMATION

Casing Material:	steel	Purge Method:	**Low-Flow-Bladder Pump**		
Casing Diameter:	6"	Screen Interval:	18' to 63'		
Total Depth:	63.31	Pump intake depth:	50'		
Depth to Water:	4.55				
Water Column:	58.76	Total Volume Purged:	4.12 gallons		
Gallons/Foot:	1.470	Pump on:	09:15:00	Off:	12:00
Gallons in Well:	86.38				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:20	5	240	0.32	0.4	-107.0	6.78	0.864	14.86	4.48	19.86	
9:25	10	240	0.63	0.00	-113.0	6.71	0.799	13.53	4.65	11.84	
9:30	15	240	0.95	0.00	-114.0	6.71	0.791	13.42	4.80	10.45	
9:35	20	240	1.27	0.00	-121.0	6.70	0.784	13.37	4.98	7.50	
9:40	25	240	1.59	0.00	-125.0	6.71	0.783	13.28	5.10	5.63	
9:45	30	240	1.90	0.00	-127.0	6.71	0.785	13.29	5.18	5.55	
9:50	35	240	2.22	0.00	-128.0	6.70	0.786	13.22	5.24	5.54	
9:55	40	240	2.54	0.00	-134.0	6.70	0.789	13.30	5.32	5.54	
10:00	45	240	2.85	0.00	-136.0	6.69	0.790	13.32	5.38	5.40	
10:05	50	240	3.17	0.00	-135.0	6.70	0.794	13.25	5.39	5.31	
10:10	55	240	3.49	0.0	-135.0	6.70	0.793	13.23	5.43	5.25	
10:15	60	240	3.80	0.0	-136.0	6.72	0.795	13.23	5.50	5.05	
10:20	65	240	4.12	0.0	-136.0	6.72	0.798	13.2	5.52	5.00	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-6
Date:	8/6/15	Sampled By:	KL, DW		
Sampling Time:	10:05	Recorded By:	KL, DW		
Weather:	sunny/ warm / 70F	Replicate/Split:	Split / EPA		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	Stainless Steel	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	6"	Screen Interval:	10' to 36'
Total Depth:	34.20	Pump intake depth:	33'
Depth to Water:	11.00		
Water Column:	23.20	Total Volume Purged:	3.57 gallons
Gallons/Foot:	1.470	Pump on:	9:15 Off: 10:40
Gallons in Well:	34.10		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:20	5	150	0.20	44.2	8.0	6.48	0.244	14.02	11.15	0.00	
9:25	10	350	0.92	27.60	13.0	6.40	0.238	12.99	11.30	0.00	
9:30	15	300	1.19	26.00	17.0	6.37	0.234	12.93	11.40	0.00	
9:35	20	300	1.59	25.80	18.0	6.37	0.234	12.82	11.45	0.00	
9:40	25	300	1.98	19.50	19.0	6.36	0.232	12.95	11.54	0.00	
9:45	30	300	2.38	18.10	20.0	6.34	0.233	12.92	11.59	0.00	
9:50	35	300	2.77	17.50	20.0	6.36	0.232	12.88	11.61	0.00	
9:55	40	300	3.17	17.00	22.0	6.33	0.231	12.99	11..64	0.00	
10:00	45	300	3.57	16.50	23.0	6.32	0.231	13.02	11.68	0.00	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good, tab for lock broken on casing	Purge Water Disposal:	To ground
Color:	clear	Turbidity(qualitative):	clear
Odor:	none	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-7
Date:	8/24/15	Sampled By:	DW		
Sampling Time:	12:50	Recorded By:	DW		
Weather:	sunny / hot / humid 80F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	XE9TCBJC

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low Flow Bladder Pump**
Casing Diameter:	4"	Screen Interval:	14' to 42'
Total Depth:	43.10	Pump intake depth:	30'
Depth to Water:	5.27		
Water Column:	37.83	Total Volume Purged:	4.36 gallons
Gallons/Foot:	0.650	Pump on:	11:50 Off: 13:10
Gallons in Well:	24.59		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:55	5	300	0.40	39.2	-26.0	6.93	0.537	13.16	5.30	8.02	
12:00	10	300	0.79	40.80	-28.0	6.93	0.536	13.08	6.58	3.33	
12:05	15	300	1.19	38.60	-27.0	6.91	0.539	13.00	6.61	1.42	
12:10	20	300	1.59	29.50	-26.0	6.94	0.538	12.95	6.62	0.00	
12:15	25	300	1.98	26.70	-26.0	6.95	0.538	12.91	6.62	0.00	
12:20	30	300	2.38	28.40	-26.0	6.92	0.540	12.90	6.62	0.00	
12:25	35	300	2.77	20.30	-31.0	6.91	0.540	12.82	6.62	0.00	
12:30	40	300	3.17	20.00	-27.0	6.90	0.540	12.87	6.62	0.00	
12:35	45	300	3.57	19.50	-26.0	6.91	0.540	12.89	6.63	0.00	
12:40	50	300	3.96	18.30	-25.0	6.92	0.539	12.92	6.63	0.00	
12:45	55	300	4.36	17.8	-26.0	6.91	0.539	12.82	6.64	0.00	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-8
Date:	8/24/15	Sampled By:	NA		
Sampling Time:	NA	Recorded By:	NA		
Weather:	sunny/hot/humid/ 88F	Replicate/Split:	NA		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

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

FIELD PARAMETERS

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

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-10
Date:	8/14/15	Sampled By:	DW		
Sampling Time:	10:20	Recorded By:	DW		
Weather:	sunny / hot/ humid / 75F	Replicate/Split:	DUP - 3- 081415		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder Pump**
Casing Diameter:	4"	Screen Interval:	10' to 20'
Total Depth:	21.10	Pump intake depth:	15'
Depth to Water:	6.90		
Water Column:	14.20	Total Volume Purged:	2.54 gallons
Gallons/Foot:	0.650	Pump on:	9:35 Off: 11:25
Gallons in Well:	9.23		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:40	5	240	0.32	46.0	79.0	7.46	0.115	15.26	6.97	2.80	
9:45	10	240	0.63	19.00	104.0	6.65	0.113	13.61	9.95	2.42	
9:50	15	240	0.95	15.00	116.0	6.43	0.112	13.16	6.93	2.39	
9:55	20	240	1.27	6.90	121.0	6.39	0.111	13.95	6.93	2.39	
10:00	25	240	1.59	7.40	124.0	6.35	0.110	13.07	6.93	2.33	
10:05	30	240	1.90	7.60	128.0	6.33	0.110	13.14	6.93	2.28	
10:10	35	240	2.22	6.90	131.0	6.33	0.110	13.00	6.93	2.34	
10:15	40	240	2.54	6.50	136.0	6.28	0.108	13.10	6.93	2.26	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-11R
Date:	8/16/15	Sampled By:	DW / KL		
Sampling Time:	12:00	Recorded By:	DW / KL		
Weather:	sunny / warm / 73F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder Pump**
Casing Diameter:	2"	Screen Interval:	25' to 40'
Total Depth:	38.55	Pump intake depth:	32'
Depth to Water:	17.84		
Water Column:	20.71	Total Volume Purged:	3.96 gallons
Gallons/Foot:	0.160	Pump on:	11:05 Off: 12:25
Gallons in Well:	3.31		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:10	5	150	0.20	52.5	-99.0	6.86	0.424	20.32	17.86	5.95	
11:15	10	325	0.86	34.50	-97.0	6.90	0.451	18.90	17.89	4.30	
11:20	15	300	1.19	29.50	-94.0	6.92	0.470	17.51	17.90	4.18	
11:25	20	300	1.59	26.80	-92.0	6.95	0.488	15.92	17.90	3.91	
11:30	25	300	1.98	37.50	-97.0	6.94	0.500	14.61	17.94	3.32	
11:35	30	300	2.38	18.10	-99.0	6.95	0.539	12.25	17.96	3.01	
11:40	35	300	2.77	15.80	-100.0	6.94	0.539	12.24	17.94	2.75	
11:45	40	300	3.17	14.90	-100.0	6.93	0.538	12.29	17.30	2.67	
11:50	45	300	3.57	14.10	-100.0	6.93	0.537	12.35	17.93	2.60	
11:55	50	300	3.96	13.80	-100.0	6.94	0.536	12.28	17.93	2.55	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-12
Date:	8/10/15	Sampled By:	RJL		
Sampling Time:	14:45	Recorded By:	RJL		
Weather:		Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	6"	Screen Interval:	9' to 40'		
Total Depth:	39.75	Pump intake depth:	20'		
Depth to Water:	14.34				
Water Column:	25.41	Total Volume Purged:	1.85 gallons		
Gallons/Foot:	1.470	Pump on:	14:00	Off:	15:05
Gallons in Well:	37.35				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:05	0	200	0.00	46.1	150.0	6.37	0.661	16.60	14.50	6.71	
14:10	5	200	0.26	27.20	188.5	5.73	0.920	12.10	14.50	6.14	
14:15	10	200	0.53	24.40	215.0	5.70	0.912	11.70	14.50	6.27	
14:20	15	200	0.79	37.60	221.0	5.70	0.918	11.70	14.50	6.10	
14:25	20	200	1.06	62.30	224.0	5.70	0.918	11.60	14.60	6.07	
14:30	25	200	1.32	62.00	215.0	5.70	0.918	11.50	14.50	5.83	
14:35	30	200	1.59	64.00	232.0	5.70	0.916	11.50	14.50	5.73	
14:40	35	200	1.85	65.70	239.9	5.73	0.917	11.60	14.50	5.73	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-13
Date:	8/10/15	Sampled By:	RJL		
Sampling Time:	9:45	Recorded By:	DJM		
Weather:		Replicate/Split:	Dup-02-081015		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	steel	Purge Method:	**Low Flow Bladdder Pump**
Casing Diameter:	6"	Screen Interval:	8' to 60'
Total Depth:	32.35	Pump intake depth:	28'
Depth to Water:	20.25		
Water Column:	12.10	Total Volume Purged:	1.85 gallons
Gallons/Foot:	1.470	Pump on:	13:35 Off: 14:30
Gallons in Well:	17.79		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:10	5	200	0.26	54.8	65.1	7.65	0.712.	14.20	20.27	5.15	
9:15	10	200	0.53	45.00	83.1	6.24	0.819	12.40	20.27	4.71	
9:20	15	200	0.79	45.10	116.5	6.00	0.742	11.60	20.75	3.36	
9:25	20	200	1.06	43.50	125.3	5.22	0.742	11.70	20.93	3.14	
9:30	25	200	1.32	42.10	122.3	5.22	0.742	11.80	21.01	3.05	
9:35	30	200	1.59	42.30	132.3	5.22	0.750	11.50	21.22	2.95	
9:40	35	200	1.85	40.40	146.4	5.22	0.742	11.60	21.32	2.72	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-14A
Date:	8/13/15	Sampled By:	DJM		
Sampling Time:	10:55	Recorded By:	DJM		
Weather:	sunny / warm / humid / 83F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low Flow Bladder Pump**		
Casing Diameter:	4"	Screen Interval:	4' to 14'		
Total Depth:	16.00	Pump intake depth:	12'		
Depth to Water:	11.20				
Water Column:	4.80	Total Volume Purged:	1.59 gallons		
Gallons/Foot:	0.650	Pump on:	10:20	Off:	11:20
Gallons in Well:	3.12				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
10:20	0	200	0.00	102.0	-55.0	6.41	0/734	15.48	11.40	2.52	
10:25	5	200	0.26	47.40	-89.0	6.38	0.748	15.54	11.40	1.05	
10:30	10	200	0.53	36.80	-64.0	6.11	0.723	16.38	11.80	0.24	
10:35	15	200	0.79	31.20	-62.0	6.10	0.713	16.67	11.80	0.14	
10:40	20	200	1.06	22.60	-60.0	6.00	0.707	16.85	11.90	0.05	
10:45	25	200	1.32	18.00	-58.0	6.08	0.703	16.76	11.90	0.07	
10:50	30	200	1.59	14.70	-58.0	6.08	0.701	17.00	11.90	0.03	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-14B
Date:	8/13/15	Sampled By:	DW		
Sampling Time:	10:20	Recorded By:	DW		
Weather:	sunny / warm /humid / 81F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	XE9TCBJC

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low Flow bladder pump**
Casing Diameter:	4"	Screen Interval:	25' to 35'
Total Depth:	37.30	Pump intake depth:	30'
Depth to Water:	13.63		
Water Column:	23.67	Total Volume Purged:	2.22 gallons
Gallons/Foot:	0.650	Pump on:	9:40 Off: 10:55
Gallons in Well:	15.39		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:45	5	240	0.32	5.1	-78.0	7.29	0.727	13.86	13.90	1.23	
9:50	10	240	0.63	0.80	-93.0	6.96	0.723	13.39	14.21	1.47	
9:55	15	240	0.95	0.50	-99.0	6.92	0.722	13.25	14.40	1.81	
10:00	20	240	1.27	0.50	-101.0	6.91	0.725	13.28	14.45	1.40	
10:05	25	240	1.59	0.00	-101.0	6.90	0.728	13.20	14.54	1.30	
10:10	30	240	1.90	0.00	-100.0	6.86	0.737	13.20	14.60	1.21	
10:15	35	240	2.22	0.00	-99.0	6.85	0.739	13.25	14.67	1.13	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	To ground
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	Yes (rotten egg odor)	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-15B
Date:	8/24/15	Sampled By:	RJL		
Sampling Time:	11:15	Recorded By:	RJL		
Weather:	Sunny / hot / humid / 85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	4"	Screen Interval:	25' to 35'
Total Depth:	31.20	Pump intake depth:	33'
Depth to Water:	3.72		
Water Column:	27.48	Total Volume Purged:	2.32 gallons
Gallons/Foot:	0.650	Pump on:	10:30 Off: 11:35
Gallons in Well:	17.86		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
10:30	0	220	0.00	107.3	48.3	8.19	0.173	14.40	3.77	0.91	
10:35	5	220	0.29	103.20	37.4	8.13	0.174	13.80	3.84	0.25	
10:40	10	220	0.58	73.00	29.2	8.13	0.173	13.90	3.96	0.13	
10:45	15	220	0.87	51.10	8.5	8.12	0.173	13.80	4.18	0.06	
10:50	20	220	1.16	46.00	-3.6	8.11	0.173	14.60	4.21	0.05	
10:55	25	220	1.45	43.30	-10.6	8.10	0.173	14.80	4.23	0.03	
11:00	30	220	1.74	44.90	-11.9	8.10	0.173	14.60	4.24	0.02	
11:05	35	220	2.03	43.80	-12.7	8.10	0.172	14.70	4.25	0.01	
11:10	40	220	2.32	44.80	-13.9	8.09	0.172	14.80	4.27	0.01	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-16
Date:	8/13/15	Sampled By:	DW		
Sampling Time:	15:45	Recorded By:	DW		
Weather:	Sunny / warm / hot / 80F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	XE9TCBJC

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	4"	Screen Interval:	5' to 15'		
Total Depth:	17.95	Pump intake depth:	10'		
Depth to Water:	6.56				
Water Column:	11.39	Total Volume Purged:	2.54 gallons		
Gallons/Foot:	0.650	Pump on:	15:00	Off:	16:05
Gallons in Well:	7.40				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
15:05	5	240	0.32	39.0	-46.0	6.46	0.889	17.20	6.69	3.73	
15:10	10	240	0.63	22.40	-51.0	6.47	0.900	16.56	6.85	2.83	
15:15	15	240	0.95	20.30	-54.0	6.46	0.906	16.27	6.87	2.33	
15:20	20	240	1.27	11.70	-57.0	6.46	0.912	16.10	6.88	1.95	
15:25	25	240	1.59	12.00	-59.0	6.46	0.913	16.06	6.88	1.74	
15:30	30	240	1.90	12.50	-60.0	6.45	0.914	16.04	6.88	1.65	
15:35	35	240	2.22	11.90	-61.0	6.45	0.915	16.02	6.88	1.60	
15:40	40	240	2.54	11.30	-61.0	6.45	0.915	16.00	6.88	1.56	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-17
Date:	8/13/15	Sampled By:	RJL		
Sampling Time:	14:05	Recorded By:	RJL		
Weather:	sunny / hot / humid / 80F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low flow Bladder pump**		
Casing Diameter:	4"	Screen Interval:	3' to 13'		
Total Depth:	17.05	Pump intake depth:	12'		
Depth to Water:	6.30				
Water Column:	10.75	Total Volume Purged:	1.59 gallons		
Gallons/Foot:	0.650	Pump on:	13:30	Off:	14:30
Gallons in Well:	6.99				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:30	0	200	0.00	0.0	-45.0	7.16	0.580	23.00	6.33	6.30	
13:35	5	200	0.26	0.00	-35.0	6.92	0.595	22.28	6.35	5.36	
13:40	10	200	0.53	642.00	-32.0	6.72	0.642	16.64	6.38	0.87	
13:45	15	200	0.79	405.00	-24.0	6.64	0.645	16.51	6.40	0.06	
13:50	20	200	1.06	197.00	-7.0	6.49	0.647	15.47	6.50	0.00	
13:55	25	200	1.32	79.00	-8.0	6.48	0.647	15.47	6.55	0.00	
14:00	30	200	1.59	43.00	-8.0	6.48	0.647	15.47	6.55	0.00	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-18
Date:	8/13/15	Sampled By:	DW		
Sampling Time:	14:25	Recorded By:	DW		
Weather:	sunny / hot / humid / 79F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	XE9TCBJC

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	4"	Screen Interval:	10' to 20'		
Total Depth:	22.00	Pump intake depth:	18'		
Depth to Water:	8.11				
Water Column:	13.89	Total Volume Purged:	2.85 gallons		
Gallons/Foot:	0.650	Pump on:	13:35	Off:	14:45
Gallons in Well:	9.03				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:40	5	240	0.32	65.5	119.0	690	0.335	12.64	8.96	1.76	
13:45	10	240	0.63	55.20	119.0	6.83	0.336	12.21	8.81	1.10	
13:50	15	240	0.95	44.00	119.0	6.80	0.335	12.00	9.00	1.00	
13:55	20	240	1.27	29.90	118.0	6.78	0.335	11.74	9.55	0.95	
14:00	25	240	1.59	24.50	117.0	6.76	0.334	11.63	9.90	0.88	
14:05	30	240	1.90	24.00	118.0	6.73	0.332	11.66	10.28	0.80	
14:10	35	240	2.22	23.70	118.0	6.72	0.332	11.65	10.45	0.74	
14:15	40	240	2.54	23.10	118.0	6.73	0.332	11.69	10.65	0.68	
14:20	45	240	2.85	22.80	118.0	6.72	0.330	11.68	10.84	0.66	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-19
Date:	8/5/15	Sampled By:	KL / DW		
Sampling Time:	10:40	Recorded By:	KL / DW		
Weather:	sunny / hot / humid / 75F	Replicate/Split:	Split - EPA		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	XE9TCBJC

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	5" to 20"		
Total Depth:	21.30	Pump intake depth:	17"		
Depth to Water:	12.94				
Water Column:	8.36	Total Volume Purged:	2.20 gallons		
Gallons/Foot:	0.160	Pump on:	10:00	Off:	11:40
Gallons in Well:	1.34				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
10:02	2	225	0.12	8.2	-94.0	6.43	0.145	17.89	13.09	20.32	
10:07	7	225	0.42	9.60	-91.0	6.39	0.143	17.09	13.10	13.26	
10:12	12	225	0.71	13.40	-88.0	6.36	0.141	16.60	13.11	8.64	
10:17	17	225	1.01	15.90	-85.0	6.35	0.141	16.61	13.11	7.44	
10:22	22	225	1.31	14.80	-85.0	6.35	0.140	16.70	13.13	6.94	
10:27	27	225	1.60	12.50	-83.0	6.35	0.139	16.85	13.13	6.28	
10:32	32	225	1.90	11.80	-85.0	6.36	0.135	16.99	13.13	6.14	
10:37	37	225	2.20	11.40	-86.0	6.37	0.138	17.10	13.13	6.00	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-20A
Date:	8/5/15	Sampled By:	RJL		
Sampling Time:	10:35	Recorded By:	RJL		
Weather:	sunny/ hot /85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	6" to 21"
Total Depth:	20.60	Pump intake depth:	15"
Depth to Water:	16.12		
Water Column:	4.48	Total Volume Purged:	3.24 gallons
Gallons/Foot:	0.160	Pump on:	10:00 Off:
Gallons in Well:	0.72		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
10:00	0	340	0.00	234.0	-65.0	6.22	0.224	14.08	16.51	0.71	
10:05	5	340	0.45	237.00	-64.0	6.11	0.230	12.39	16.72	0.00	
10:10	10	350	0.92	237.00	-73.0	6.18	0.235	11.90	16.73	0.00	
10:15	15	350	1.39	86.70	-76.0	6.21	0.245	11.83	16.75	0.00	
10:20	20	350	1.85	89.50	-79.0	6.24	0.244	11.64	16,75	0.00	
10:25	25	350	2.31	84.60	-82.0	6.26	0.248	11.51	16.76	0.00	
10:30	30	350	2.77	81.20	-84.0	6.28	0.249	11.46	16.76	0.00	
10:35	35	350	3.24	80.40	-83.0	6.30	0.251	11.47	16.76	0.00	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-20B
Date:	8/3/15	Sampled By:	RJL		
Sampling Time:	14:10	Recorded By:	DJM		
Weather:	sunny /hot / humid 81F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	24' to 34'
Total Depth:	36.00	Pump intake depth:	30'
Depth to Water:	15.60		
Water Column:	20.40	Total Volume Purged:	1.78 gallons
Gallons/Foot:	0.160	Pump on:	13:30 Off:
Gallons in Well:	3.26		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:35	0	250	0.00	0.0	-68.0	5.71	0.471	21.23	15.71	2.67	
13:40	5	225	0.30	71.50	-68.0	5.72	0.463	13.60	15.80	0.15	
13:45	10	225	0.59	189.00	-68.0	5.72	0.478	13.82	16.60	0.00	
13:50	15	225	0.89	171.00	-69.0	5.72	0.471	13.98	16.60	0.00	
13:55	20	225	1.19	47.20	-68.0	5.68	0.476	13.08	16.63	0.00	
14:00	25	225	1.49	36.20	-66.0	5.65	0.477	12.53	16.65	0.00	
14:05	30	225	1.78	25.50	-67.0	5.64	0.478	12.50	16.70	0.00	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-21
Date:	8/6/15	Sampled By:	RJL		
Sampling Time:	10:35	Recorded By:	RJL		
Weather:	Sunny / hot / humid / 78F	Replicate/Split:	Dup-01-080615		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	TSCNWAIF / XMJFJ9W4Y

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	6' to 21'		
Total Depth:	20.20	Pump intake depth:	17'		
Depth to Water:	9.20				
Water Column:	11.00	Total Volume Purged:	4.65 gallons		
Gallons/Foot:	0.160	Pump on:	9:40	Off:	11:15
Gallons in Well:	1.76				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:40	0	400	0.00	752.0	142.0	6.38	0.105	14.66	9.34	23.85	
9:45	5	400	0.53	752.00	192.0	6.07	0.105	12.70	9.41	9.66	
9:50	10	400	1.06	800.00	211.0	5.95	0.104	12.63	9.51	7.41	
9:55	15	320	1.27	756.00	221.0	5.90	0.103	13.08	9.46	5.26	
10;00	20	320	1.69	484.00	229.0	5.85	0.104	12.77	9.47	4.57	
10:05	25	320	2.11	630.00	74.0	6.42	0.114	13.72	9.46	8.42	Horiba replaced
10:10	30	320	2.54	237.00	76.0	6.32	0.114	12.25	9.46	8.09	
10:15	35	320	2.96	226.00	76.0	6.30	0.113	12.20	9.46	7.49	
10:20	40	320	3.38	217.00	76.0	6.30	0.113	12.51	9.46	7.54	
10:25	45	320	3.80	209.00	76.0	6.29	0.113	12.60	9.46	7.48	
10:30	50	320	4.23	205.0	76.0	6.29	0.113	12.56	9.46	7.46	
10:35	55	320	4.65	202.0	76.0	6.29	0.113	12.54	9.46	7.51	

OBSERVATIONS DURING SAMPLING

Well Condition:	good	Purge Water Disposal:	To ground
Color:	Clear	Turbidity(qualitative):	Tan sediment
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-22
Date:	8/18/15	Sampled By:			
Sampling Time:	DRY	Recorded By:			
Weather:	sunny / hot / humid/ 78F	Replicate/Split:			

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	PVc	Purge Method:			
Casing Diameter:	2"	Screen Interval:	10' to 20'		
Total Depth:	21.85	Pump intake depth:			
Depth to Water:	21.51				
Water Column:	0.34	Total Volume Purged:			
Gallons/Foot:	0.160	Pump on:		Off:	
Gallons in Well:	0.05				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
				DRY WELL- No Sample							

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-23
Date:	8/18/15	Sampled By:			
Sampling Time:	DRY	Recorded By:			
Weather:	sunny / hot / humid 78F	Replicate/Split:			

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

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

FIELD PARAMETERS

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

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-24
Date:	8/13/15	Sampled By:	DJM		
Sampling Time:	9:50	Recorded By:	DJM		
Weather:	sunny / hot / humid 80F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	5' to 15'		
Total Depth:	18.05	Pump intake depth:	11'		
Depth to Water:	6.20				
Water Column:	11.85	Total Volume Purged:	1.59 gallons		
Gallons/Foot:	0.160	Pump on:	9:10	Off:	10:05
Gallons in Well:	1.90				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:15	0	200	0.00	256.0	-150.0	8.57	0.011	22.88	6.20	20.91	
9:20	5	200	0.26	232.00	-103.0	8.43	0.843	13.56	6.80	11.01	
9:25	10	200	0.53	162.00	-24.0	7.28	0.711	13.08	7.20	8.29	
9:30	15	200	0.79	124.00	-32.0	7.29	0.700	13.53	8.00	5.76	
9:35	20	200	1.06	58.90	-34.0	7.27	0.689	13.88	8.00	4.35	
9:40	25	200	1.32	42.70	-34.0	7.27	0.688	13.83	8.00	3.95	
9:45	30	200	1.59	27.20	-35.0	7.27	0.688	13.83	8.00	3.55	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-25
Date:	8/13/15	Sampled By:	DJM		
Sampling Time:	9:50	Recorded By:	DJM		
Weather:	sunny /hot/ humid/ 82F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	PVc	Purge Method:	**Low Flow bladder pump**		
Casing Diameter:	2"	Screen Interval:	10' to 20'		
Total Depth:	18.35	Pump intake depth:	18'		
Depth to Water:	11.35				
Water Column:	7.00	Total Volume Purged:	1.16 gallons		
Gallons/Foot:	0.160	Pump on:	9:15	Off:	
Gallons in Well:	1.12				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:15	0	125	0.00	0.0	85.0	8.47	0.854	15.55	11.70	7.25	
9:20	5	125	0.17	0.00	81.0	7.45	0.676	14.37	12.01	5.11	
9:25	10	125	0.33	0.00	90.0	7.10	0.587	14.17	12.31	4.82	
9:30	15	125	0.50	0.00	107.0	6.93	0.448	14.23	12.80	5.00	
9:35	25	125	0.83	0.00	117.0	6.89	0.496	14.32	12.95	4.40	
9:40	30	125	0.99	0.00	117.0	6.88	0.499	14.57	13.20	4.32	
9:45	35	125	1.16	0.00	117.0	6.87	0.499	14.57	13.25	4.32	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-26
Date:	8/13/15	Sampled By:			
Sampling Time:	Damaged	Recorded By:			
Weather:	sunny/ hot/ humid / 80F	Replicate/Split:			

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

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

FIELD PARAMETERS

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

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-27
Date:	8/6/15	Sampled By:	DW		
Sampling Time:	15:20	Recorded By:	DW		
Weather:	sunny / hot / humid / 78F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	24.5' to 39.5'		
Total Depth:	40.15	Pump intake depth:	32'		
Depth to Water:	16.05				
Water Column:	24.10	Total Volume Purged:	3.96 gallons		
Gallons/Foot:	0.160	Pump on:	14:25	Off:	
Gallons in Well:	3.86				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:40	5	300	0.40	400.0	-70.0	6.96	0.339	17.35	16.27	14.00	
14:35	10	300	0.79	359.00	-82.0	6.95	0.349	14.39	16.26	9.85	
14:40	15	300	1.19	180.00	-86.0	6.94	0.362	13.85	16.25	6.13	
14:45	20	300	1.59	78.50	-86.0	6.93	0.366	13.52	16.25	3.30	
14:50	25	300	1.98	40.10	-87.0	6.92	0.366	13.40	16.24	1.38	
14:55	30	300	2.38	25.30	-87.0	6.91	0.362	13.58	16.23	0.81	
15:00	35	300	2.77	24.50	-87.0	6.93	0.360	13.69	16.23	0.75	
15:05	40	300	3.17	26.00	-87.0	6.92	0.360	13.61	16.22	0.70	
15:10	45	300	3.57	24.70	-87.0	6.93	0.361	13.57	16.22	0.68	
15:15	50	300	3.96	23.00	-87.0	6.93	0.362	13.48	16.22	0.65	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-28
Date:	8/13/15	Sampled By:	DJM		
Sampling Time:	15:15	Recorded By:	DJM		
Weather:	sunny/ hot/ humid/ 81F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVc	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	3 ' to 18'		
Total Depth:	18.60	Pump intake depth:	10'		
Depth to Water:	2.26				
Water Column:	16.34	Total Volume Purged:	1.59 gallons		
Gallons/Foot:	0.160	Pump on:	14:40	Off:	
Gallons in Well:	2.61				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:40	0	200	0.00	800.0	133.0	6.95	0.850	18.77	2.35	4.92	
14:45	5	200	0.26	612.00	92.0	6.79	0.861	17.70	2.40	0.69	
14:50	10	200	0.53	449.00	32.0	6.72	0.885	16.05	2.40	0.00	
14:55	15	200	0.79	425.00	32.0	6.69	0.888	15.78	2.40	0.00	
15:00	20	200	1.06	150.00	33.0	6.67	0.888	15.63	2.40	0.00	
15:05	25	200	1.32	70.00	34.0	6.69	0.892	15.07	2.40	0.00	
15:10	30	200	1.59	45.00	35.0	6.69	0.892	15.07	2.40	0.00	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-29
Date:	8/12/15	Sampled By:	DW		
Sampling Time:	15:30	Recorded By:	DW		
Weather:	sunny / hot / humid / 77F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	XE9TCBJC

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	18' to 35'
Total Depth:	34.45	Pump intake depth:	32'
Depth to Water:	5.85		
Water Column:	28.60	Total Volume Purged:	2.85 gallons
Gallons/Foot:	0.160	Pump on:	14:40 Off: 15:45
Gallons in Well:	4.58		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (°C)	Depth to Water	Diss. Oxygen	Comments
14:45	5	240	0.32	210.0	4.0	6.87	0.114	14.18	5.80	30.27	
14:50	10	240	0.63	145.00	24.0	6.67	0.110	13.48	5.80	19.00	
14:55	15	240	0.95	99.80	26.0	6.68	0.109	13.05	5.80	15.52	
15:00	20	240	1.27	75.10	27.0	6.56	0.109	13.04	5.81	12.39	
15:05	25	240	1.59	60.50	31.0	6.53	0.109	13.00	5.81	10.95	
15:10	30	240	1.90	54.60	34.0	6.56	0.108	12.67	5.81	10.15	
15:15	35	240	2.22	40.50	40.0	6.51	0.108	12.55	5.81	10.00	
15:20	40	240	2.54	32.30	33.0	6.49	0.111	12.54	5.81	9.82	
15:25	45	240	2.85	29.40	37.0	6.49	0.111	12.53	5.82	9.50	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-30A
Date:	8/18/15	Sampled By:	DW		
Sampling Time:	DRY	Recorded By:	DW		
Weather:	sunny / hot / humid / 79F	Replicate/Split:			

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	PVC	Purge Method:			
Casing Diameter:	2"	Screen Interval:			
Total Depth:	20.70	Pump intake depth:			
Depth to Water:	20.32				
Water Column:	0.38	Total Volume Purged:			
Gallons/Foot:	0.160	Pump on:		Off:	
Gallons in Well:	0.06				

FIELD PARAMETERS

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

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-30B
Date:	8/6/15	Sampled By:	RJL		
Sampling Time:	15:10	Recorded By:	RJL		
Weather:	sunny / hot / humid / 80F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	21' to 36'
Total Depth:	38.50	Pump intake depth:	30'
Depth to Water:	20.61		
Water Column:	17.89	Total Volume Purged:	3.38 gallons
Gallons/Foot:	0.160	Pump on:	14:30 Off: 15:30
Gallons in Well:	2.86		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:30	0	510	0.00	243.0	194.0	6.44	0.288	23.51	21.28	8.34	
14:35	5	480	0.63	207.00	192.0	6.09	0.303	12.81	21.31	1.09	
14:40	10	320	0.85	191.00	200.0	5.89	0.297	12.39	21.34	0.61	
14:45	15	320	1.27	144.00	216.0	5.64	0.289	12.00	21.36	0.34	
14:50	20	320	1.69	93.30	225.0	5.46	0.283	11.94	21.37	0.18	
14:55	25	320	2.11	66.00	233.0	5.34	0.283	11.52	21.37	0.00	
15:00	30	320	2.54	54.40	233.0	5.29	0.283	11.48	21.37	0.00	
15:05	35	320	2.96	51.70	234.0	5.26	0.283	11.36	21.37	0.00	
15:10	40	320	3.38	50.30	234.0	5.26	0.283	11.34	21.37	0.00	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	OB-30C
Date:	8/6/15	Sampled By:	RJL		
Sampling Time:	15:05	Recorded By:	RJL		
Weather:	sunny /hot / humid/ 78F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	40' to 50'		
Total Depth:	52.05	Pump intake depth:	45'		
Depth to Water:	19.95				
Water Column:	32.10	Total Volume Purged:			
Gallons/Foot:	0.160	Pump on:	14:30	Off:	15:25
Gallons in Well:	5.14				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:30	0	200	0.00	69.5	-70.0	8.06	0.314	22.00	20.00	8.27	
14:35	5	200	0.26	0.00	-99.0	8.28	0.384	15.61	20.00	18.77	
14:40	10	200	0.53	0.00	-89.0	8.10	0.379	13.38	20.00	12.17	
14:45	15	200	0.79	0.00	-89.0	8.10	0.383	12.81	20.00	10.50	
14:50	20	200	1.06	0.00	-120.0	8.71	0.372	12.50	20.00	9.07	
14:55	25	200	1.32	0.00	-130.0	8.61	0.366	12.26	20.00	8.88	
15:00	30	200	1.59	0.00	-130.0	8.57	0.366	12.26	20.00	8.51	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-1(64-74)
Date:	8/13/15	Sampled By:	CC		
Sampling Time:		Recorded By:	CC		
Weather:	sunny / hot / humid / 78F	Replicate/Split:			

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**
Casing Diameter:	1"	Screen Interval:	64' to -74'
Total Depth:	74'	Pump intake depth:	69
Depth to Water:	12.88 (9/2/14)		
Water Column:	NA	Total Volume Purged:	
Gallons/Foot:		Pump on:	Off:
Gallons in Well:			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
				Not sampled due to access road issues							

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-1(131-141)
Date:	8/13/15	Sampled By:	CC		
Sampling Time:		Recorded By:	CC		
Weather:	sunny / hot / humid / 83F	Replicate/Split:			

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**
Casing Diameter:	1"	Screen Interval:	131' to 141'
Total Depth:	141'	Pump intake depth:	136'
Depth to Water:	12.60 (9/2/14)		
Water Column:	NA	Total Volume Purged:	
Gallons/Foot:		Pump on:	Off:
Gallons in Well:			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
				Not sampled due to access road issues							

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-2(279-289)
Date:	8/21/15	Sampled By:	CC		
Sampling Time:	13:45	Recorded By:	CC		
Weather:	sunny/ hot / humid / 80F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	279' to 289'		
Total Depth:	289'	Pump intake depth:	284'		
Depth to Water:	12.87 (8/21/15)				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	13:28	Off:	14:24
Gallons in Well:	0.41	PSI at 125	D/R at 10sec /1 min		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:43	15	100	0.40	0.0	-233.0	10.73	1.270	23.73	NA	2.51	

OBSERVATIONS DURING SAMPLING

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

**** Well interval water effervescent.**

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-2(452-462)
Date:	8/25/15	Sampled By:	CC		
Sampling Time:	13:30	Recorded By:	CC		
Weather:	sunny/ hot/ humid/ 80F	Replicate/Split:	MS/MSD		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52CGLR3

PURGING INFORMATION

Casing Material:	PVc	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	452' to 462'		
Total Depth:	462'	Pump intake depth:	457		
Depth to Water:	13.23 (8/21/15)				
Water Column:	Na	Total Volume Purged:	950 ml		
Gallons/Foot:	0.041	Pump on:	13:10	Off:	19:00
Gallons in Well:	0.41	PSI at 200	D/R at 20 sec /45 sec		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:29	19	50	0.25	0.0	-33.0	11.28	3.110	19.43	NA	9.89	
		Submitted only 1 250 ml amber bottle per analysis (total 3 bottles, PCBs, SIM, TCL)									

OBSERVATIONS DURING SAMPLING

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

** Use 1 60 cc nitrogen tank per 60 minutes

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-3(77-87)
Date:	8/6/15	Sampled By:	CC / KL		
Sampling Time:	14:35	Recorded By:	CC / KL		
Weather:	Sunny / hot / humid / 80F	Replicate/Split:	NA		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE 013626	Solinist	Horbia U-52	S52CGLR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1'	Screen Interval:	77' to 87'		
Total Depth:	87.00	Pump intake depth:	82'		
Depth to Water:	14.88				
Water Column:	72.12	Total Volume Purged:			
Gallons/Foot:	0.041	Pump on:	14:14	Off:	15:45
Gallons in Well:	0.41	PSI at 50 psi	D/R at 10 sec / 1 min		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:34	20	75	0.40	0.0	-26.0	5.89	0.384	16.79	NA	2.40	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	To ground
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	Yes	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	159468	Task:	001	Well ID:	RW-3DS(155-160)
Date:	8/25/2015	Sampled By:	CC / DW		
Sampling Time:	8:40	Recorded By:	CC / DW		
Weather:	sunny / hot / humid / 80F	Replicate/Split:	Dup-04-082515		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52CGLR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	155' to 160'		
Total Depth:	160'	Pump intake depth:	157.5		
Depth to Water:	16.52				
Water Column:	NA	Total Volume Purged:	800 ml		
Gallons/Foot:	0.041	Pump on:		Off:	
Gallons in Well:	0.21	PSI at 75 psi	D/R at 15 sec / 1 min		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
8:38	11	100	0.29	8.0	-84.0	10.4	1.640	19.65	NA	1.61	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	NA
Color:	slight yellow	Turbidity(qualitative):	Clear
Odor:	yes	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-3DD(175-180)
Date:	8/10/15	Sampled By:	CC/KL		
Sampling Time:	14:25	Recorded By:	CC/KL		
Weather:	partly sunny / warm / 80F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	175-180		
Total Depth:	180'	Pump intake depth:	177.5		
Depth to Water:	17.02				
Water Column:	NA	Total Volume Purged:	800 ml		
Gallons/Foot:	0.041	Pump on:	14:08	Off:	15:35
Gallons in Well:	0.21	PSI at 85	D/R at 10 sec / 1 min		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:23	15	100	0.40	11.2	-150.0	10.58	0.283	19.40	NA	13.45	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-4(333-343)
Date:	8/24/15	Sampled By:	CC		
Sampling Time:	11:25	Recorded By:	CC		
Weather:	sunny/hot/humid 80F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	333' to 343'		
Total Depth:	343'	Pump intake depth:	338'		
Depth to Water:	31.23				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	11:06	Off:	12:20
Gallons in Well:	0.41				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:24	18	100	0.48	0.0	-15.0	11.4	0.532	16.10	NA	10.90	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-4(393-403)
Date:	8/10/15	Sampled By:	CC / KL		
Sampling Time:	9:40	Recorded By:	CC / KL		
Weather:	sunny/ warm / 70F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**
Casing Diameter:	1"	Screen Interval:	393' to 403'
Total Depth:	403'	Pump intake depth:	398'
Depth to Water:	31.35		
Water Column:	NA	Total Volume Purged:	1600 ml
Gallons/Foot:	0.041	Pump on:	9:15 Off: 10:00
Gallons in Well:	0.41		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:37	22	75	0.44	26.8	124.0	8.25	0.356	18.20	NA	14.48	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	To ground
Color:	Chalky	Turbidity(qualitative):	Cloudy
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-4A(62-72)
Date:	8/10/15	Sampled By:	CC / KL		
Sampling Time:	12:15	Recorded By:	CC / KL		
Weather:	Cloudy/ warm/ 70F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	62' to 72'		
Total Depth:	72'	Pump intake depth:	67'		
Depth to Water:	18.12				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.040	Pump on:	11:40	Off:	13:46
Gallons in Well:	0.41	PSI at 40 D/R at 10 sec / 1 min			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
12:14	34	70	0.63	1.5	51.0	7,40	0.094	18.52	NA	14.75	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-4A(113-123)
Date:	8/24/15	Sampled By:	CC		
Sampling Time:	9:35	Recorded By:	CC		
Weather:	sunny/ hot /humid 75F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE 013626	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	113' to 123'		
Total Depth:	123'	Pump intake depth:	118'		
Depth to Water:	32.55				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	9:10	Off:	10:12
Gallons in Well:	0.41				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:34	24	60	0.38	0.0	194.0	6.75	0.126	15.04	NA	11.11	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-5
Date:	8/5/15	Sampled By:	DW / KL		
Sampling Time:	14:35	Recorded By:	DW / KL		
Weather:	sunny / hot / 85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	XE9TCBJC

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Flow flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	99' to 119'
Total Depth:	121.85	Pump intake depth:	109
Depth to Water:	13.65		
Water Column:	108.20	Total Volume Purged:	1.49 gallons
Gallons/Foot:	0.160	Pump on:	13:33 Off: 15:30
Gallons in Well:	17.31		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:55	5	150	0.20	20.8	-224.0	10.63	0.564	27.50	13.70	2.22	
14:00	10	125	0.33	21.40	-347.0	10.84	0.513	24.90	13.85	6.72	
14:05	15	125	0.50	41.60	-326.0	10.90	0.535	20.20	13.92	6.75	
14:10	20	125	0.66	41.40	-309.0	10.89	0.541	17.40	13.93	6.32	
14:15	25	125	0.83	43.50	-298.0	10.83	0.525	16.48	13.95	5.52	
14:20	30	125	0.99	44.20	-291.0	10.75	0.500	16.18	14.94	5.20	
14:25	35	125	1.16	46.80	-287.0	10.70	0.490	16.09	13.99	5.15	
14:30	40	125	1.32	47.00	-284.0	10.64	0.475	15.95	13.99	5.00	
14:35	45	125	1.49	46.20	-283.0	10.62	0.472	15.75	13.99	5.10	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-5A
Date:	8/24/15	Sampled By:	DW		
Sampling Time:	10:25	Recorded By:	DW		
Weather:	sunny / hot / humid 80F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	XE9TCBJC

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	54' to 74'
Total Depth:	75.60	Pump intake depth:	64'
Depth to Water:	12.91		
Water Column:	62.69	Total Volume Purged:	4.07 gallons
Gallons/Foot:	0.160	Pump on:	9:25 Off: 10:45
Gallons in Well:	10.03		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:30	5	280	0.37	80.1	-41.0	5.83	0.589	15.00	14.80	7.77	
9:35	10	280	0.74	85.20	-32.0	5.81	0.565	14.83	15.00	3.80	
9:40	15	280	1.11	84.50	-30.0	5.96	0.583	14.00	15.65	2.81	
9:45	20	280	1.48	83.90	-28.0	5.94	0.588	13.25	15.80	1.72	
9:50	25	280	1.85	78.30	-25.0	5.95	0.591	13.03	16.30	1.13	
9:55	30	280	2.22	70.80	24.0	6.01	0.590	12.95	17.80	0.00	
10:00	35	280	2.59	65.80	-25.0	6.05	0.584	12.50	18.50	0.00	
10:05	40	280	2.96	44.00	-23.0	6.15	0.571	12.31	18.69	0.00	
10:10	45	280	3.33	41.50	-26.0	6.08	0.595	12.01	19.25	0.00	
10:15	50	280	3.70	38.00	-24.0	6.10	0.580	11.91	19.40	0.00	
10:20	55	280	4.07	36.8	-24.0	6.12	0.589	11.89	19.68	0.00	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-6
Date:	8/6/15	Sampled By:	DJM		
Sampling Time:	10:30	Recorded By:	DJM		
Weather:	Sunny / warm / 75F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	99' to 119'
Total Depth:	122.10	Pump intake depth:	109
Depth to Water:	13.77		
Water Column:	108.33	Total Volume Purged:	1.85 gallons
Gallons/Foot:	1.444	Pump on:	9:33 Off: 11:20
Gallons in Well:	17.33		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:40	0	200	0.00	12.2	-97.0	5.27	0.385	19.68	13.87	7.56	
		Replaced gas tank, resumed at 09:55									
9:55	5	200	0.26	144.00	-91.0	5.58	0.461	16.37	13.80	2.82	
10:00	10	200	0.53	141.00	-89.0	5.76	0.532	14.04	13.80	0.54	
10:05	15	200	0.79	89.20	-89.0	5.76	0.549	12.66	13.80	0.36	
10:10	20	200	1.06	31.20	-91.0	5.72	0.547	12.29	13.80	0.14	
10:15	25	200	1.32	16.80	-92.0	5.67	0.544	12.00	13.80	0.01	
10:20	30	200	1.59	12.30	-92.0	5.64	0.540	12.13	13.80	0.00	
10:25	35	200	1.85	17.90	-92.0	5.61	0.542	12.12	13.80	0.00	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-6A
Date:	8/4/15	Sampled By:	RJL / DJM		
Sampling Time:	14:15	Recorded By:	RJL / DJM		
Weather:	sunny / hot/ humid / 90F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE 013626	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	58' to 78'		
Total Depth:	80.25	Pump intake depth:	68		
Depth to Water:	14.32				
Water Column:	65.93	Total Volume Purged:	1.59 gallons		
Gallons/Foot:	0.160	Pump on:	12:35	Off:	14:35
Gallons in Well:	10.55				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:40	0	200	0.00	34.3	-84.0	6.49	0.540	19.05	14.90	6.69	
13:45	5	200	0.26	34.30	-84.0	6.20	0.607	19.25	14.90	2.70	
13:50	10	200	0.53	34.30	-60.0	6.05	0.604	13.87	14.90	1.13	
13:55	15	200	0.79	34.30	-48.0	5.82	0.624	13.14	14.97	0.67	
14:00	20	200	1.06	34.30	-44.0	5.81	0.625	13.22	14.95	0.63	
14:05	25	200	1.32	34.30	-46.0	5.76	0.620	13.08	14.97	0.32	
14:10	30	200	1.59	34.30	-43.0	5.69	0.619	13.01	14.98	0.35	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-7
Date:	9/4/15	Sampled By:	RJL		
Sampling Time:	10:05	Recorded By:	RJL		
Weather:	Sunny / hot/ humid / 85F	Replicate/Split:	MS / MSD		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	99' to 119'
Total Depth:	120.65	Pump intake depth:	109
Depth to Water:	5.82		
Water Column:	114.83	Total Volume Purged:	1.85 gallons
Gallons/Foot:	0.160	Pump on:	9:20 Off: 10:30
Gallons in Well:	18.37		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:25	0	200	0.00	8.5	-124.0	8.5	0.126	21.34	5.80	20.04	
9:30	5	200	0.26	12.20	-48.0	7.32	0.117	13.38	5.85	15.06	
9:35	10	200	0.53	65.80	-35.0	6.80	0.112	14.60	5.83	11.02	
9:40	15	200	0.79	41.50	-24.0	6.88	0.113	13.61	5.90	11.49	
9:45	20	200	1.06	33.60	-19.0	6.77	0.110	13.44	5.90	10.10	
9:50	25	200	1.32	38.00	-15.0	6.72	0.110	13.46	5.90	10.21	
9:55	30	200	1.59	36.10	-16.0	6.70	0.110	13.31	5.90	9.32	
10:00	35	200	1.85	49.80	-15.0	6.70	0.110	13.12	5.90	9.63	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-8A(163-173)
Date:	8/18/15	Sampled By:	CC		
Sampling Time:	14:15	Recorded By:	CC		
Weather:	sunny / hot / 80F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**
Casing Diameter:	1"	Screen Interval:	163' to 173'
Total Depth:	173.00	Pump intake depth:	163'
Depth to Water:	62.26 (8/18/2015)		
Water Column:	NA	Total Volume Purged:	1600 ml
Gallons/Foot:	0.041	Pump on:	13:53 Off: 15:17
Gallons in Well:	0.41		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:13	20	150	0.79	0.0	-16.0	7.63	0.493	19.89	NA	9.25	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	To ground
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	Slight	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-8(204-214)
Date:	8/19/15 / 8/20/15	Sampled By:	CC		
Sampling Time:	dried out / 11:30	Recorded By:	CC		
Weather:	sunny / hot / humid 85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	204' to 214'		
Total Depth:	214.00	Pump intake depth:	204'		
Depth to Water:	66.17 (8/18/2015)				
Water Column:	NA	Total Volume Purged:	1450ml to dry		
Gallons/Foot:	0.041	Pump on: 13:15 on 8/19/15	11:23 on 8/20/	Off:	13:45 on 8/19/15
Gallons in Well:	0.41	PSI at 110	D/R at 15 sec / 1 min		12:25 on 8/20/15

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:45		8/19/2015 Well dried out, purged 1450 ml									
11:23		8/20/2015 Well sampled, collected all **except** 1 PCB, ALK, Chloride, sulfate, dissolved metals									
				Field parameters not taken due to low volume							

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-8A(47-57)
Date:	8/18/15	Sampled By:	CC		
Sampling Time:	Dry	Recorded By:	CC		
Weather:	Sunny / hot / humid 85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	PVc	Purge Method:	**ZIST System**
Casing Diameter:	1"	Screen Interval:	47' to 57'
Total Depth:	57.00	Pump intake depth:	47'
Depth to Water:	Dry		
Water Column:	NA	Total Volume Purged:	none - dry
Gallons/Foot:	0.041	Pump on:	Off:
Gallons in Well:	0.41		

FIELD PARAMETERS

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

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-9A(25-35)
Date:	8/20/15	Sampled By:	CC		
Sampling Time:	Dry	Recorded By:	CC		
Weather:	sunny/ hot/humid / 80F	Replicate/Split:	NA		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	PVC	Purge Method:			
Casing Diameter:	1"	Screen Interval:	25' to 35'		
Total Depth:	35.00	Pump intake depth:	30		
Depth to Water:	22.84				
Water Column:	NA	Total Volume Purged:	None-Dry		
Gallons/Foot:	0.041	Pump on:	15:05	Off:	15:09
Gallons in Well:	0.41				

FIELD PARAMETERS

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

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-9A(85-95)
Date:	8/20/15 & 08/21/15	Sampled By:	CC		
Sampling Time:	10:45 on 8/21/15	Recorded By:	CC		
Weather:	sunny / hot /humid/ 85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	85' to 95'		
Total Depth:	95.00	Pump intake depth:	90		
Depth to Water:	56.14				
Water Column:	NA	Total Volume Purged:	650 ml		
Gallons/Foot:	0.041	Pump on: 8/20/15 at 15:10		Off:	8/20/15 at 15:20
Gallons in Well:	0.41	8/21/15 at 10:40			8/21/15 at 12:05

PSI at 50 D/R 10 sec/ 1 min

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
15:10	pump on										
15:20	pump off			**well dry after 650 ml purged**							
10:45	pump on	**Well sampled, not enough volume for field parameters**									
10:55	pump off										

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-9(139-149)
Date:	8/19/15	Sampled By:	CC		
Sampling Time:	Dry	Recorded By:	CC		
Weather:	sunny/ hot/ humid/ 85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	PVC	Purge Method:		**ZIST system**		
Casing Diameter:	1"	Screen Interval:		139' to 149'		
Total Depth:	149'	Pump intake depth:		144		
Depth to Water:	59.05					
Water Column:	NA	Total Volume Purged:		650 ml - dry		
Gallons/Foot:	0.041		8/19/2015	15:10	Off:	15:17
Gallons in Well:	0.41	PSI at 100 D/	8/20/2015	13:35		13:37
		D/R at 10 sec/ 1 min				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
	8/19/2015										
15:15		**Well went dry -purged 650 ml**									
	8/20/2015										
13:35		**Well still dry - no sample taken**									

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-9(106-216)
Date:	8/20/15 & 8/21/15	Sampled By:	CC		
Sampling Time:	09:25 on 08/21/15	Recorded By:	CC		
Weather:	sunny / hot/ humid 85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

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

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	206' to 216'		
Total Depth:	216"	Pump intake depth:	211		
Depth to Water:	61.26				
Water Column:	NA	Total Volume Purged:	1450 m l - dry		
Gallons/Foot:	0.041	Pump on:	14:20	Off:	14:55
Gallons in Well:	0.41	PSI at 100 D/R at 10 sec/1 min	9:25		10:00

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
	8/20/2015										
14:20	pump on										
14:55	pump off		**Well dry - purged 1450 ml**								
	8/21/2015										
9:15	pump on										
10:00	Pump off		**Well went dry- sampled only 4 VOAs, 2 TAL Metals, 1 Cyanide, 1 SVOC-TCL, 1 SVOC-SIM, 1 PCBs**								

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-10A(51-61)
Date:	8/19/15 & 8/20/15	Sampled By:	CC		
Sampling Time:	8/20/15 at 09:15	Recorded By:	CC		
Weather:	sunny/ hot/humid / 85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	51' to 61'		
Total Depth:	61.00	Pump intake depth:	56'		
Depth to Water:	39.33 (8/19/15)				
Water Column:	NA	Total Volume Purged:	1600ml		
Gallons/Foot:	0.041	Pump on:	11:05	Off:	11:50
Gallons in Well:	0.41	PSI at 30 D/R 10 sec/ 1 min	9:05		10:48

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
	8/19/2015										
11:42	37	70	0.68	0.00	-22.0	7.34	0.467	18.14	NA	11.14	
			Well dry -purged 1600 ml								
	8/20/2015										
9:15		**Well went dry - sampled 4 VOAs**									

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-10A(75-85)
Date:	8/18/15	Sampled By:	CC		
Sampling Time:	10:25	Recorded By:	CC		
Weather:	sunny/hot/humid/ 85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	75' to 85'		
Total Depth:	85.00	Pump intake depth:	80		
Depth to Water:	39.88 (8/18/15)				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	9:51	Off:	11:13
Gallons in Well:	0.41	PSI at 60			
			D/R at 15 sec / 30 sec		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
10:20	24	80	0.51	0.0	167.0	6.91	0.352	15.91	NA	3.88	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-10(120-130)
Date:	8/18/2015 & 08/19/15	Sampled By:	CC		
Sampling Time:	9:25	Recorded By:	CC		
Weather:	sunny / hot / humid /85F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:			
Casing Diameter:	1"	Screen Interval:	120' to 130'		
Total Depth:	130"	Pump intake depth:	125		
Depth to Water:	41.21 (08/18/15)				
Water Column:	NA	Total Volume Purged:	1700 ml		
Gallons/Foot:	0.041	Pump on:	12:10	Off:	12:28
Gallons in Well:	0.41	PSI at 80 D/R at 10 sec/1 min	9:25		10:44

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
	8/18/2015										
12:10	pump on										
12:28	37	75	0.73	5.50	-51.0	11.12	0.704	17.10	NA	3.57	
	8/19/2015										
9:25		**Full sample taken from well**									

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-10(185-195)
Date:	8/18/15	Sampled By:	CC		
Sampling Time:	11:35	Recorded By:	CC		
Weather:	Sunny / hot/ humid 85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	185' to 195'		
Total Depth:	195'	Pump intake depth:	190		
Depth to Water:	42.20 (8/18/15)				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	11:18	Off:	!!;56
Gallons in Well:	0.41	PSI at 80 D/R 10 sec/ 1 min			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:30	12	100	0.32	2.5	-41.0	11.13	0.517	16.99	NA	1.61	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-11S(236-241)
Date:	8/17/15	Sampled By:	CC		
Sampling Time:	15:15	Recorded By:	CC		
Weather:	Sunny/ hot / humid / 90F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	236' to 241'		
Total Depth:	241.00	Pump intake depth:	238.5		
Depth to Water:	9.68 (8/17/2015)				
Water Column:	NA	Total Volume Purged:	800 ml		
Gallons/Foot:	0.041	Pump on:	15:00	Off:	15:32
Gallons in Well:	0.41	PSI at 90 D/R at 10 sec/ 1 min			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
15:13	13	150	0.52	0.0	101.0	7.18	0.105	17.75	NA	10.43	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-11D(262-267)
Date:	8/25/2015 & 8/26/2015	Sampled By:	CC / RJL		
Sampling Time:	8/26/105 at 10:30	Recorded By:	CC / RJL		
Weather:	Sunny/ hot / humid / 88F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:			**ZIST system**		
Casing Diameter:	1"	Screen Interval:			262' to 267'		
Total Depth:	267'	Pump intake depth:			262'		
Depth to Water:	9.93 (8/17/2015)						
Water Column:	NA	Total Volume Purged:			800 ml		
Gallons/Foot:	0.041	Pump on:	8/25/2015	11:29	Off:	12:16	
Gallons in Well:	0.41	PSI at 110 D/R at 10 sec/ 1 min		8/26/2015	8:53	10:56	

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
	8/25/2015										
12:04		100		32.10	-141.0	12.57	11..2	23.10	NA	2.50	
12:05		**Well dried out after 800 ml purge - no sample**									
	8/26/2015										
10:30		**Well sampled**									

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-12(55-65)
Date:	8/17/15	Sampled By:	CC		
Sampling Time:	11:17	Recorded By:	CC		
Weather:	Sunny/ hot /humid/ 85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	55' to 65'		
Total Depth:	65.00	Pump intake depth:	60		
Depth to Water:	6.15				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	10:10	Off:	!3:30
Gallons in Well:	0.41	PSI at 40 D/R at 15 sec/ 1 min.			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:20	60	50	0.79	0.0	-100.0	11.05	1.480	26.10	NA	1.24	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-12(130-140)
Date:	8/12/15	Sampled By:	CC		
Sampling Time:	14:20	Recorded By:	CC		
Weather:	sunny / hot / humid / 85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	130' to 140'		
Total Depth:	140'	Pump intake depth:	135'		
Depth to Water:	6.08				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	14:35	Off:	16:00
Gallons in Well:	0.41	PSI at 60 D/R at 10 sec/ 1 min			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
15:49	14	100	0.37	2.9	-78.0	11.5	1.140	20.30	NA	12.51	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-13(71-91)
Date:	8/24/15	Sampled By:	RJL		
Sampling Time:	13:35	Recorded By:	RJL		
Weather:	Sunny / hot/ humid / 85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow bladder pump**		
Casing Diameter:	2"	Screen Interval:	71' to 91'		
Total Depth:	93.40	Pump intake depth:	81		
Depth to Water:	14.32				
Water Column:	79.08	Total Volume Purged:	2.11 gallons		
Gallons/Foot:	0.160	Pump on:	12:55	Off:	14:00
Gallons in Well:	12.65				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
12:55	0	200	0.00	41.5	96.2	7.67	0.629	15.50	13.16	3.31	
13:00	5	200	0.26	85.10	98.7	7.90	0.634	13.60	14.28	1.46	
13:05	10	200	0.53	101.50	98.9	7.94	0.633	13.20	14.56	1.09	
13:10	15	200	0.79	114.60	99.3	7.93	0.629	15.10	14.81	0.95	
13:15	20	200	1.06	115.40	98.3	7.93	0.632	16.80	15.63	0.83	
13:20	25	200	1.32	132.20	98.3	7.91	0.631	16.80	16.21	0.81	
13:25	30	200	1.59	146.70	97.2	7.89	0.629	16.30	16.94	0.75	
13:30	35	200	1.85	144.80	97.3	7.88	0.626	16.20	17.26	0.70	
13:35	40	200	2.11	147.20	97.5	7.87	0.625	16.10	17.41	0.68	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-13(100-120)
Date:	8/12/15 & 08/13/15	Sampled By:	KL / DW		
Sampling Time:	9:15	Recorded By:	KL / DW		
Weather:	sunny / hot / humid / 85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	100' to 120'		
Total Depth:	120.00	Pump intake depth:	110		
Depth to Water:	7.21				
Water Column:	NA	Total Volume Purged:	3200 ml		
Gallons/Foot:	0.041	Pump on:	9:09	Off:	10:19
Gallons in Well:	0.41	PSI at 50 D/R at 10 sec/ 1 min			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
	8/12/2015		**No sample, well dried out, 3200 ml purged**								
	8/13/2015										
9:14		**Full sample taken at well, field parameters not taken, low volume**									

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	RW-13(150-170)
Date:	8/12/15	Sampled By:	KL/ DW		
Sampling Time:	11:10	Recorded By:	KL/ DW		
Weather:	Sunny/ hot/ humid/ 85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	150' to 170'		
Total Depth:	170.00	Pump intake depth:	160		
Depth to Water:	2.24				
Water Column:	NA	Total Volume Purged:	2400 ml		
Gallons/Foot:	0.041	Pump on:	10:30	Off:	11:30
Gallons in Well:	0.41	PSI at 70 D/R at 10 sec/ 1 min.			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:10	40	75	0.79	2.1	-65.0	7.73	0.339	21.04	NA	9.00	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	SC-1
Date:	8/4/15	Sampled By:	RJL/ DJM		
Sampling Time:	10:40	Recorded By:	RJL / DJM		
Weather:		Replicate/Split:			

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	99' to 109' (angled)
Total Depth:	67.77	Pump intake depth:	
Depth to Water:	15.28		
Water Column:	52.49	Total Volume Purged:	1.59 gallons
Gallons/Foot:	0.160	Pump on:	10:05 Off: 11:00
Gallons in Well:	8.40		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
10:07	2	100	0.05	30.5	-93.0	6.2	0.187	25,90	15.30	7.44	
10:10	5	200	0.26	30.50	-82.0	5.90	0.248	19.49	15.35	2,52	
10:15	10	200	0.53	30.50	-77.0	5.93	0.353	16.91	15.35	1,67	
10:20	15	200	0.79	30.50	-36.0	6.87	0.358	16.31	15.35	0.73	
10:25	20	200	1.06	30.50	-33.0	5.83	0.390	16.77	15.35	0.34	
10:30	25	200	1.32	30.50	-33.0	5.80	0.390	16.77	15.35	0.42	
10:35	30	200	1.59	30.50	-31.0	5.83	0.394	17.07	15.35	0.31	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	SC-2
Date:	8/12/15	Sampled By:	RJL		
Sampling Time:	14:25	Recorded By:	RJL		
Weather:	sunny /hot /humid /80F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow bladder Pump**
Casing Diameter:	2"	Screen Interval:	47' to 67'
Total Depth:	69.75	Pump intake depth:	66'
Depth to Water:	60.14		
Water Column:	9.61	Total Volume Purged:	1.59 gallons
Gallons/Foot:	0.160	Pump on:	13:50 Off: 15:00
Gallons in Well:	1.54		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:50	0	200	0.00	13.8	124.1	6.58	0.484	20.50	60.14	3.29	
13:55	5	200	0.26	13.60	121.3	6.52	0.481	19.80	60.15	2,69	
14:00	10	200	0.53	14.20	128.3	6.51	0.481	18.00	60.28	2.08	
14:05	15	200	0.79	18.80	140.0	6.44	0.476	16.60	60.28	1.10	
14:10	20	200	1.06	18.20	146.7	6.47	0.475	15.80	60.28	0.88	
14:15	25	200	1.32	22.40	132.2	6.47	0.759	15.80	60.28	0.82	
14:20	30	200	1.59	23.60	136.9	6.47	0.479	15.60	60.28	0.79	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	Cannon Mine Shaft-100
Date:	8/17/15	Sampled By:	DW / RJL		
Sampling Time:	15:10	Recorded By:	DW / RJL		
Weather:	sunny/ hot /humid/ 82F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	XE9TCBJC

PURGING INFORMATION

Casing Material:	steel	Purge Method:	**Low flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:			
Total Depth:	275.00	Pump intake depth:	100		
Depth to Water:	10.00				
Water Column:	265	Total Volume Purged:	2.11 gallons		
Gallons/Foot:	NA	Pump on:	14:20	Off:	15:25
Gallons in Well:	NA				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:25	0	200	0.00	25.0	-69.0	6.78	0.811	24.87	10.01	7.67	
14:30	5	200	0.26	24.40	-81.0	6.70	0.861	17.81	10.02	7.18	
14:35	10	200	0.53	23.10	-83.0	6.71	0.890	16.25	10.02	4.44	
14:40	15	200	0.79	22.80	-85.0	6.70	0.900	16.00	10.01	4.00	
14:45	20	200	1.06	24.90	-100.0	6.70	0.906	15.50	10.05	4.14	
14:50	25	200	1.32	23.00	-97.0	6.69	0.909	14.86	10.04	4.00	
14:55	30	200	1.59	25.70	-95.0	6.68	0.910	14.55	10.04	3.85	
15:00	35	200	1.85	26.80	-91.0	6.69	0.911	14.52	10.04	3.49	
15:05	40	200	2.11	28.50	-89.0	6.69	0.914	14.49	10.04	3,20	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	Cannon Mine Shaft-50
Date:	8/14/15	Sampled By:	RJL		
Sampling Time:	10:25	Recorded By:	RJL		
Weather:	sunny/ hot /humid/ 82F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	steel	Purge Method:	**Low flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	
Total Depth:	275.00	Pump intake depth:	50
Depth to Water:	10.00		
Water Column:	265	Total Volume Purged:	1.59 gallons
Gallons/Foot:	NA	Pump on:	9:50 Off: 10:40
Gallons in Well:	NA		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:50	0	200	0.00	13.6	-46.0	6.54	0.108	16.80	10.00	3.46	
9:55	5	200	0.26	21.10	-47.8	6.57	0.109	16.30	10.00	2.62	
10:00	10	200	0.53	47.30	-48.9	6.45	0.107	16.80	10.00	2.47	
10:05	15	200	0.79	23.70	-46.1	6.46	0.107	16.80	10.00	2.36	
10:10	20	200	1.06	16.80	-50.8	6.48	0.106	16.80	10.00	2.26	
10:15	25	200	1.32	16.20	-60.7	6.46	0.104	16.80	10.00	2.28	
10:20	30	200	1.59	16.10	-52.6	6.46	0.104	16.70	10.00	2.23	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	Cannon Mine Shaft-275
Date:	8/18/15	Sampled By:	DW		
Sampling Time:	13:20	Recorded By:	DW		
Weather:	sunny/ hot /humid/ 82F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	XE9TCBJC

PURGING INFORMATION

Casing Material:	steel	Purge Method:	**Low flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	
Total Depth:	275.00	Pump intake depth:	275
Depth to Water:	10.00		
Water Column:	265	Total Volume Purged:	6.34 gallons
Gallons/Foot:	NA	Pump on:	12:00 Off: 13:40
Gallons in Well:	NA		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
12:05	5	320	0.42	67.9	-72.0	6.67	0.968	15.10	10.00	19.45	
12:10	10	320	0.85	97.30	-69.0	6.60	0.971	14.75	10.00	9.98	
12:15	15	320	1.27	240.00	-69.0	6.56	0.969	15.94	10.00	5.81	
12:20	20	320	1.69	150.00	-100.0	6.60	0.950	16.20	10.00	4.48	
12:25	25	320	2.11	93.50	-107.0	6.78	0.940	16.47	10.00	3.72	
12:30	30	320	2.54	88.60	-88.0	6.70	0.953	16.21	10.00	3.65	
12:35	35	320	2.96	90.00	-85.0	6.62	0.983	14.40	10.00	3.58	
12:40	40	320	3.38	80.50	-80.0	6.64	0.981	13.66	10.00	3.47	
12:45	45	320	3.81	77.50	-79.0	6.65	0.955	13.60	10.00	3.31	
12:50	50	320	4.23	75.60	-80.0	6.67	0.956	13.70	10.00	3.24	
12:55	55	320	4.65	77.4	-78.0	6.63	0.950	14.05	10.00	3.11	
13:00	60	320	5.07	78.9	-81.0	6.65	0.943	14.31	10.00	2.89	
13:05	65	320	5.50	80.1	-85.0	6.67	0.933	14.28	10.00	2.78	
13:10	70	320	5.92	81.7	-84.0	6.68	0.925	14.4	10.00	2.67	
13:15	75	320	6.34	80.1	-83.0	6.68	0.920	14.39	10.00	2.5	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	Cannon Mine Shaft-160
Date:	8/17/15	Sampled By:	DW / RJL		
Sampling Time:	16:45	Recorded By:	DW / RJL		
Weather:	sunny/ hot /humid/ 82F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	XE9TCBJC

PURGING INFORMATION

Casing Material:	steel	Purge Method:	**Low flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:			
Total Depth:	275.00	Pump intake depth:	160		
Depth to Water:	10.02				
Water Column:	265	Total Volume Purged:	4.62 gallons		
Gallons/Foot:	NA	Pump on:	15:50	Off:	17:00
Gallons in Well:	NA				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
15:55	5	350	0.46	74.9	-83.0	6.73	0.921	13.44	10.01	11.74	
16:00	10	350	0.92	32.50	-80.0	6.72	0.927	13.10	10.01	6.56	
16:05	15	350	1.39	35.00	-82.0	6.68	0.923	13.00	10.01	4.00	
16:10	20	350	1.85	38.00	-79.0	6.67	0.936	12.80	10.01	2.87	
16:15	25	350	2.31	41.80	-76.0	6.67	0.940	12.68	10.01	2.48	
16:20	30	350	2.77	39.90	-76.0	6.64	0.940	12.51	10.01	2.09	
16:25	35	350	3.24	37.20	-80.0	6.68	0.938	12.53	10.01	2.08	
16:30	40	350	3.70	36.10	78.0	6.67	0.940	12.47	10.01	2.11	
16:35	45	350	4.16	36.30	-79.0	6.61	0.941	12.40	10.01	2.08	
16:40	50	350	4.62	37.00	-77.0	6.61	0.940	12.42	10.01	2.06	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	Peters Mine Shaft-50
Date:	8/12/15	Sampled By:	RJL		
Sampling Time:	10:05	Recorded By:	RJL		
Weather:	Sunny / warm /75F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE 013626	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	Steel	Purge Method:	**Low Flow Bladder Pump**		
Casing Diameter:	2"	Screen Interval:			
Total Depth:	230.00	Pump intake depth:	50		
Depth to Water:	8.92				
Water Column:	221.08	Total Volume Purged:	2.22 gallons		
Gallons/Foot:	NA	Pump on:	9:30	Off:	10:20
Gallons in Well:	NA				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:30	0	240	0.00	42.0	-341.2	7.33	0.923	17.30	8.92	1.85	
9:35	5	240	0.32	45.10	-365.0	7.30	0.901	15.50	8.92	2.03	
9:40	10	240	0.63	50.70	-375.0	7.30	0.843	14.80	8.92	2.99	
9:45	15	240	0.95	44.20	-288.0	6.94	0.731	15.00	8.92	2.77	
9:50	20	240	1.27	32.40	-227.0	6.58	0.682	14.70	8.92	2.81	
9:55	25	240	1.59	25.10	-204.0	6.48	0.668	14.80	8.92	2.75	
10:00	30	240	1.90	24.20	-201.6	6.46	0.661	14.70	8.92	2.77	
10:05	35	240	2.22	23.40	-197.8	6.45	0.659	14.80	8.92	2.73	

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	Peters Mine Shaft-180
Date:	8/17/15	Sampled By:	DW/ RJL		
Sampling Time:	12:05	Recorded By:	DW/ RJL		
Weather:	Sunny / warm /85F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	Steel	Purge Method:	**Low Flow Bladder Pump**		
Casing Diameter:	2"	Screen Interval:			
Total Depth:	230.00	Pump intake depth:	180		
Depth to Water:	8.98				
Water Column:	221.02	Total Volume Purged:	4.76 gallons		
Gallons/Foot:	NA	Pump on:	11:15	Off:	12:20
Gallons in Well:	NA				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:20	5	400	0.53	109.0	-100.0	7.23	0.457	18.99	8.98	13.09	
11:25	10	400	1.06	75.30	-99.0	6.25	0.596	18.90	8.98	13.95	
11:30	15	400	1.59	51.40	-98.0	6.29	0.471	18.84	8.98	14.30	
11:35	20	400	2.11	42.30	-97.0	6.29	0.466	18.71	8.98	14.42	
11:40	25	400	2.64	35.30	-96.0	6.29	0.462	18.38	8.98	9.88	
11:45	30	400	3.17	41.00	-96.0	6.27	0.452	18.06	8.98	9.00	
11:50	35	400	3.70	38.50	-96.0	6.26	0.441	18.00	8.98	8.81	
11:55	40	400	4.23	36.80	-96.0	6.26	0.429	17.81	8.98	8,50	
12:00	45	400	4.76	35.00	-95.0	6.27	0.424	17.75	8.98	8.03	
			Partial blockage in well tagged at 50 ft / 120 ft / 160 ft								

OBSERVATIONS DURING SAMPLING

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

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID:	Peters Mine Shaft-230
Date:	8/18/15	Sampled By:	DW/ RJL		
Sampling Time:	10:05	Recorded By:	DW/ RJL		
Weather:	Sunny / warm /80F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	Steel	Purge Method:	**Low Flow Bladder Pump**		
Casing Diameter:	2"	Screen Interval:			
Total Depth:	230.00	Pump intake depth:	230		
Depth to Water:	9.05				
Water Column:	220.95	Total Volume Purged:	4.28 gallons		
Gallons/Foot:	NA	Pump on:	10:00	Off:	11:05
Gallons in Well:	NA				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
10:05	5	360	0.48	14.3	-45.0	6.8	0.096	14.86	9.05	22.75	
10:10	10	360	0.95	35.40	-97.0	6.46	0.847	14.80	9.04	9.85	
10:15	15	360	1.43	18.00	-89.0	6.33	0.913	15.18	9.04	5.60	
10:20	20	360	1.90	11.00	-90.0	6.33	0.929	15.22	9.03	4.77	
10:25	25	360	2.38	8.50	-90.0	6.31	0.938	15.47	9.02	3.10	
10:30	30	360	2.85	0.00	-90.0	6.30	0.928	15.62	9.02	2.49	
10:35	35	360	3.33	0.00	-93.0	6.30	0.945	15.50	9.02	2.37	
10:40	40	360	3.80	0.00	-94.0	6.31	0.945	15.57	9.02	2.10	
10:45	45	360	4.28	0.00	-95.0	6.29	0.941	15.52	9.02	2.00	
			Partial blockage in well tagged at 50 ft / 120 ft / 160 ft								

OBSERVATIONS DURING SAMPLING

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

ATTACHMENT C

LABORATORY REPORTS (ON COMPACT DISC)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-84420-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Tim Roeper

Authorized for release by:
9/11/2015 2:28:02 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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

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

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

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Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84420-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-84420-1	SC-1-080415	Water	08/04/15 10:40	08/06/15 08:50
490-84420-2	RW-6A-080415	Water	08/04/15 14:15	08/06/15 08:50
490-84420-3	TB-01-080515	Water	08/04/15 01:00	08/06/15 08:50

Job ID: 490-84420-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 490-84420-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 8/6/2015 8:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.8º C and 1.3º C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples SC-1-080415 (490-84420-1), RW-6A-080415 (490-84420-2) and TB-01-080515 (490-84420-3) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/16/2015.

1,2,4-Trichlorobenzene and Methylene Chloride were detected in method blank MB 490-273547/10 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Cyclohexane failed the recovery criteria high for LCS 490-273547/8. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

Job ID: 490-84420-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

VOLATILE ORGANIC COMPOUNDS (GC-MS SIM)

Samples SC-1-080415 (490-84420-1), RW-6A-080415 (490-84420-2) and TB-01-080515 (490-84420-3) were analyzed for volatile organic compounds (GC-MS SIM) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/18/2015.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GC MS)

Samples SC-1-080415 (490-84420-1) and RW-6A-080415 (490-84420-2) were analyzed for semivolatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared and analyzed on 08/11/2015.

Benzaldehyde failed the recovery criteria high for LCS 490-272218/2-A. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-272218 and analytical batch 490-272371.

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

POLYCHLORINATED BIPHENYLS (PCBS)

Samples SC-1-080415 (490-84420-1) and RW-6A-080415 (490-84420-2) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 08/18/2015 and analyzed on 08/20/2015.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 490-273908.

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

POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

Samples SC-1-080415 (490-84420-1) and RW-6A-080415 (490-84420-2) were analyzed for polycyclic aromatic hydrocarbons (PAHs) in accordance with EPA SW-846 Method 8270D. The samples were prepared and analyzed on 08/11/2015 and 08/13/2015.

Pentachlorophenol failed the recovery criteria low for LCS 490-272220/2-A. Pentachlorophenol failed the recovery criteria low for LCS 490-272814/2-A. The associated sample was re-prepared and re-analyzed outside holding time. Both sets of data have been reported.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-272220 and analytical batch 490-272273.

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

DISSOLVED METALS (ICPMS)

Samples SC-1-080415 (490-84420-1) and RW-6A-080415 (490-84420-2) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/11/2015 and analyzed on 08/12/2015 and 08/24/2015.

Copper, Arsenic and Vanadium were detected in method blank MB 490-272304/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

METALS (ICPMS)

Samples SC-1-080415 (490-84420-1) and RW-6A-080415 (490-84420-2) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/10/2015 and analyzed on 08/12/2015, 08/13/2015 and 08/20/2015.

Arsenic and Vanadium were detected in method blank MB 490-272053/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above

Job ID: 490-84420-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Sample RW-6A-080415 (490-84420-2)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

DISSOLVED MERCURY (CVAA)

Samples SC-1-080415 (490-84420-1) and RW-6A-080415 (490-84420-2) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/11/2015 and analyzed on 08/13/2015.

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

TOTAL MERCURY

Samples SC-1-080415 (490-84420-1) and RW-6A-080415 (490-84420-2) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 08/07/2015.

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

ALKALINITY

Samples SC-1-080415 (490-84420-1) and RW-6A-080415 (490-84420-2) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/07/2015.

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

TOTAL CYANIDE

Samples SC-1-080415 (490-84420-1) and RW-6A-080415 (490-84420-2) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared on 08/06/2015 and analyzed on 08/07/2015.

Cyanide, Total failed the recovery criteria low for the MSD of sample SC-1-080415MSD (490-84420-1) in batch 490-271598. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

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

ANIONS

Samples SC-1-080415 (490-84420-1) and RW-6A-080415 (490-84420-2) were analyzed for anions in accordance with SW-846 Method 9056. The samples were analyzed on 08/15/2015 and 08/16/2015.

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
E	Result exceeded calibration range.
F2	MS/MSD RPD exceeds control limits

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
B	Compound was found in the blank and sample.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
E	Result exceeded calibration range.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
^	Instrument related QC is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84420-1

Client Sample ID: SC-1-080415
Date Collected: 08/04/15 10:40
Date Received: 08/06/15 08:50

Lab Sample ID: 490-84420-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 18:05	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 18:05	1
1,4-Dioxane	**0.39**	**J**	10	0.27	ug/L			08/18/15 18:05	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*08/18/15 18:05*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/18/15 18:05*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/18/15 18:05*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*08/18/15 18:05*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/16/15 01:14	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/16/15 01:14	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/16/15 01:14	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/16/15 01:14	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/16/15 01:14	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/16/15 01:14	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/16/15 01:14	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/16/15 01:14	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/16/15 01:14	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/16/15 01:14	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/16/15 01:14	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/16/15 01:14	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/16/15 01:14	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/16/15 01:14	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/16/15 01:14	1
Acetone	2.7	U	25	2.7	ug/L			08/16/15 01:14	1
Benzene	**1.3**		1.0	0.20	ug/L			08/16/15 01:14	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/16/15 01:14	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/16/15 01:14	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/16/15 01:14	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/16/15 01:14	1
Chlorobenzene	**0.21**	**J**	1.0	0.18	ug/L			08/16/15 01:14	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/16/15 01:14	1
Chloroethane	**0.53**	**J**	1.0	0.36	ug/L			08/16/15 01:14	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/16/15 01:14	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/16/15 01:14	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/16/15 01:14	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/16/15 01:14	1
Cyclohexane	**2.0**	**J ***	5.0	0.13	ug/L			08/16/15 01:14	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/16/15 01:14	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/16/15 01:14	1
Ethylbenzene	**2.0**		1.0	0.19	ug/L			08/16/15 01:14	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/16/15 01:14	1
Isopropylbenzene	**1.6**		1.0	0.33	ug/L			08/16/15 01:14	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/16/15 01:14	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/16/15 01:14	1
Methylcyclohexane	**1.1**	**J**	5.0	0.090	ug/L			08/16/15 01:14	1

Client Sample ID: SC-1-080415
Date Collected: 08/04/15 10:40
Date Received: 08/06/15 08:50

Lab Sample ID: 490-84420-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/16/15 01:14	1
Styrene	0.28	U	1.0	0.28	ug/L			08/16/15 01:14	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/16/15 01:14	1
Toluene	**0.61**	**J**	1.0	0.17	ug/L			08/16/15 01:14	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/16/15 01:14	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/16/15 01:14	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/16/15 01:14	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/16/15 01:14	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/16/15 01:14	1
Xylenes, Total	**60**		3.0	0.58	ug/L			08/16/15 01:14	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/16/15 01:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclopentane, methyl-	*3.3*	*J N*	*ug/L*		*2.81*	*96-37-7*		*08/16/15 01:14*	*1*
Ethyl acrylate	*0.63*	*J*	*ug/L*		*3.97*	*140-88-5*		*08/16/15 01:14*	*1*
N-Propylbenzene	*0.58*	*J*	*ug/L*		*7.21*	*103-65-1*		*08/16/15 01:14*	*1*
1,3,5-Trimethylbenzene	*1.1*		*ug/L*		*7.38*	*108-67-8*		*08/16/15 01:14*	*1*
1,2,4-Trimethylbenzene	*4.7*		*ug/L*		*7.72*	*95-63-6*		*08/16/15 01:14*	*1*
4-Isopropyltoluene	*0.26*	*J*	*ug/L*		*8.01*	*99-87-6*		*08/16/15 01:14*	*1*
1,2,3-Trimethylbenzene	*3.6*		*ug/L*		*8.12*	*526-73-8*		*08/16/15 01:14*	*1*
Indane	*4.5*	*J N*	*ug/L*		*8.31*	*496-11-7*		*08/16/15 01:14*	*1*
n-Butylbenzene	*0.95*	*J*	*ug/L*		*8.40*	*104-51-8*		*08/16/15 01:14*	*1*
Benzene, 2-ethyl-1,4-dimethyl-	*4.9*	*J N*	*ug/L*		*8.76*	*1758-88-9*		*08/16/15 01:14*	*1*
Benzene, 1,2,3,5-tetramethyl-	*3.4*	*J N*	*ug/L*		*9.15*	*527-53-7*		*08/16/15 01:14*	*1*
Benzene, 1,2,3,4-tetramethyl-	*5.7*	*J N*	*ug/L*		*9.20*	*488-23-3*		*08/16/15 01:14*	*1*
Benzene, 2-ethenyl-1,4-dimethyl-	*5.8*	*J N*	*ug/L*		*9.62*	*2039-89-6*		*08/16/15 01:14*	*1*
Naphthalene	*7.5*	*B*	*ug/L*		*10.38*	*91-20-3*		*08/16/15 01:14*	*1*
Total Alkanes	*0.00*	*J*	*ug/L*					*08/16/15 01:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/16/15 01:14*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/16/15 01:14*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/16/15 01:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*08/16/15 01:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 18:00	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 18:00	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 18:00	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/11/15 08:16	08/11/15 18:00	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/11/15 08:16	08/11/15 18:00	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/11/15 08:16	08/11/15 18:00	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		08/11/15 08:16	08/11/15 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*49*		*29 - 120*	*08/11/15 08:16*	*08/11/15 18:00*	*1*
Nitrobenzene-d5	*43*		*27 - 120*	*08/11/15 08:16*	*08/11/15 18:00*	*1*
Terphenyl-d14	*57*		*13 - 120*	*08/11/15 08:16*	*08/11/15 18:00*	*1*
2,4,6-Tribromophenol	*51*		*10 - 120*	*08/11/15 08:16*	*08/11/15 18:00*	*1*

Client Sample ID: SC-1-080415
Date Collected: 08/04/15 10:40
Date Received: 08/06/15 08:50

Lab Sample ID: 490-84420-1
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	*36*		*10 - 120*	*08/11/15 08:16*	*08/11/15 18:00*	*1*
Phenol-d5	*26*		*10 - 120*	*08/11/15 08:16*	*08/11/15 18:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 20:27	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/11/15 08:09	08/11/15 20:27	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/11/15 08:09	08/11/15 20:27	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/11/15 08:09	08/11/15 20:27	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/11/15 08:09	08/11/15 20:27	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/11/15 08:09	08/11/15 20:27	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 20:27	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/11/15 08:09	08/11/15 20:27	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/11/15 08:09	08/11/15 20:27	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 20:27	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 20:27	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/11/15 08:09	08/11/15 20:27	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/11/15 08:09	08/11/15 20:27	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 20:27	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/11/15 08:09	08/11/15 20:27	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/11/15 08:09	08/11/15 20:27	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/11/15 08:09	08/11/15 20:27	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 20:27	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/11/15 08:09	08/11/15 20:27	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/11/15 08:09	08/11/15 20:27	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 20:27	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/11/15 08:09	08/11/15 20:27	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 20:27	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 20:27	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/11/15 08:09	08/11/15 20:27	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/11/15 08:09	08/11/15 20:27	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 20:27	1
Acetophenone	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 20:27	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/11/15 08:09	08/11/15 20:27	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/11/15 08:09	08/11/15 20:27	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/11/15 08:09	08/11/15 20:27	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/11/15 08:09	08/11/15 20:27	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 20:27	1
Bis(2-chloroethyl)ether	**2.9**	**J**	10	2.8	ug/L		08/11/15 08:09	08/11/15 20:27	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 20:27	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/11/15 08:09	08/11/15 20:27	1
Carbazole	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 20:27	1
Caprolactam	2.4	U	10	2.4	ug/L		08/11/15 08:09	08/11/15 20:27	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/11/15 08:09	08/11/15 20:27	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/11/15 08:09	08/11/15 20:27	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 20:27	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/11/15 08:09	08/11/15 20:27	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 20:27	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 20:27	1

Client Sample ID: SC-1-080415
Date Collected: 08/04/15 10:40
Date Received: 08/06/15 08:50

Lab Sample ID: 490-84420-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 20:27	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 20:27	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/11/15 08:09	08/11/15 20:27	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/11/15 08:09	08/11/15 20:27	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/11/15 08:09	08/11/15 20:27	1
Isophorone	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 20:27	1
Naphthalene	**5.5**		2.0	0.37	ug/L		08/11/15 08:09	08/11/15 20:27	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 20:27	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/11/15 08:09	08/11/15 20:27	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/11/15 08:09	08/11/15 20:27	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/11/15 08:09	08/11/15 20:27	1
Phenol	1.5	U	10	1.5	ug/L		08/11/15 08:09	08/11/15 20:27	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 20:27	1
Diphenyl	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 20:27	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 20:27	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 20:27	1
Atrazine	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 20:27	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	*4.0*	*J N*	*ug/L*		*4.10*	*2437-95-8*	*08/11/15 08:09*	*08/11/15 20:27*	*1*
Benzene, 1,2,3-trimethyl-	*6.4*	*J N*	*ug/L*		*4.41*	*526-73-8*	*08/11/15 08:09*	*08/11/15 20:27*	*1*
Indane	*3.6*	*J N*	*ug/L*		*4.63*	*496-11-7*	*08/11/15 08:09*	*08/11/15 20:27*	*1*
Benzene, 4-ethyl-1,2-dimethyl-	*3.9*	*J N*	*ug/L*		*4.79*	*934-80-5*	*08/11/15 08:09*	*08/11/15 20:27*	*1*
Benzene, 1,2,3,4-tetramethyl-	*4.9*	*J N*	*ug/L*		*4.99*	*488-23-3*	*08/11/15 08:09*	*08/11/15 20:27*	*1*
1-Phenyl-1-butene	*4.4*	*J N*	*ug/L*		*5.14*	*824-90-8*	*08/11/15 08:09*	*08/11/15 20:27*	*1*
2(3H)-Benzothiazolone	*6.3*	*J N*	*ug/L*		*7.22*	*934-34-9*	*08/11/15 08:09*	*08/11/15 20:27*	*1*
Benzenesulfonamide, N-cyclohexyl-4-methy	*8.0*	*J N*	*ug/L*		*8.87*	*80-30-8*	*08/11/15 08:09*	*08/11/15 20:27*	*1*
Squalene	*7.5*	*J N*	*ug/L*		*10.56*	*7683-64-9*	*08/11/15 08:09*	*08/11/15 20:27*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*95*		*10 - 120*	*08/11/15 08:09*	*08/11/15 20:27*	*1*
2-Fluorobiphenyl (Surr)	*85*		*29 - 120*	*08/11/15 08:09*	*08/11/15 20:27*	*1*
2-Fluorophenol (Surr)	*53*		*10 - 120*	*08/11/15 08:09*	*08/11/15 20:27*	*1*
Nitrobenzene-d5 (Surr)	*79*		*27 - 120*	*08/11/15 08:09*	*08/11/15 20:27*	*1*
Phenol-d5 (Surr)	*35*		*10 - 120*	*08/11/15 08:09*	*08/11/15 20:27*	*1*
Terphenyl-d14 (Surr)	*97*		*13 - 120*	*08/11/15 08:09*	*08/11/15 20:27*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/18/15 06:45	08/20/15 07:52	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/18/15 06:45	08/20/15 07:52	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/18/15 06:45	08/20/15 07:52	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/18/15 06:45	08/20/15 07:52	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/18/15 06:45	08/20/15 07:52	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/18/15 06:45	08/20/15 07:52	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/18/15 06:45	08/20/15 07:52	1
Polychlorinated biphenyls, Total	0.50	U	0.50	0.50	ug/L		08/18/15 06:45	08/20/15 07:52	1

Client Sample ID: SC-1-080415

Date Collected: 08/04/15 10:40
Date Received: 08/06/15 08:50

Lab Sample ID: 490-84420-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*68*		*10 - 150*	*08/18/15 06:45*	*08/20/15 07:52*	*1*
Tetrachloro-m-xylene	*60*		*10 - 150*	*08/18/15 06:45*	*08/20/15 07:52*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.45**		1.00	0.70	mg/L			08/15/15 23:37	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/15/15 23:37	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.056**		0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 15:33	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:33	1
Arsenic	**0.0011**	**J B**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:33	1
Barium	**0.46**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:33	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:33	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 15:33	1
Calcium	**42.5**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:33	1
Chromium	**0.0038**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:33	1
Cobalt	**0.0034**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:33	1
Copper	**0.00053**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 16:00	1
Iron	**70.1**		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 15:33	1
Lead	**0.013**		0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 15:33	1
Magnesium	**4.4**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:33	1
Manganese	**0.75**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 16:00	1
Nickel	**0.013**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 16:00	1
Potassium	**2.4**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:33	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 15:33	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:33	1
Sodium	**4.1**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:33	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 15:33	1
Vanadium	**0.0039**	**B**	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 15:33	1
Zinc	**0.034**		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 15:33	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/11/15 10:38	08/12/15 19:14	1
Antimony	**0.00050**	**J**	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:14	1
Arsenic	**0.00084**	**J B**	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:14	1
Barium	**0.40**		0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:14	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:14	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/11/15 10:38	08/12/15 19:14	1
Calcium	**39.0**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 19:14	1
Chromium	**0.00079**	**J**	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:14	1
Cobalt	**0.0030**		0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:14	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 00:38	1
Iron	**51.4**		0.025	0.010	mg/L		08/11/15 10:38	08/12/15 19:14	1
Lead	**0.0020**		0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 19:14	1
Magnesium	**4.1**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 19:14	1
Manganese	**0.64**	**B**	0.0020	0.00050	mg/L		08/11/15 10:38	08/24/15 21:58	1
Nickel	**0.012**		0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 00:38	1
Potassium	**2.2**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 19:14	1

Client Sample ID: SC-1-080415
Date Collected: 08/04/15 10:40
Date Received: 08/06/15 08:50

Lab Sample ID: 490-84420-1
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/11/15 10:38	08/12/15 19:14	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:14	1
Sodium	**3.5**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 19:14	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 19:14	1
Vanadium	**0.0013**	**J B**	0.0020	0.00010	mg/L		08/11/15 10:38	08/12/15 19:14	1
Zinc	**0.010**	**J**	0.025	0.010	mg/L		08/11/15 10:38	08/12/15 19:14	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/07/15 11:20	08/07/15 21:00	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 16:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U F1	0.010	0.0070	mg/L		08/06/15 15:53	08/07/15 09:11	1
Bicarbonate Alkalinity as CaCO3	**217**		10.0	5.0	mg/L			08/07/15 20:41	1
Total Alkalinity as CaCO3	**217**		10.0	5.0	mg/L			08/07/15 20:41	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84420-1

Client Sample ID: RW-6A-080415
Date Collected: 08/04/15 14:15
Date Received: 08/06/15 08:50

Lab Sample ID: 490-84420-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 18:33	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 18:33	1
1,4-Dioxane	**2.7**	**J**	10	0.27	ug/L			08/18/15 18:33	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*08/18/15 18:33*	*1*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*		*08/18/15 18:33*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*08/18/15 18:33*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*08/18/15 18:33*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/16/15 00:46	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/16/15 00:46	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/16/15 00:46	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/16/15 00:46	1
1,1-Dichloroethane	**0.42**	**J**	1.0	0.24	ug/L			08/16/15 00:46	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/16/15 00:46	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/16/15 00:46	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/16/15 00:46	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/16/15 00:46	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/16/15 00:46	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/16/15 00:46	1
1,4-Dichlorobenzene	**0.27**	**J**	1.0	0.17	ug/L			08/16/15 00:46	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/16/15 00:46	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/16/15 00:46	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/16/15 00:46	1
Acetone	2.7	U	25	2.7	ug/L			08/16/15 00:46	1
Benzene	**7.7**		1.0	0.20	ug/L			08/16/15 00:46	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/16/15 00:46	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/16/15 00:46	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/16/15 00:46	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/16/15 00:46	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/16/15 00:46	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/16/15 00:46	1
Chloroethane	**2.0**		1.0	0.36	ug/L			08/16/15 00:46	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/16/15 00:46	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/16/15 00:46	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/16/15 00:46	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/16/15 00:46	1
Cyclohexane	**4.1**	**J ***	5.0	0.13	ug/L			08/16/15 00:46	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/16/15 00:46	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/16/15 00:46	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/16/15 00:46	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/16/15 00:46	1
Isopropylbenzene	**4.6**		1.0	0.33	ug/L			08/16/15 00:46	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/16/15 00:46	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/16/15 00:46	1
Methylcyclohexane	**0.74**	**J**	5.0	0.090	ug/L			08/16/15 00:46	1

Client Sample ID: RW-6A-080415
Date Collected: 08/04/15 14:15
Date Received: 08/06/15 08:50

Lab Sample ID: 490-84420-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/16/15 00:46	1
Styrene	0.28	U	1.0	0.28	ug/L			08/16/15 00:46	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/16/15 00:46	1
Toluene	0.17	U	1.0	0.17	ug/L			08/16/15 00:46	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/16/15 00:46	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/16/15 00:46	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/16/15 00:46	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/16/15 00:46	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/16/15 00:46	1
Xylenes, Total	**12**		3.0	0.58	ug/L			08/16/15 00:46	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/16/15 00:46	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclopentane, methyl-	*10*	*J N*	*ug/L*		*2.81*	*96-37-7*		*08/16/15 00:46*	*1*
N-Propylbenzene	*4.8*		*ug/L*		*7.20*	*103-65-1*		*08/16/15 00:46*	*1*
1,3,5-Trimethylbenzene	*2.6*		*ug/L*		*7.37*	*108-67-8*		*08/16/15 00:46*	*1*
1,2,3-Trimethylbenzene	*13*		*ug/L*		*8.12*	*526-73-8*		*08/16/15 00:46*	*1*
Indane	*19*	*J N*	*ug/L*		*8.31*	*496-11-7*		*08/16/15 00:46*	*1*
n-Butylbenzene	*1.5*		*ug/L*		*8.40*	*104-51-8*		*08/16/15 00:46*	*1*
Benzene, 1-ethyl-2,4-dimethyl-	*13*	*J N*	*ug/L*		*8.75*	*874-41-9*		*08/16/15 00:46*	*1*
Benzene, (1-methyl-1-propenyl)-, (E)-	*4.7*	*J N*	*ug/L*		*8.86*	*768-00-3*		*08/16/15 00:46*	*1*
Benzene, 4-ethyl-1,2-dimethyl-	*3.3*	*J N*	*ug/L*		*9.05*	*934-80-5*		*08/16/15 00:46*	*1*
Benzene, 1,2,3,4-tetramethyl-	*10*	*J N*	*ug/L*		*9.15*	*488-23-3*		*08/16/15 00:46*	*1*
Benzene, 1,2,4,5-tetramethyl-	*3.8*	*J N*	*ug/L*		*9.20*	*95-93-2*		*08/16/15 00:46*	*1*
3-Phenylbut-1-ene	*4.3*	*J N*	*ug/L*		*9.46*	*934-10-1*		*08/16/15 00:46*	*1*
Benzene, 2-ethenyl-1,4-dimethyl-	*15*	*J N*	*ug/L*		*9.62*	*2039-89-6*		*08/16/15 00:46*	*1*
Naphthalene	*8.1*	*B*	*ug/L*		*10.38*	*91-20-3*		*08/16/15 00:46*	*1*
Total Alkanes	*0.00*	*J*	*ug/L*					*08/16/15 00:46*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/16/15 00:46*	*1*
Dibromofluoromethane (Surr)	*121*		*70 - 130*		*08/16/15 00:46*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/16/15 00:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/16/15 00:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 18:28	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 18:28	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 18:28	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/11/15 08:16	08/11/15 18:28	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/11/15 08:16	08/11/15 18:28	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/11/15 08:16	08/11/15 18:28	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		08/11/15 08:16	08/11/15 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*56*		*29 - 120*	*08/11/15 08:16*	*08/11/15 18:28*	*1*
Nitrobenzene-d5	*49*		*27 - 120*	*08/11/15 08:16*	*08/11/15 18:28*	*1*
Terphenyl-d14	*66*		*13 - 120*	*08/11/15 08:16*	*08/11/15 18:28*	*1*
2,4,6-Tribromophenol	*62*		*10 - 120*	*08/11/15 08:16*	*08/11/15 18:28*	*1*

Client Sample ID: RW-6A-080415
Date Collected: 08/04/15 14:15
Date Received: 08/06/15 08:50

Lab Sample ID: 490-84420-2
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	*43*		*10 - 120*	*08/11/15 08:16*	*08/11/15 18:28*	*1*
Phenol-d5	*32*		*10 - 120*	*08/11/15 08:16*	*08/11/15 18:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 20:51	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/11/15 08:09	08/11/15 20:51	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/11/15 08:09	08/11/15 20:51	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/11/15 08:09	08/11/15 20:51	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/11/15 08:09	08/11/15 20:51	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/11/15 08:09	08/11/15 20:51	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 20:51	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/11/15 08:09	08/11/15 20:51	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/11/15 08:09	08/11/15 20:51	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 20:51	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 20:51	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/11/15 08:09	08/11/15 20:51	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/11/15 08:09	08/11/15 20:51	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 20:51	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/11/15 08:09	08/11/15 20:51	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/11/15 08:09	08/11/15 20:51	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/11/15 08:09	08/11/15 20:51	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 20:51	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/11/15 08:09	08/11/15 20:51	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/11/15 08:09	08/11/15 20:51	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 20:51	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/11/15 08:09	08/11/15 20:51	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 20:51	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 20:51	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/11/15 08:09	08/11/15 20:51	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/11/15 08:09	08/11/15 20:51	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 20:51	1
Acetophenone	**2.4**	**J**	10	2.3	ug/L		08/11/15 08:09	08/11/15 20:51	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/11/15 08:09	08/11/15 20:51	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/11/15 08:09	08/11/15 20:51	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/11/15 08:09	08/11/15 20:51	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/11/15 08:09	08/11/15 20:51	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 20:51	1
Bis(2-chloroethyl)ether	**3.4**	**J**	10	2.8	ug/L		08/11/15 08:09	08/11/15 20:51	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 20:51	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/11/15 08:09	08/11/15 20:51	1
Carbazole	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 20:51	1
Caprolactam	2.4	U	10	2.4	ug/L		08/11/15 08:09	08/11/15 20:51	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/11/15 08:09	08/11/15 20:51	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/11/15 08:09	08/11/15 20:51	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 20:51	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/11/15 08:09	08/11/15 20:51	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 20:51	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 20:51	1

Client Sample ID: RW-6A-080415
Date Collected: 08/04/15 14:15
Date Received: 08/06/15 08:50

Lab Sample ID: 490-84420-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 20:51	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 20:51	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/11/15 08:09	08/11/15 20:51	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/11/15 08:09	08/11/15 20:51	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/11/15 08:09	08/11/15 20:51	1
Isophorone	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 20:51	1
Naphthalene	**5.6**		2.0	0.37	ug/L		08/11/15 08:09	08/11/15 20:51	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 20:51	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/11/15 08:09	08/11/15 20:51	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/11/15 08:09	08/11/15 20:51	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/11/15 08:09	08/11/15 20:51	1
Phenol	1.5	U	10	1.5	ug/L		08/11/15 08:09	08/11/15 20:51	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 20:51	1
Diphenyl	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 20:51	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 20:51	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 20:51	1
Atrazine	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 20:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
.alpha.-Pinene	*3.8*	*J N*	*ug/L*		*4.10*	*80-56-8*	*08/11/15 08:09*	*08/11/15 20:51*	*1*
Indane	*10*	*J N*	*ug/L*		*4.63*	*496-11-7*	*08/11/15 08:09*	*08/11/15 20:51*	*1*
Benzene, 1,2,3,4-tetramethyl-	*7.0*	*J N*	*ug/L*		*4.98*	*488-23-3*	*08/11/15 08:09*	*08/11/15 20:51*	*1*
1-Phenyl-1-butene	*6.8*	*J N*	*ug/L*		*5.14*	*824-90-8*	*08/11/15 08:09*	*08/11/15 20:51*	*1*
Cyclohexanamine, N-cyclohexyl-	*4.8*	*J N*	*ug/L*		*6.29*	*101-83-7*	*08/11/15 08:09*	*08/11/15 20:51*	*1*
2(3H)-Benzothiazolone	*4.2*	*J N*	*ug/L*		*7.22*	*934-34-9*	*08/11/15 08:09*	*08/11/15 20:51*	*1*
Phenol, 4,4'-(1-methylethylidene)bis-	*13*	*J N*	*ug/L*		*8.90*	*80-05-7*	*08/11/15 08:09*	*08/11/15 20:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*83*		*10 - 120*	*08/11/15 08:09*	*08/11/15 20:51*	*1*
2-Fluorobiphenyl (Surr)	*76*		*29 - 120*	*08/11/15 08:09*	*08/11/15 20:51*	*1*
2-Fluorophenol (Surr)	*51*		*10 - 120*	*08/11/15 08:09*	*08/11/15 20:51*	*1*
Nitrobenzene-d5 (Surr)	*73*		*27 - 120*	*08/11/15 08:09*	*08/11/15 20:51*	*1*
Phenol-d5 (Surr)	*33*		*10 - 120*	*08/11/15 08:09*	*08/11/15 20:51*	*1*
Terphenyl-d14 (Surr)	*85*		*13 - 120*	*08/11/15 08:09*	*08/11/15 20:51*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/18/15 06:45	08/20/15 00:48	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/18/15 06:45	08/20/15 00:48	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/18/15 06:45	08/20/15 00:48	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/18/15 06:45	08/20/15 00:48	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/18/15 06:45	08/20/15 00:48	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/18/15 06:45	08/20/15 00:48	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/18/15 06:45	08/20/15 00:48	1
Polychlorinated biphenyls, Total	0.50	U	0.50	0.50	ug/L		08/18/15 06:45	08/20/15 00:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*136*		*10 - 150*	*08/18/15 06:45*	*08/20/15 00:48*	*1*
Tetrachloro-m-xylene	*91*		*10 - 150*	*08/18/15 06:45*	*08/20/15 00:48*	*1*

Client Sample ID: RW-6A-080415

Date Collected: 08/04/15 14:15
Date Received: 08/06/15 08:50

Lab Sample ID: 490-84420-2

Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.00**		1.00	0.70	mg/L			08/16/15 00:35	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/16/15 00:35	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.0098**	**J**	0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 15:49	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:49	1
Arsenic	**0.0014**	**J B**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:49	1
Barium	**0.048**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:49	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:49	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 15:49	1
Calcium	**85.5**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:49	1
Chromium	**0.00080**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:49	1
Cobalt	**0.019**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:49	1
Copper	**0.00071**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 16:05	1
Iron	**22.2**		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 15:49	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 15:49	1
Magnesium	**19.3**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:49	1
Manganese	**15.7**		0.040	0.010	mg/L		08/10/15 10:44	08/20/15 14:53	20
Nickel	**0.0033**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 16:05	1
Potassium	**2.8**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:49	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 15:49	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:49	1
Sodium	**8.2**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:49	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 15:49	1
Vanadium	**0.0033**	**B**	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 15:49	1
Zinc	0.010	U	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 15:49	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/11/15 10:38	08/12/15 19:19	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:19	1
Arsenic	**0.0011**	**J B**	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:19	1
Barium	**0.036**		0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:19	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:19	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/11/15 10:38	08/12/15 19:19	1
Calcium	**87.5**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 19:19	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:19	1
Cobalt	**0.019**		0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:19	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 00:44	1
Iron	**9.8**		0.025	0.010	mg/L		08/11/15 10:38	08/12/15 19:19	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 19:19	1
Magnesium	**20.0**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 19:19	1
Manganese	**14.2**	**B**	0.20	0.050	mg/L		08/11/15 10:38	08/24/15 22:03	100
Nickel	**0.0041**		0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 00:44	1
Potassium	**2.8**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 19:19	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/11/15 10:38	08/12/15 19:19	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:19	1
Sodium	**8.1**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 19:19	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 19:19	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84420-1

Client Sample ID: RW-6A-080415
Date Collected: 08/04/15 14:15
Date Received: 08/06/15 08:50

Lab Sample ID: 490-84420-2
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	**0.0011**	**J B**	0.0020	0.00010	mg/L		08/11/15 10:38	08/12/15 19:19	1
Zinc	0.010	U	0.025	0.010	mg/L		08/11/15 10:38	08/12/15 19:19	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/07/15 11:20	08/07/15 21:02	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 16:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/06/15 15:53	08/07/15 09:13	1
Bicarbonate Alkalinity as CaCO3	**326**		10.0	5.0	mg/L			08/07/15 20:46	1
Total Alkalinity as CaCO3	**326**		10.0	5.0	mg/L			08/07/15 20:46	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84420-1

Client Sample ID: TB-01-080515
Date Collected: 08/04/15 01:00
Date Received: 08/06/15 08:50

Lab Sample ID: 490-84420-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 17:36	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 17:36	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/18/15 17:36	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*08/18/15 17:36*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*08/18/15 17:36*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/18/15 17:36*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/18/15 17:36*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/16/15 00:19	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/16/15 00:19	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/16/15 00:19	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/16/15 00:19	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/16/15 00:19	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/16/15 00:19	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/16/15 00:19	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/16/15 00:19	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/16/15 00:19	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/16/15 00:19	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/16/15 00:19	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/16/15 00:19	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/16/15 00:19	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/16/15 00:19	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/16/15 00:19	1
Acetone	**5.9**	**J**	25	2.7	ug/L			08/16/15 00:19	1
Benzene	0.20	U	1.0	0.20	ug/L			08/16/15 00:19	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/16/15 00:19	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/16/15 00:19	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/16/15 00:19	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/16/15 00:19	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/16/15 00:19	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/16/15 00:19	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/16/15 00:19	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/16/15 00:19	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/16/15 00:19	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/16/15 00:19	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/16/15 00:19	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			08/16/15 00:19	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/16/15 00:19	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/16/15 00:19	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/16/15 00:19	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/16/15 00:19	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/16/15 00:19	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/16/15 00:19	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/16/15 00:19	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/16/15 00:19	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84420-1

Client Sample ID: TB-01-080515
Date Collected: 08/04/15 01:00
Date Received: 08/06/15 08:50

Lab Sample ID: 490-84420-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/16/15 00:19	1
Styrene	0.28	U	1.0	0.28	ug/L			08/16/15 00:19	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/16/15 00:19	1
Toluene	0.17	U	1.0	0.17	ug/L			08/16/15 00:19	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/16/15 00:19	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/16/15 00:19	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/16/15 00:19	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/16/15 00:19	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/16/15 00:19	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/16/15 00:19	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/16/15 00:19	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/16/15 00:19*	*1*
Total Alkanes	*0.00*	*J*	*ug/L*					*08/16/15 00:19*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/16/15 00:19*	*1*
Dibromofluoromethane (Surr)	*117*		*70 - 130*		*08/16/15 00:19*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/16/15 00:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*126*		*70 - 130*		*08/16/15 00:19*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-273547/10
Matrix: Water
Analysis Batch: 273547

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/15/15 19:45	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/15/15 19:45	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/15/15 19:45	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/15/15 19:45	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/15/15 19:45	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/15/15 19:45	1
1,2,4-Trichlorobenzene	0.266	J	1.0	0.20	ug/L			08/15/15 19:45	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/15/15 19:45	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/15/15 19:45	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/15/15 19:45	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/15/15 19:45	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/15/15 19:45	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/15/15 19:45	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/15/15 19:45	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/15/15 19:45	1
Acetone	2.7	U	25	2.7	ug/L			08/15/15 19:45	1
Benzene	0.20	U	1.0	0.20	ug/L			08/15/15 19:45	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/15/15 19:45	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/15/15 19:45	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/15/15 19:45	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/15/15 19:45	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/15/15 19:45	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/15/15 19:45	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/15/15 19:45	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/15/15 19:45	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/15/15 19:45	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/15/15 19:45	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/15/15 19:45	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/15/15 19:45	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/15/15 19:45	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/15/15 19:45	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/15/15 19:45	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/15/15 19:45	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/15/15 19:45	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/15/15 19:45	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/15/15 19:45	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/15/15 19:45	1
Methylene Chloride	0.619	J	5.0	0.22	ug/L			08/15/15 19:45	1
Styrene	0.28	U	1.0	0.28	ug/L			08/15/15 19:45	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/15/15 19:45	1
Toluene	0.17	U	1.0	0.17	ug/L			08/15/15 19:45	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/15/15 19:45	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/15/15 19:45	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/15/15 19:45	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/15/15 19:45	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/15/15 19:45	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/15/15 19:45	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/15/15 19:45	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	0.524	J	ug/L		10.23	87-68-3		08/15/15 19:45	1
Naphthalene	0.324	J	ug/L		10.45	91-20-3		08/15/15 19:45	1
Total Alkanes	0.000	J	ug/L					08/15/15 19:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130		08/15/15 19:45	1
Dibromofluoromethane (Surr)	118		70 - 130		08/15/15 19:45	1
Toluene-d8 (Surr)	97		70 - 130		08/15/15 19:45	1
1,2-Dichloroethane-d4 (Surr)	125		70 - 130		08/15/15 19:45	1

Lab Sample ID: LCS 490-273547/8
Matrix: Water
Analysis Batch: 273547

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	23.0		ug/L		115	78 - 135
Freon-113	20.0	16.9		ug/L		84	77 - 129
1,1,2,2-Tetrachloroethane	20.0	21.1		ug/L		105	69 - 131
1,1,2-Trichloroethane	20.0	19.4		ug/L		97	80 - 124
1,1-Dichloroethane	20.0	22.2		ug/L		111	78 - 125
1,1-Dichloroethene	20.0	18.1		ug/L		90	79 - 124
1,2,4-Trichlorobenzene	20.0	21.0		ug/L		105	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	18.9		ug/L		94	54 - 125
1,2-Dichlorobenzene	20.0	21.1		ug/L		105	80 - 121
1,2-Dichloropropane	20.0	17.6		ug/L		88	75 - 120
1,3-Dichlorobenzene	20.0	21.1		ug/L		106	80 - 122
1,4-Dichlorobenzene	20.0	20.2		ug/L		101	80 - 120
2-Butanone (MEK)	100	103		ug/L		103	62 - 133
2-Hexanone	100	116		ug/L		116	60 - 142
4-Methyl-2-pentanone (MIBK)	100	100		ug/L		100	60 - 137
Acetone	100	79.1		ug/L		79	54 - 145
Benzene	20.0	21.3		ug/L		106	80 - 121
Bromoform	20.0	19.6		ug/L		98	46 - 145
Bromomethane	20.0	21.5		ug/L		107	41 - 150
Carbon disulfide	20.0	18.2		ug/L		91	77 - 126
Carbon tetrachloride	20.0	23.2		ug/L		116	64 - 147
Chlorobenzene	20.0	20.3		ug/L		102	80 - 120
Chlorodibromomethane	20.0	19.2		ug/L		96	69 - 133
Chloroethane	20.0	18.1		ug/L		91	72 - 120
Chloroform	20.0	22.3		ug/L		111	73 - 129
Chloromethane	20.0	14.9		ug/L		74	12 - 150
cis-1,2-Dichloroethene	20.0	24.2		ug/L		121	76 - 125
cis-1,3-Dichloropropene	20.0	20.2		ug/L		101	74 - 140
Cyclohexane	20.0	26.3	*	ug/L		131	73 - 122
Dichlorobromomethane	20.0	18.1		ug/L		91	75 - 129
Dichlorodifluoromethane	20.0	18.0		ug/L		90	37 - 127
Ethylbenzene	20.0	21.5		ug/L		108	80 - 130
1,2-Dibromoethane	20.0	20.8		ug/L		104	80 - 129
Isopropylbenzene	20.0	23.1		ug/L		115	80 - 141
Methyl acetate	100	75.9		ug/L		76	64 - 150
Methyl tert-butyl ether	20.0	16.9		ug/L		84	72 - 133
Methylcyclohexane	20.0	19.3		ug/L		97	71 - 129
Methylene Chloride	20.0	17.6		ug/L		88	79 - 123

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

Lab Sample ID: LCS 490-273547/8
Matrix: Water
Analysis Batch: 273547

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	20.0	22.7		ug/L		113	80 - 127
Tetrachloroethene	20.0	21.6		ug/L		108	80 - 126
Toluene	20.0	20.4		ug/L		102	80 - 126
trans-1,2-Dichloroethene	20.0	17.5		ug/L		88	79 - 126
trans-1,3-Dichloropropene	20.0	20.2		ug/L		101	63 - 134
Trichloroethene	20.0	18.0		ug/L		90	80 - 123
Trichlorofluoromethane	20.0	17.3		ug/L		87	65 - 124
Vinyl chloride	20.0	18.8		ug/L		94	68 - 120
1,2-Dichloroethane	20.0	23.5		ug/L		118	77 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*

Lab Sample ID: 490-85116-A-8 MS
Matrix: Water
Analysis Batch: 273547

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.19	U	50.0	60.5		ug/L		121	76 - 149
Freon-113	0.15	U	50.0	43.8		ug/L		88	72 - 148
1,1,2,2-Tetrachloroethane	0.19	U	50.0	51.3		ug/L		103	56 - 143
1,1,2-Trichloroethane	0.19	U	50.0	48.0		ug/L		96	74 - 134
1,1-Dichloroethane	0.24	U	50.0	55.2		ug/L		110	71 - 139
1,1-Dichloroethene	0.25	U	50.0	44.4		ug/L		89	70 - 142
1,2,4-Trichlorobenzene	0.20	U	50.0	53.3		ug/L		107	60 - 136
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	53.9		ug/L		108	52 - 126
1,2-Dichlorobenzene	0.19	U	50.0	50.0		ug/L		100	79 - 128
1,2-Dichloropropane	0.25	U	50.0	53.1		ug/L		106	67 - 131
1,3-Dichlorobenzene	0.18	U	50.0	51.0		ug/L		102	77 - 131
1,4-Dichlorobenzene	0.17	U	50.0	48.3		ug/L		97	78 - 126
2-Butanone (MEK)	13	J	250	284		ug/L		108	50 - 138
2-Hexanone	1.3	U	250	323		ug/L		129	50 - 150
4-Methyl-2-pentanone (MIBK)	0.81	U	250	300		ug/L		120	50 - 147
Acetone	120		250	341		ug/L		89	45 - 141
Benzene	0.25	J	50.0	52.2		ug/L		104	75 - 133
Bromoform	0.29	U	50.0	51.5		ug/L		103	42 - 147
Bromomethane	0.35	U	50.0	27.4		ug/L		55	16 - 163
Carbon disulfide	3.0		50.0	41.3		ug/L		76	48 - 152
Carbon tetrachloride	0.18	U	50.0	57.5		ug/L		115	62 - 164
Chlorobenzene	0.18	U	50.0	49.2		ug/L		98	80 - 129
Chlorodibromomethane	0.25	U	50.0	46.8		ug/L		94	66 - 140
Chloroethane	0.36	U	50.0	43.3		ug/L		87	58 - 137
Chloroform	0.23	U	50.0	55.3		ug/L		111	66 - 138
Chloromethane	0.36	U	50.0	28.3		ug/L		57	10 - 169
cis-1,2-Dichloroethene	0.21	U	50.0	59.5		ug/L		119	68 - 138

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

Lab Sample ID: 490-85116-A-8 MS
Matrix: Water
Analysis Batch: 273547

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	0.17	U	50.0	49.9		ug/L		100	71 - 141
Cyclohexane	0.19	J *	50.0	64.2	E	ug/L		128	58 - 144
Dichlorobromomethane	0.17	U F2	50.0	50.9		ug/L		102	70 - 140
Dichlorodifluoromethane	0.17	U	50.0	45.7		ug/L		91	40 - 127
Ethylbenzene	0.19	U	50.0	53.9		ug/L		108	79 - 139
1,2-Dibromoethane	0.21	U	50.0	49.6		ug/L		99	75 - 137
Isopropylbenzene	0.33	U	50.0	56.2		ug/L		112	80 - 153
Methyl acetate	0.58	U	250	195		ug/L		78	30 - 165
Methyl tert-butyl ether	0.33	J	50.0	43.6		ug/L		86	66 - 141
Methylcyclohexane	0.24	J	50.0	50.6		ug/L		101	59 - 151
Methylene Chloride	0.22	U	50.0	41.1		ug/L		82	64 - 139
Styrene	0.28	U	50.0	54.3		ug/L		109	61 - 148
Tetrachloroethene	0.14	U	50.0	49.8		ug/L		100	72 - 145
Toluene	0.17	U	50.0	49.7		ug/L		99	75 - 136
trans-1,2-Dichloroethene	0.23	U	50.0	42.1		ug/L		84	66 - 143
trans-1,3-Dichloropropene	0.17	U	50.0	48.6		ug/L		97	59 - 135
Trichloroethene	0.20	U	50.0	48.9		ug/L		98	73 - 144
Trichlorofluoromethane	0.21	U	50.0	46.4		ug/L		93	58 - 139
Vinyl chloride	0.18	U	50.0	45.1		ug/L		90	56 - 129
1,2-Dichloroethane	0.20	U	50.0	56.2		ug/L		112	64 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*

Lab Sample ID: 490-85116-A-8 MSD
Matrix: Water
Analysis Batch: 273547

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.19	U	50.0	59.1		ug/L		118	76 - 149	2	17
Freon-113	0.15	U	50.0	44.1		ug/L		88	72 - 148	1	18
1,1,2,2-Tetrachloroethane	0.19	U	50.0	49.7		ug/L		99	56 - 143	3	20
1,1,2-Trichloroethane	0.19	U	50.0	46.5		ug/L		93	74 - 134	3	15
1,1-Dichloroethane	0.24	U	50.0	54.2		ug/L		108	71 - 139	2	17
1,1-Dichloroethene	0.25	U	50.0	45.7		ug/L		91	70 - 142	3	17
1,2,4-Trichlorobenzene	0.20	U	50.0	54.8		ug/L		110	60 - 136	3	19
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	53.2		ug/L		106	52 - 126	1	24
1,2-Dichlorobenzene	0.19	U	50.0	47.4		ug/L		95	79 - 128	5	15
1,2-Dichloropropane	0.25	U	50.0	51.0		ug/L		102	67 - 131	4	17
1,3-Dichlorobenzene	0.18	U	50.0	49.6		ug/L		99	77 - 131	3	15
1,4-Dichlorobenzene	0.17	U	50.0	48.1		ug/L		96	78 - 126	0	15
2-Butanone (MEK)	13	J	250	264		ug/L		100	50 - 138	7	19
2-Hexanone	1.3	U	250	304		ug/L		122	50 - 150	6	15
4-Methyl-2-pentanone (MIBK)	0.81	U	250	286		ug/L		114	50 - 147	5	17
Acetone	120		250	359		ug/L		96	45 - 141	5	21

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

Lab Sample ID: 490-85116-A-8 MSD
Matrix: Water
Analysis Batch: 273547

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.25	J	50.0	51.6		ug/L		103	75 - 133	1	17
Bromoform	0.29	U	50.0	50.2		ug/L		100	42 - 147	3	16
Bromomethane	0.35	U	50.0	40.6		ug/L		81	16 - 163	39	50
Carbon disulfide	3.0		50.0	40.9		ug/L		76	48 - 152	1	21
Carbon tetrachloride	0.18	U	50.0	56.8		ug/L		114	62 - 164	1	19
Chlorobenzene	0.18	U	50.0	47.9		ug/L		96	80 - 129	3	14
Chlorodibromomethane	0.25	U	50.0	45.7		ug/L		91	66 - 140	2	15
Chloroethane	0.36	U	50.0	41.4		ug/L		83	58 - 137	4	20
Chloroform	0.23	U	50.0	54.3		ug/L		109	66 - 138	2	18
Chloromethane	0.36	U	50.0	29.5		ug/L		59	10 - 169	4	31
cis-1,2-Dichloroethene	0.21	U	50.0	57.0		ug/L		114	68 - 138	4	17
cis-1,3-Dichloropropene	0.17	U	50.0	47.5		ug/L		95	71 - 141	5	15
Cyclohexane	0.19	J *	50.0	62.9	E	ug/L		125	58 - 144	2	16
Dichlorobromomethane	0.17	U F2	50.0	42.3	F2	ug/L		85	70 - 140	19	18
Dichlorodifluoromethane	0.17	U	50.0	44.2		ug/L		88	40 - 127	3	18
Ethylbenzene	0.19	U	50.0	52.4		ug/L		105	79 - 139	3	15
1,2-Dibromoethane	0.21	U	50.0	48.1		ug/L		96	75 - 137	3	15
Isopropylbenzene	0.33	U	50.0	55.2		ug/L		110	80 - 153	2	16
Methyl acetate	0.58	U	250	197		ug/L		79	30 - 165	1	31
Methyl tert-butyl ether	0.33	J	50.0	43.1		ug/L		85	66 - 141	1	16
Methylcyclohexane	0.24	J	50.0	49.8		ug/L		99	59 - 151	2	19
Methylene Chloride	0.22	U	50.0	40.4		ug/L		81	64 - 139	2	17
Styrene	0.28	U	50.0	52.7		ug/L		105	61 - 148	3	24
Tetrachloroethene	0.14	U	50.0	49.2		ug/L		98	72 - 145	1	16
Toluene	0.17	U	50.0	47.8		ug/L		96	75 - 136	4	15
trans-1,2-Dichloroethene	0.23	U	50.0	41.1		ug/L		82	66 - 143	3	16
trans-1,3-Dichloropropene	0.17	U	50.0	47.8		ug/L		96	59 - 135	2	14
Trichloroethene	0.20	U	50.0	47.1		ug/L		94	73 - 144	4	17
Trichlorofluoromethane	0.21	U	50.0	45.3		ug/L		91	58 - 139	2	18
Vinyl chloride	0.18	U	50.0	45.3		ug/L		91	56 - 129	0	17
1,2-Dichloroethane	0.20	U	50.0	54.7		ug/L		109	64 - 136	3	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*

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

Lab Sample ID: MB 490-273990/7
Matrix: Water
Analysis Batch: 273990

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 13:47	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 13:47	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/18/15 13:47	1

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

Lab Sample ID: MB 490-273990/7
Matrix: Water
Analysis Batch: 273990

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 13:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/18/15 13:47*	*1*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*08/18/15 13:47*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/18/15 13:47*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/18/15 13:47*	*1*

Lab Sample ID: LCS 490-273990/3
Matrix: Water
Analysis Batch: 273990

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.500	0.480		ug/L		96	70 - 131		
1,2-Dibromo-3-Chloropropane			0.500	0.454		ug/L		91	40 - 160		
1,4-Dioxane			10.0	9.87	J	ug/L		99	40 - 160		
Ethylene Dibromide			0.500	0.470		ug/L		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 490-273990/4
Matrix: Water
Analysis Batch: 273990

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.500	0.480		ug/L		96	70 - 131	0	19
1,2-Dibromo-3-Chloropropane			0.500	0.456		ug/L		91	40 - 160	0	20
1,4-Dioxane			10.0	9.92	J	ug/L		99	40 - 160	0	20
Ethylene Dibromide			0.500	0.466		ug/L		93	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: 490-84672-C-1 MS
Matrix: Water
Analysis Batch: 273990

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane	0.010	U	0.500	0.464		ug/L		93	53 - 144		
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.421		ug/L		84	40 - 160		

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

Lab Sample ID: 490-84672-C-1 MS
Matrix: Water
Analysis Batch: 273990

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.27	U	10.0	9.08	J	ug/L		91	40 - 160
Ethylene Dibromide	0.010	U	0.500	0.437		ug/L		87	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: 490-84672-C-1 MSD
Matrix: Water
Analysis Batch: 273990

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.010	U	0.500	0.478		ug/L		96	53 - 144	3	19
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.404		ug/L		81	40 - 160	4	20
1,4-Dioxane	0.27	U	10.0	8.96	J	ug/L		90	40 - 160	1	20
Ethylene Dibromide	0.010	U	0.500	0.451		ug/L		90	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

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

Lab Sample ID: MB 490-272218/1-A
Matrix: Water
Analysis Batch: 272371

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272218

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 19:40	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 19:40	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 19:40	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/11/15 08:09	08/11/15 19:40	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/11/15 08:09	08/11/15 19:40	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 19:40	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/11/15 08:09	08/11/15 19:40	1

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

Lab Sample ID: MB 490-272218/1-A
Matrix: Water
Analysis Batch: 272371

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272218

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/11/15 08:09	08/11/15 19:40	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/11/15 08:09	08/11/15 19:40	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 19:40	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/11/15 08:09	08/11/15 19:40	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/11/15 08:09	08/11/15 19:40	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 19:40	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/11/15 08:09	08/11/15 19:40	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 19:40	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 19:40	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/11/15 08:09	08/11/15 19:40	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/11/15 08:09	08/11/15 19:40	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 19:40	1
Acetophenone	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 19:40	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/11/15 08:09	08/11/15 19:40	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/11/15 08:09	08/11/15 19:40	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/11/15 08:09	08/11/15 19:40	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/11/15 08:09	08/11/15 19:40	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 19:40	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 19:40	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 19:40	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/11/15 08:09	08/11/15 19:40	1
Carbazole	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 19:40	1
Caprolactam	2.4	U	10	2.4	ug/L		08/11/15 08:09	08/11/15 19:40	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/11/15 08:09	08/11/15 19:40	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/11/15 08:09	08/11/15 19:40	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 19:40	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/11/15 08:09	08/11/15 19:40	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 19:40	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 19:40	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 19:40	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 19:40	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/11/15 08:09	08/11/15 19:40	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/11/15 08:09	08/11/15 19:40	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/11/15 08:09	08/11/15 19:40	1
Isophorone	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 19:40	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/11/15 08:09	08/11/15 19:40	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 19:40	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/11/15 08:09	08/11/15 19:40	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/11/15 08:09	08/11/15 19:40	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/11/15 08:09	08/11/15 19:40	1
Phenol	1.5	U	10	1.5	ug/L		08/11/15 08:09	08/11/15 19:40	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 19:40	1
Diphenyl	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 19:40	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 19:40	1
Atrazine	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 19:40	1

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

Lab Sample ID: MB 490-272218/1-A
Matrix: Water
Analysis Batch: 272371

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272218

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L				08/11/15 08:09	08/11/15 19:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	86		10 - 120	08/11/15 08:09	08/11/15 19:40	1
2-Fluorobiphenyl (Surr)	78		29 - 120	08/11/15 08:09	08/11/15 19:40	1
2-Fluorophenol (Surr)	50		10 - 120	08/11/15 08:09	08/11/15 19:40	1
Nitrobenzene-d5 (Surr)	75		27 - 120	08/11/15 08:09	08/11/15 19:40	1
Phenol-d5 (Surr)	33		10 - 120	08/11/15 08:09	08/11/15 19:40	1
Terphenyl-d14 (Surr)	98		13 - 120	08/11/15 08:09	08/11/15 19:40	1

Lab Sample ID: LCS 490-272218/2-A
Matrix: Water
Analysis Batch: 272371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272218

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	40.0	33.6		ug/L		84	46 - 120
1,2,4,5-Tetrachlorobenzene	40.0	31.1		ug/L		78	25 - 120
2,3,4,6-Tetrachlorophenol	40.0	36.3		ug/L		91	31 - 148
2,4,5-Trichlorophenol	40.0	35.0		ug/L		87	40 - 129
2,4,6-Trichlorophenol	40.0	34.2		ug/L		85	39 - 135
2,4-Dichlorophenol	40.0	31.1		ug/L		78	38 - 120
2,4-Dimethylphenol	40.0	29.8		ug/L		74	21 - 126
2,4-Dinitrophenol	80.0	57.8		ug/L		72	20 - 150
2,4-Dinitrotoluene	40.0	37.1		ug/L		93	46 - 132
2,6-Dinitrotoluene	40.0	36.4		ug/L		91	54 - 128
2-Chloronaphthalene	40.0	32.1		ug/L		80	39 - 120
2-Chlorophenol	40.0	29.2		ug/L		73	40 - 120
2-Methylnaphthalene	40.0	30.0		ug/L		75	31 - 120
2-Methylphenol	40.0	27.7		ug/L		69	38 - 120
2-Nitroaniline	40.0	37.0		ug/L		93	46 - 131
2-Nitrophenol	40.0	32.3		ug/L		81	32 - 120
3,3'-Dichlorobenzidine	40.0	39.5		ug/L		99	46 - 129
3 & 4 Methylphenol	40.0	26.1		ug/L		65	33 - 120
3-Nitroaniline	40.0	34.9		ug/L		87	54 - 121
4,6-Dinitro-2-methylphenol	80.0	72.0		ug/L		90	19 - 150
4-Bromophenyl phenyl ether	40.0	34.6		ug/L		86	47 - 127
4-Chloro-3-methylphenol	40.0	33.7		ug/L		84	44 - 120
4-Chloroaniline	40.0	29.2		ug/L		73	44 - 120
4-Chlorophenyl phenyl ether	40.0	33.8		ug/L		84	50 - 120
4-Nitroaniline	40.0	38.3		ug/L		96	55 - 123
4-Nitrophenol	80.0	31.5		ug/L		39	10 - 120
Acenaphthylene	40.0	32.2		ug/L		81	48 - 120
Acetophenone	40.0	31.1		ug/L		78	52 - 133
Anthracene	40.0	35.2		ug/L		88	58 - 130
Benzaldehyde	40.0	52.8	*	ug/L		132	34 - 120
Benzo[g,h,i]perylene	40.0	36.3		ug/L		91	51 - 123
Benzo[k]fluoranthene	40.0	33.7		ug/L		84	51 - 120

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

Lab Sample ID: LCS 490-272218/2-A
Matrix: Water
Analysis Batch: 272371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272218

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethoxy)methane	40.0	31.0		ug/L		78	44 - 120
Bis(2-chloroethyl)ether	40.0	30.1		ug/L		75	47 - 120
Butyl benzyl phthalate	40.0	38.5		ug/L		96	51 - 146
Bis(2-ethylhexyl) phthalate	40.0	39.4		ug/L		99	47 - 138
Carbazole	40.0	35.9		ug/L		90	54 - 123
Caprolactam	40.0	12.0		ug/L		30	10 - 120
Chrysene	40.0	34.6		ug/L		86	55 - 120
Dibenz(a,h)anthracene	40.0	37.0		ug/L		93	50 - 125
Dibenzofuran	40.0	33.3		ug/L		83	50 - 120
Diethyl phthalate	40.0	36.4		ug/L		91	54 - 128
Dimethyl phthalate	40.0	35.1		ug/L		88	53 - 127
Di-n-butyl phthalate	40.0	37.3		ug/L		93	54 - 140
Fluoranthene	40.0	36.2		ug/L		91	56 - 120
Fluorene	40.0	34.7		ug/L		87	52 - 120
Hexachlorocyclopentadiene	40.0	23.2		ug/L		58	17 - 120
Hexachloroethane	40.0	28.7		ug/L		72	30 - 120
Indeno[1,2,3-cd]pyrene	40.0	35.7		ug/L		89	54 - 125
Isophorone	40.0	26.7		ug/L		67	47 - 120
Naphthalene	40.0	30.3		ug/L		76	37 - 120
Nitrobenzene	40.0	30.4		ug/L		76	36 - 120
N-Nitrosodi-n-propylamine	40.0	32.5		ug/L		81	51 - 120
N-Nitrosodiphenylamine	80.0	70.0		ug/L		87	58 - 149
Phenanthrene	40.0	34.3		ug/L		86	56 - 120
Phenol	40.0	14.2		ug/L		36	14 - 120
Pyrene	40.0	34.9		ug/L		87	53 - 129
Diphenyl	40.0	32.3		ug/L		81	10 - 146
Di-n-octyl phthalate	40.0	39.4		ug/L		98	50 - 142
2,2'-oxybis[1-chloropropane]	40.0	30.4		ug/L		76	44 - 120
Atrazine	40.0	16.2		ug/L		41	24 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*93*		*10 - 120*
2-Fluorobiphenyl (Surr)	*81*		*29 - 120*
2-Fluorophenol (Surr)	*48*		*10 - 120*
Nitrobenzene-d5 (Surr)	*77*		*27 - 120*
Phenol-d5 (Surr)	*33*		*10 - 120*
Terphenyl-d14 (Surr)	*91*		*13 - 120*

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

Lab Sample ID: MB 490-272220/1-A
Matrix: Water
Analysis Batch: 272273

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272220

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 17:04	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 17:04	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 17:04	1

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

Lab Sample ID: MB 490-272220/1-A
Matrix: Water
Analysis Batch: 272273

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272220

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/11/15 08:16	08/11/15 17:04	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/11/15 08:16	08/11/15 17:04	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/11/15 08:16	08/11/15 17:04	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/11/15 08:16	08/11/15 17:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*52*		*29 - 120*	*08/11/15 08:16*	*08/11/15 17:04*	*1*
Nitrobenzene-d5	*46*		*27 - 120*	*08/11/15 08:16*	*08/11/15 17:04*	*1*
Terphenyl-d14	*59*		*13 - 120*	*08/11/15 08:16*	*08/11/15 17:04*	*1*
2,4,6-Tribromophenol	*50*		*10 - 120*	*08/11/15 08:16*	*08/11/15 17:04*	*1*
2-Fluorophenol	*42*		*10 - 120*	*08/11/15 08:16*	*08/11/15 17:04*	*1*
Phenol-d5	*31*		*10 - 120*	*08/11/15 08:16*	*08/11/15 17:04*	*1*

Lab Sample ID: LCS 490-272220/2-A
Matrix: Water
Analysis Batch: 272273

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272220

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.685		ug/L		86	57 - 120
Benzo[a]pyrene	0.800	0.618		ug/L		77	57 - 124
Benzo[b]fluoranthene	0.800	0.642		ug/L		80	51 - 125
Hexachlorobenzene	0.800	0.593		ug/L		74	48 - 131
Hexachlorobutadiene	0.800	0.539		ug/L		67	28 - 120
N-Nitrosodimethylamine	0.800	0.386	J	ug/L		48	20 - 120
Pentachlorophenol	1.60	0.10	U *	ug/L		5	21 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*
Nitrobenzene-d5	*68*		*27 - 120*
Terphenyl-d14	*78*		*13 - 120*
2,4,6-Tribromophenol	*69*		*10 - 120*
2-Fluorophenol	*50*		*10 - 120*
Phenol-d5	*37*		*10 - 120*

Lab Sample ID: MB 490-272814/1-A
Matrix: Water
Analysis Batch: 272977

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272814

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 16:17	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 16:17	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 16:17	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 06:53	08/13/15 16:17	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 06:53	08/13/15 16:17	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 06:53	08/13/15 16:17	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/13/15 06:53	08/13/15 16:17	1

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

Lab Sample ID: MB 490-272814/1-A
Matrix: Water
Analysis Batch: 272977

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272814

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	54		29 - 120	08/13/15 06:53	08/13/15 16:17	1
Nitrobenzene-d5	47		27 - 120	08/13/15 06:53	08/13/15 16:17	1
Terphenyl-d14	70		13 - 120	08/13/15 06:53	08/13/15 16:17	1
2,4,6-Tribromophenol	53		10 - 120	08/13/15 06:53	08/13/15 16:17	1
2-Fluorophenol	40		10 - 120	08/13/15 06:53	08/13/15 16:17	1
Phenol-d5	28		10 - 120	08/13/15 06:53	08/13/15 16:17	1

Lab Sample ID: LCS 490-272814/2-A
Matrix: Water
Analysis Batch: 272977

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272814

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.533		ug/L		67	57 - 120
Benzo[a]pyrene	0.800	0.477		ug/L		60	57 - 124
Benzo[b]fluoranthene	0.800	0.502		ug/L		63	51 - 125
Hexachlorobenzene	0.800	0.461		ug/L		58	48 - 131
Hexachlorobutadiene	0.800	0.435		ug/L		54	28 - 120
N-Nitrosodimethylamine	0.800	0.306	J	ug/L		38	20 - 120
Pentachlorophenol	1.60	0.10	U *	ug/L		5	21 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	52		29 - 120
Nitrobenzene-d5	51		27 - 120
Terphenyl-d14	64		13 - 120
2,4,6-Tribromophenol	41		10 - 120
2-Fluorophenol	37		10 - 120
Phenol-d5	26		10 - 120

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-273908/1-A
Matrix: Water
Analysis Batch: 274717

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 273908

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/18/15 06:45	08/20/15 00:01	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/18/15 06:45	08/20/15 00:01	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/18/15 06:45	08/20/15 00:01	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/18/15 06:45	08/20/15 00:01	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/18/15 06:45	08/20/15 00:01	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/18/15 06:45	08/20/15 00:01	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/18/15 06:45	08/20/15 00:01	1
Polychlorinated biphenyls, Total	0.50	U	0.50	0.50	ug/L		08/18/15 06:45	08/20/15 00:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	100		10 - 150	08/18/15 06:45	08/20/15 00:01	1
Tetrachloro-m-xylene	85		10 - 150	08/18/15 06:45	08/20/15 00:01	1

Lab Sample ID: LCS 490-273908/2-A
Matrix: Water
Analysis Batch: 274717

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 273908

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	3.83		ug/L		96	23 - 139		
PCB-1260			4.00	4.37	E	ug/L		109	36 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*111*		*10 - 150*
Tetrachloro-m-xylene	*96*		*10 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 490-273680/3
Matrix: Water
Analysis Batch: 273680

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			08/15/15 22:40	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/15/15 22:40	1

Lab Sample ID: LCS 490-273680/4
Matrix: Water
Analysis Batch: 273680

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			100	95.10		mg/L		95	80 - 120		
Sulfate			100	91.23		mg/L		91	80 - 120		

Lab Sample ID: LCSD 490-273680/5
Matrix: Water
Analysis Batch: 273680

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	95.22		mg/L		95	80 - 120	0	20
Sulfate			100	91.49		mg/L		91	80 - 120	0	20

Lab Sample ID: 490-84420-1 MS
Matrix: Water
Analysis Batch: 273680

Client Sample ID: SC-1-080415
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	1.45		100	98.71		mg/L		97	80 - 120		
Sulfate	0.60	U	100	101.1		mg/L		101	80 - 120		

Lab Sample ID: 490-84420-1 MSD
Matrix: Water
Analysis Batch: 273680

Client Sample ID: SC-1-080415
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.45		100	94.82		mg/L		93	80 - 120	4	20
Sulfate	0.60	U	100	98.98		mg/L		99	80 - 120	2	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 490-272053/1-A
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272053

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 13:53	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Arsenic	0.000582	J	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 13:53	1
Calcium	0.13	U	1.0	0.13	mg/L		08/10/15 10:44	08/12/15 13:53	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Iron	0.010	U	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 13:53	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 13:53	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/10/15 10:44	08/12/15 13:53	1
Potassium	0.13	U ^	1.0	0.13	mg/L		08/10/15 10:44	08/12/15 13:53	1
Selenium	0.00060	U ^	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 13:53	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Sodium	0.13	U	1.0	0.13	mg/L		08/10/15 10:44	08/12/15 13:53	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 13:53	1
Vanadium	0.00122	J	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 13:53	1
Zinc	0.010	U	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 13:53	1

Lab Sample ID: MB 490-272053/1-A
Matrix: Water
Analysis Batch: 273153

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272053

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 14:16	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 14:16	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 14:16	1

Lab Sample ID: LCS 490-272053/2-A
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.02		mg/L		102	80 - 120
Antimony	0.100	0.111		mg/L		111	80 - 120
Arsenic	0.100	0.102		mg/L		102	80 - 120
Barium	0.100	0.106		mg/L		106	80 - 120
Beryllium	0.100	0.107		mg/L		107	80 - 120
Cadmium	0.100	0.105		mg/L		105	80 - 120
Calcium	10.0	10.27		mg/L		103	80 - 120
Chromium	0.100	0.104		mg/L		104	80 - 120
Cobalt	0.100	0.102		mg/L		102	80 - 120
Iron	1.00	1.03		mg/L		103	80 - 120
Lead	0.100	0.106		mg/L		106	80 - 120
Magnesium	10.0	10.08		mg/L		101	80 - 120
Potassium	10.0	10.19		mg/L		102	80 - 120
Selenium	0.100	0.103		mg/L		103	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-272053/2-A
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.100	0.105		mg/L		105	80 - 120
Sodium	10.0	10.12		mg/L		101	80 - 120
Thallium	0.100	0.105		mg/L		105	80 - 120
Vanadium	0.100	0.107		mg/L		107	80 - 120
Zinc	0.100	0.0971		mg/L		97	80 - 120

Lab Sample ID: LCS 490-272053/2-A
Matrix: Water
Analysis Batch: 273153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.100	0.0997		mg/L		100	80 - 120
Manganese	0.100	0.105		mg/L		105	80 - 120
Nickel	0.100	0.104		mg/L		104	80 - 120

Lab Sample ID: 490-84672-G-1-B MS
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.38		1.00	1.47		mg/L		109	75 - 125
Antimony	0.00050	U	0.100	0.109		mg/L		109	75 - 125
Arsenic	0.00074	J B	0.100	0.102		mg/L		101	75 - 125
Barium	0.0021		0.100	0.111		mg/L		109	75 - 125
Beryllium	0.00050	U	0.100	0.112		mg/L		112	75 - 125
Cadmium	0.00040	U	0.100	0.109		mg/L		109	75 - 125
Calcium	12.1		10.0	21.81		mg/L		97	75 - 125
Chromium	0.00050	U	0.100	0.102		mg/L		102	75 - 125
Cobalt	0.00050	U	0.100	0.100		mg/L		100	75 - 125
Iron	0.26		1.00	1.30		mg/L		105	75 - 125
Lead	0.00048	J	0.100	0.108		mg/L		107	75 - 125
Magnesium	4.2		10.0	14.11		mg/L		99	75 - 125
Potassium	0.90	J	10.0	10.95		mg/L		100	75 - 125
Selenium	0.00060	U	0.100	0.104		mg/L		104	75 - 125
Silver	0.00050	U	0.100	0.109		mg/L		109	75 - 125
Sodium	4.2		10.0	14.40		mg/L		102	75 - 125
Thallium	0.00037	J	0.100	0.107		mg/L		106	75 - 125
Vanadium	0.0019	J B	0.100	0.107		mg/L		105	75 - 125
Zinc	0.010	U F2 F1	0.100	0.0999		mg/L		100	75 - 125

Lab Sample ID: 490-84672-G-1-B MS
Matrix: Water
Analysis Batch: 273153

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.0012	J	0.100	0.107		mg/L		106	75 - 125
Manganese	0.0042	F2 F1	0.100	0.119		mg/L		115	75 - 125
Nickel	0.00051	J	0.100	0.110		mg/L		109	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-84672-G-1-C MSD
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.38		1.00	1.53		mg/L		115	75 - 125	4	20
Antimony	0.00050	U	0.100	0.108		mg/L		108	75 - 125	1	20
Arsenic	0.00074	J B	0.100	0.101		mg/L		100	75 - 125	1	20
Barium	0.0021		0.100	0.120		mg/L		118	75 - 125	8	20
Beryllium	0.00050	U	0.100	0.112		mg/L		112	75 - 125	0	20
Cadmium	0.00040	U	0.100	0.109		mg/L		109	75 - 125	0	20
Calcium	12.1		10.0	24.42		mg/L		123	75 - 125	11	20
Chromium	0.00050	U	0.100	0.101		mg/L		101	75 - 125	2	20
Cobalt	0.00050	U	0.100	0.0994		mg/L		99	75 - 125	1	20
Iron	0.26		1.00	1.42		mg/L		116	75 - 125	9	20
Lead	0.00048	J	0.100	0.105		mg/L		105	75 - 125	2	20
Magnesium	4.2		10.0	14.11		mg/L		99	75 - 125	0	20
Potassium	0.90	J	10.0	10.99		mg/L		101	75 - 125	0	20
Selenium	0.00060	U	0.100	0.102		mg/L		102	75 - 125	2	20
Silver	0.00050	U	0.100	0.108		mg/L		108	75 - 125	0	20
Sodium	4.2		10.0	13.92		mg/L		98	75 - 125	3	20
Thallium	0.00037	J	0.100	0.105		mg/L		105	75 - 125	2	20
Vanadium	0.0019	J B	0.100	0.105		mg/L		103	75 - 125	2	20
Zinc	0.010	U F2 F1	0.100	0.126	F1 F2	mg/L		126	75 - 125	23	20

Lab Sample ID: 490-84672-G-1-C MSD
Matrix: Water
Analysis Batch: 273153

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	0.0012	J	0.100	0.104		mg/L		103	75 - 125	3	20
Manganese	0.0042	F2 F1	0.100	0.164	F1 F2	mg/L		160	75 - 125	32	20
Nickel	0.00051	J	0.100	0.105		mg/L		104	75 - 125	5	20

Lab Sample ID: MB 490-272304/1-A
Matrix: Water
Analysis Batch: 272623

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.000555	J	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 21:56	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 21:56	1

Lab Sample ID: MB 490-272304/1-A
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/11/15 10:38	08/12/15 16:46	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 16:46	1
Arsenic	0.000571	J	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 16:46	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 16:46	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 16:46	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/11/15 10:38	08/12/15 16:46	1
Calcium	0.13	U	1.0	0.13	mg/L		08/11/15 10:38	08/12/15 16:46	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 490-272304/1-A
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 16:46	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 16:46	1
Iron	0.010	U	0.025	0.010	mg/L		08/11/15 10:38	08/12/15 16:46	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 16:46	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/11/15 10:38	08/12/15 16:46	1
Potassium	0.13	U ^	1.0	0.13	mg/L		08/11/15 10:38	08/12/15 16:46	1
Selenium	0.00060	U ^	0.0020	0.00060	mg/L		08/11/15 10:38	08/12/15 16:46	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 16:46	1
Sodium	0.13	U	1.0	0.13	mg/L		08/11/15 10:38	08/12/15 16:46	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 16:46	1
Vanadium	0.000961	J	0.0020	0.00010	mg/L		08/11/15 10:38	08/12/15 16:46	1
Zinc	0.010	U	0.025	0.010	mg/L		08/11/15 10:38	08/12/15 16:46	1

Lab Sample ID: MB 490-272304/1-A
Matrix: Water
Analysis Batch: 273149

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/13/15 18:45	1

Lab Sample ID: LCS 490-272304/2-A
Matrix: Water
Analysis Batch: 272623

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.100	0.113		mg/L		113	80 - 120
Nickel	0.100	0.109		mg/L		109	80 - 120

Lab Sample ID: LCS 490-272304/2-A
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.08		mg/L		108	80 - 120
Antimony	0.100	0.113		mg/L		113	80 - 120
Arsenic	0.100	0.107		mg/L		107	80 - 120
Barium	0.100	0.114		mg/L		114	80 - 120
Beryllium	0.100	0.107		mg/L		107	80 - 120
Cadmium	0.100	0.111		mg/L		111	80 - 120
Calcium	10.0	10.67		mg/L		107	80 - 120
Chromium	0.100	0.107		mg/L		107	80 - 120
Cobalt	0.100	0.106		mg/L		106	80 - 120
Iron	1.00	1.05		mg/L		105	80 - 120
Lead	0.100	0.108		mg/L		108	80 - 120
Magnesium	10.0	10.52		mg/L		105	80 - 120
Potassium	10.0	10.65		mg/L		107	80 - 120
Selenium	0.100	0.110		mg/L		110	80 - 120
Silver	0.100	0.108		mg/L		108	80 - 120
Sodium	10.0	10.45		mg/L		105	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-272304/2-A
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	0.100	0.105		mg/L		105	80 - 120
Vanadium	0.100	0.111		mg/L		111	80 - 120
Zinc	0.100	0.104		mg/L		104	80 - 120

Lab Sample ID: LCS 490-272304/2-A
Matrix: Water
Analysis Batch: 273149

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.100	0.107		mg/L		107	80 - 120

Lab Sample ID: 490-84554-O-1-B MS
Matrix: Water
Analysis Batch: 272623

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.00050	U	0.100	0.106		mg/L		106	75 - 125
Nickel	0.00050	U	0.100	0.104		mg/L		104	75 - 125

Lab Sample ID: 490-84554-O-1-B MS
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0096	U	1.00	0.986		mg/L		99	75 - 125
Antimony	0.00050	U	0.100	0.111		mg/L		111	75 - 125
Arsenic	0.00093	J B	0.100	0.102		mg/L		101	75 - 125
Barium	0.013		0.100	0.121		mg/L		108	75 - 125
Beryllium	0.00050	U	0.100	0.105		mg/L		105	75 - 125
Cadmium	0.00040	U	0.100	0.106		mg/L		106	75 - 125
Calcium	81.4		10.0	88.94	4	mg/L		75	75 - 125
Chromium	0.00050	U	0.100	0.0994		mg/L		99	75 - 125
Cobalt	0.00050	U	0.100	0.0984		mg/L		98	75 - 125
Iron	0.20		1.00	1.18		mg/L		98	75 - 125
Lead	0.00020	U	0.100	0.104		mg/L		104	75 - 125
Magnesium	22.0		10.0	30.94		mg/L		90	75 - 125
Potassium	4.3		10.0	13.74		mg/L		94	75 - 125
Selenium	0.00060	U	0.100	0.100		mg/L		100	75 - 125
Silver	0.00050	U	0.100	0.103		mg/L		103	75 - 125
Sodium	72.6		10.0	80.72	4	mg/L		81	75 - 125
Thallium	0.00044	J	0.100	0.102		mg/L		102	75 - 125
Vanadium	0.0010	J B	0.100	0.105		mg/L		104	75 - 125
Zinc	0.010	U	0.100	0.0986		mg/L		99	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-84554-O-1-B MS
Matrix: Water
Analysis Batch: 273149

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.16		0.100	0.248		mg/L		89	75 - 125

Lab Sample ID: 490-84554-O-1-C MSD
Matrix: Water
Analysis Batch: 272623

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	0.00050	U	0.100	0.0981		mg/L		98	75 - 125	8	20
Nickel	0.00050	U	0.100	0.0972		mg/L		97	75 - 125	7	20

Lab Sample ID: 490-84554-O-1-C MSD
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0096	U	1.00	0.993		mg/L		99	75 - 125	1	20
Antimony	0.00050	U	0.100	0.108		mg/L		108	75 - 125	3	20
Arsenic	0.00093	J B	0.100	0.100		mg/L		99	75 - 125	1	20
Barium	0.013		0.100	0.119		mg/L		106	75 - 125	2	20
Beryllium	0.00050	U	0.100	0.102		mg/L		102	75 - 125	2	20
Cadmium	0.00040	U	0.100	0.110		mg/L		110	75 - 125	4	20
Calcium	81.4		10.0	92.71	4	mg/L		113	75 - 125	4	20
Chromium	0.00050	U	0.100	0.100		mg/L		100	75 - 125	1	20
Cobalt	0.00050	U	0.100	0.0992		mg/L		99	75 - 125	1	20
Iron	0.20		1.00	1.21		mg/L		101	75 - 125	3	20
Lead	0.00020	U	0.100	0.100		mg/L		100	75 - 125	4	20
Magnesium	22.0		10.0	31.75		mg/L		98	75 - 125	3	20
Potassium	4.3		10.0	13.97		mg/L		97	75 - 125	2	20
Selenium	0.00060	U	0.100	0.102		mg/L		102	75 - 125	2	20
Silver	0.00050	U	0.100	0.104		mg/L		104	75 - 125	1	20
Sodium	72.6		10.0	83.36	4	mg/L		108	75 - 125	3	20
Thallium	0.00044	J	0.100	0.0985		mg/L		98	75 - 125	4	20
Vanadium	0.0010	J B	0.100	0.105		mg/L		104	75 - 125	1	20
Zinc	0.010	U	0.100	0.0995		mg/L		99	75 - 125	1	20

Lab Sample ID: 490-84554-O-1-C MSD
Matrix: Water
Analysis Batch: 273149

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	0.16		0.100	0.248		mg/L		89	75 - 125	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 490-271554/1-A
Matrix: Water
Analysis Batch: 272012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 271554

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/07/15 11:20	08/07/15 20:24	1

Lab Sample ID: LCS 490-271554/2-A
Matrix: Water
Analysis Batch: 272012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 271554

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000818		mg/L		82	80 - 120

Lab Sample ID: LCSD 490-271554/3-A
Matrix: Water
Analysis Batch: 272143

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 271554

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00100	0.000893		mg/L		89	80 - 120	9	20

Lab Sample ID: 490-84129-I-3-D MS
Matrix: Water
Analysis Batch: 272012

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 271554

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000811		mg/L		81	75 - 125

Lab Sample ID: 490-84129-I-3-E MSD
Matrix: Water
Analysis Batch: 272012

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 271554

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000747		mg/L		75	75 - 125	8	20

Lab Sample ID: MB 490-272424/1-B
Matrix: Water
Analysis Batch: 273136

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 272902

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 15:50	1

Lab Sample ID: LCS 490-272424/2-B
Matrix: Water
Analysis Batch: 273136

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 272902

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000858		mg/L		86	80 - 120

Lab Sample ID: 490-84672-I-1-K MS
Matrix: Water
Analysis Batch: 273136

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 272902

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000811		mg/L		81	75 - 125

Lab Sample ID: 490-84672-I-1-L MSD
Matrix: Water
Analysis Batch: 273136

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 272902

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000796		mg/L		80	75 - 125	2	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 490-271352/1-A
Matrix: Water
Analysis Batch: 271598

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 271352

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/06/15 15:53	08/07/15 09:09	1

Lab Sample ID: LCS 490-271352/2-A
Matrix: Water
Analysis Batch: 271598

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 271352

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0985		mg/L		99	90 - 110

Lab Sample ID: 490-84420-1 MS
Matrix: Water
Analysis Batch: 271598

Client Sample ID: SC-1-080415
Prep Type: Total/NA
Prep Batch: 271352

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1	0.100	0.0698		mg/L		70	70 - 130

Lab Sample ID: 490-84420-1 MSD
Matrix: Water
Analysis Batch: 271598

Client Sample ID: SC-1-080415
Prep Type: Total/NA
Prep Batch: 271352

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1	0.100	0.0691	F1	mg/L		69	70 - 130	1	46

Lab Sample ID: 490-84375-E-1-B DU
Matrix: Water
Analysis Batch: 271598

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 271352

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.014		0.00990	J F5	mg/L		31	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 490-272008/35
Matrix: Water
Analysis Batch: 272008

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/07/15 19:35	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/07/15 19:35	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 490-272008/36
Matrix: Water
Analysis Batch: 272008

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	100	92.49		mg/L		92	90 - 110

Lab Sample ID: LCSD 490-272008/37
Matrix: Water
Analysis Batch: 272008

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Alkalinity as CaCO3	100	93.69		mg/L		94	90 - 110	1	20

Lab Sample ID: 490-84338-Q-1 DU
Matrix: Water
Analysis Batch: 272008

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	100		100.1		mg/L		0.2	20
Total Alkalinity as CaCO3	100		100.1		mg/L		0.2	20

Lab Sample ID: 490-84427-E-1 DU
Matrix: Water
Analysis Batch: 272008

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	58.8		59.89		mg/L		2	20
Total Alkalinity as CaCO3	58.8		59.89		mg/L		2	20

GC/MS VOA

Analysis Batch: 273547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Total/NA	Water	8260C	
490-84420-2	RW-6A-080415	Total/NA	Water	8260C	
490-84420-3	TB-01-080515	Total/NA	Water	8260C	
490-85116-A-8 MS	Matrix Spike	Total/NA	Water	8260C	
490-85116-A-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	
LCS 490-273547/8	Lab Control Sample	Total/NA	Water	8260C	
MB 490-273547/10	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 273990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Total/NA	Water	8260C SIM	
490-84420-2	RW-6A-080415	Total/NA	Water	8260C SIM	
490-84420-3	TB-01-080515	Total/NA	Water	8260C SIM	
490-84672-C-1 MS	Matrix Spike	Total/NA	Water	8260C SIM	
490-84672-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C SIM	
LCS 490-273990/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-273990/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-273990/7	Method Blank	Total/NA	Water	8260C SIM	

GC/MS Semi VOA

Prep Batch: 272218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Total/NA	Water	3510C	
490-84420-2	RW-6A-080415	Total/NA	Water	3510C	
LCS 490-272218/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-272218/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 272220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Total/NA	Water	3510C	
490-84420-2	RW-6A-080415	Total/NA	Water	3510C	
LCS 490-272220/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-272220/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 272273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Total/NA	Water	8270D SIM	272220
490-84420-2	RW-6A-080415	Total/NA	Water	8270D SIM	272220
LCS 490-272220/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	272220
MB 490-272220/1-A	Method Blank	Total/NA	Water	8270D SIM	272220

Analysis Batch: 272371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Total/NA	Water	8270D	272218
490-84420-2	RW-6A-080415	Total/NA	Water	8270D	272218
LCS 490-272218/2-A	Lab Control Sample	Total/NA	Water	8270D	272218
MB 490-272218/1-A	Method Blank	Total/NA	Water	8270D	272218

GC/MS Semi VOA (Continued)

Prep Batch: 272814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Total/NA	Water	3510C	
490-84420-2	RW-6A-080415	Total/NA	Water	3510C	
LCS 490-272814/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-272814/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 272977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Total/NA	Water	8270D SIM	272814
490-84420-2	RW-6A-080415	Total/NA	Water	8270D SIM	272814
LCS 490-272814/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	272814
MB 490-272814/1-A	Method Blank	Total/NA	Water	8270D SIM	272814

GC Semi VOA

Prep Batch: 273908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Total/NA	Water	3510C	
490-84420-2	RW-6A-080415	Total/NA	Water	3510C	
LCS 490-273908/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-273908/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 274717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Total/NA	Water	8082A	273908
490-84420-2	RW-6A-080415	Total/NA	Water	8082A	273908
LCS 490-273908/2-A	Lab Control Sample	Total/NA	Water	8082A	273908
MB 490-273908/1-A	Method Blank	Total/NA	Water	8082A	273908

HPLC/IC

Analysis Batch: 273680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Total/NA	Water	9056A	
490-84420-1 MS	SC-1-080415	Total/NA	Water	9056A	
490-84420-1 MSD	SC-1-080415	Total/NA	Water	9056A	
490-84420-2	RW-6A-080415	Total/NA	Water	9056A	
LCS 490-273680/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-273680/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-273680/3	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 271554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84129-I-3-D MS	Matrix Spike	Dissolved	Water	7470A	
490-84129-I-3-E MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	
490-84420-1	SC-1-080415	Total/NA	Water	7470A	
490-84420-2	RW-6A-080415	Total/NA	Water	7470A	
LCS 490-271554/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 490-271554/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 271554 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-271554/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 272012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84129-I-3-D MS	Matrix Spike	Dissolved	Water	7470A	271554
490-84129-I-3-E MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	271554
490-84420-1	SC-1-080415	Total/NA	Water	7470A	271554
490-84420-2	RW-6A-080415	Total/NA	Water	7470A	271554
LCS 490-271554/2-A	Lab Control Sample	Total/NA	Water	7470A	271554
MB 490-271554/1-A	Method Blank	Total/NA	Water	7470A	271554

Prep Batch: 272053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Total/NA	Water	3010A	
490-84420-2	RW-6A-080415	Total/NA	Water	3010A	
490-84672-G-1-B MS	Matrix Spike	Total/NA	Water	3010A	
490-84672-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
LCS 490-272053/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-272053/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 272143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 490-271554/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	271554

Filtration Batch: 272302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Dissolved	Water	Filtration	
490-84420-2	RW-6A-080415	Dissolved	Water	Filtration	

Prep Batch: 272304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Dissolved	Water	3005A	272302
490-84420-2	RW-6A-080415	Dissolved	Water	3005A	272302
490-84554-O-1-B MS	Matrix Spike	Dissolved	Water	3005A	
490-84554-O-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	
LCS 490-272304/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 490-272304/1-A	Method Blank	Total Recoverable	Water	3005A	

Filtration Batch: 272424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Dissolved	Water	Filtration	
490-84420-2	RW-6A-080415	Dissolved	Water	Filtration	
490-84672-I-1-K MS	Matrix Spike	Dissolved	Water	Filtration	
490-84672-I-1-L MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	
LCS 490-272424/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-272424/1-B	Method Blank	Dissolved	Water	Filtration	

Analysis Batch: 272623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Dissolved	Water	6020A	272304
490-84420-2	RW-6A-080415	Dissolved	Water	6020A	272304

Metals (Continued)

Analysis Batch: 272623 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84554-O-1-B MS	Matrix Spike	Dissolved	Water	6020A	272304
490-84554-O-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	272304
LCS 490-272304/2-A	Lab Control Sample	Total Recoverable	Water	6020A	272304
MB 490-272304/1-A	Method Blank	Total Recoverable	Water	6020A	272304

Analysis Batch: 272841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Dissolved	Water	6020A	272304
490-84420-1	SC-1-080415	Total/NA	Water	6020A	272053
490-84420-2	RW-6A-080415	Dissolved	Water	6020A	272304
490-84420-2	RW-6A-080415	Total/NA	Water	6020A	272053
490-84554-O-1-B MS	Matrix Spike	Dissolved	Water	6020A	272304
490-84554-O-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	272304
490-84672-G-1-B MS	Matrix Spike	Total/NA	Water	6020A	272053
490-84672-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	272053
LCS 490-272053/2-A	Lab Control Sample	Total/NA	Water	6020A	272053
LCS 490-272304/2-A	Lab Control Sample	Total Recoverable	Water	6020A	272304
MB 490-272053/1-A	Method Blank	Total/NA	Water	6020A	272053
MB 490-272304/1-A	Method Blank	Total Recoverable	Water	6020A	272304

Prep Batch: 272902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Dissolved	Water	7470A	272424
490-84420-2	RW-6A-080415	Dissolved	Water	7470A	272424
490-84672-I-1-K MS	Matrix Spike	Dissolved	Water	7470A	272424
490-84672-I-1-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	272424
LCS 490-272424/2-B	Lab Control Sample	Dissolved	Water	7470A	272424
MB 490-272424/1-B	Method Blank	Dissolved	Water	7470A	272424

Analysis Batch: 273136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Dissolved	Water	7470A	272902
490-84420-2	RW-6A-080415	Dissolved	Water	7470A	272902
490-84672-I-1-K MS	Matrix Spike	Dissolved	Water	7470A	272902
490-84672-I-1-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	272902
LCS 490-272424/2-B	Lab Control Sample	Dissolved	Water	7470A	272902
MB 490-272424/1-B	Method Blank	Dissolved	Water	7470A	272902

Analysis Batch: 273149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84554-O-1-B MS	Matrix Spike	Dissolved	Water	6020A	272304
490-84554-O-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	272304
LCS 490-272304/2-A	Lab Control Sample	Total Recoverable	Water	6020A	272304
MB 490-272304/1-A	Method Blank	Total Recoverable	Water	6020A	272304

Analysis Batch: 273153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Total/NA	Water	6020A	272053
490-84420-2	RW-6A-080415	Total/NA	Water	6020A	272053
490-84672-G-1-B MS	Matrix Spike	Total/NA	Water	6020A	272053
490-84672-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	272053

Metals (Continued)

Analysis Batch: 273153 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-272053/2-A	Lab Control Sample	Total/NA	Water	6020A	272053
MB 490-272053/1-A	Method Blank	Total/NA	Water	6020A	272053

Analysis Batch: 275097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-2	RW-6A-080415	Total/NA	Water	6020A	272053

Analysis Batch: 275984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84420-1	SC-1-080415	Dissolved	Water	6020A	272304
490-84420-2	RW-6A-080415	Dissolved	Water	6020A	272304

General Chemistry

Prep Batch: 271352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84375-E-1-B DU	Duplicate	Total/NA	Water	9012B	
490-84420-1	SC-1-080415	Total/NA	Water	9012B	
490-84420-1 MS	SC-1-080415	Total/NA	Water	9012B	
490-84420-1 MSD	SC-1-080415	Total/NA	Water	9012B	
490-84420-2	RW-6A-080415	Total/NA	Water	9012B	
LCS 490-271352/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 490-271352/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 271598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84375-E-1-B DU	Duplicate	Total/NA	Water	9012B	271352
490-84420-1	SC-1-080415	Total/NA	Water	9012B	271352
490-84420-1 MS	SC-1-080415	Total/NA	Water	9012B	271352
490-84420-1 MSD	SC-1-080415	Total/NA	Water	9012B	271352
490-84420-2	RW-6A-080415	Total/NA	Water	9012B	271352
LCS 490-271352/2-A	Lab Control Sample	Total/NA	Water	9012B	271352
MB 490-271352/1-A	Method Blank	Total/NA	Water	9012B	271352

Analysis Batch: 272008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84338-Q-1 DU	Duplicate	Total/NA	Water	SM 2320B	
490-84420-1	SC-1-080415	Total/NA	Water	SM 2320B	
490-84420-2	RW-6A-080415	Total/NA	Water	SM 2320B	
490-84427-E-1 DU	Duplicate	Total/NA	Water	SM 2320B	
LCS 490-272008/36	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 490-272008/37	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 490-272008/35	Method Blank	Total/NA	Water	SM 2320B	

Client Sample ID: SC-1-080415

Lab Sample ID: 490-84420-1

Date Collected: 08/04/15 10:40

Matrix: Water

Date Received: 08/06/15 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	273547	08/16/15 01:14	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273990	08/18/15 18:05	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272218	08/11/15 08:09	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	272371	08/11/15 20:27	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272220	08/11/15 08:16	MRM	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272273	08/11/15 18:00	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272814	08/13/15 06:53	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272977	08/13/15 17:12	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	273908	08/18/15 06:45	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	274717	08/20/15 07:52	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		273680	08/15/15 23:37	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272623	08/12/15 00:38	CME	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 19:14	CME	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 21:58	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 15:33	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	273153	08/13/15 16:00	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	272902	08/11/15 14:41	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	272424	08/11/15 14:41	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	273136	08/13/15 16:38	RDF	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	271554	08/07/15 11:20	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	272012	08/07/15 21:00	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	271352	08/06/15 15:53	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	271598	08/07/15 09:11	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	272008	08/07/15 20:41	SMB	TAL NSH

Client Sample ID: RW-6A-080415

Lab Sample ID: 490-84420-2

Date Collected: 08/04/15 14:15

Matrix: Water

Date Received: 08/06/15 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	273547	08/16/15 00:46	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273990	08/18/15 18:33	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272218	08/11/15 08:09	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	272371	08/11/15 20:51	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272220	08/11/15 08:16	MRM	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84420-1

Client Sample ID: RW-6A-080415

Date Collected: 08/04/15 14:15
Date Received: 08/06/15 08:50

Lab Sample ID: 490-84420-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272273	08/11/15 18:28	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272814	08/13/15 06:53	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272977	08/13/15 17:40	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	273908	08/18/15 06:45	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	274717	08/20/15 00:48	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		273680	08/16/15 00:35	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272623	08/12/15 00:44	CME	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 19:19	CME	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		100	50 mL	50 mL	275984	08/24/15 22:03	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		20	50 mL	50 mL	275097	08/20/15 14:53	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 15:49	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	273153	08/13/15 16:05	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	272902	08/11/15 14:41	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	272424	08/11/15 14:41	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	273136	08/13/15 16:41	RDF	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	271554	08/07/15 11:20	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	272012	08/07/15 21:02	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	271352	08/06/15 15:53	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	271598	08/07/15 09:13	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	272008	08/07/15 20:46	SMB	TAL NSH

Client Sample ID: TB-01-080515

Date Collected: 08/04/15 01:00
Date Received: 08/06/15 08:50

Lab Sample ID: 490-84420-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	273547	08/16/15 00:19	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273990	08/18/15 17:36	MJH	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84420-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
9056A	Anions, Ion Chromatography	SW846	TAL NSH
6020A	Metals (ICP/MS)	SW846	TAL NSH
7470A	Mercury (CVAA)	SW846	TAL NSH
9012B	Cyanide, Total andor Amenable	SW846	TAL NSH
SM 2320B	Alkalinity	SM	TAL NSH

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84420-1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	TN965	09-30-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total
8260C		Water	Dichlorobromomethane
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	1,4-Dioxane
8260C SIM		Water	Ethylene Dibromide
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

490-84420 Chain of Custody

COOLER RECEIPT FORM

Cooler Received/Opened On 8/6/2015 @ 0850

1. Tracking # 1935 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 0.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO...NA

12. Did all container labels and tags agree with custody papers? YES NO...NA

13a. Were VOA vials received? YES NO...NA

b. Was there any observable headspace present in any VOA vial? YES NO NA

14. Was there a Trip Blank in this cooler? YES NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) MBM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO...NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) MBM

17. Were custody papers properly filled out (ink, signed, etc)? YES NO...NA

18. Did you sign the custody papers in the appropriate place? YES NO...NA

19. Were correct containers used for the analysis requested? YES NO...NA

20. Was sufficient amount of sample sent in each container? YES NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) MBM

I certify that I attached a label with the unique LIMS number to each container (intial) MBM

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO #_____

BIS = Broken in shipment

Loc: 490
84420

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 8/6/2015 @ 0850

1. Tracking # 1924 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 1.3 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: one front

5. Were the seals intact, signed, and dated correctly? YES NO NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA

12. Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA mbm 8/6/15

b. Was there any observable headspace present in any VOA vial? YES NO NA

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) mbm

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) mbm

17. Were custody papers properly filled out (ink, signed, etc)? YES NO NA

18. Did you sign the custody papers in the appropriate place? YES NO NA

19. Were correct containers used for the analysis requested? YES NO NA

20. Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) mbm

I certify that I attached a label with the unique LIMS number to each container (intial) mbm

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO #_____

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Loc: 490
84420

9/11/2015

Client Information	Sampler: Robert Lautenberg	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate			Total Number of containers	Special Instructions/Note:
				Preservation Code:																	
1	SC-1-080415	8/4/15	10:40	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
2	RW-6A-080415	8/4/15	14:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
3	TB-01-080515	8/5/15	–	–	Water	N	N	✓	✓												
					Water																
					Water																
					Water																
					Water																
					Water																
					Water																
					Water																
					Water																

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/5/2015 820		James Thiessen	8-5-2015 820	TA
2	James Thiessen	8/5/2015 1210			8.6.15 0850	TAN
3		Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.3/0Bc

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 490-84420-1

Login Number: 84420
List Number: 1
Creator: McBride, Mike

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3/0.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-84595-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Tim Roeper

Authorized for release by:
9/14/2015 4:44:35 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-84595-1	RW-6-080515	Water	08/05/15 10:30	08/07/15 16:34
490-84595-2	OB-20A-080515	Water	08/05/15 10:35	08/07/15 16:34
490-84595-3	OB-19-080515	Water	08/05/15 10:40	08/07/15 16:34
490-84595-4	RW-5-080515	Water	08/05/15 14:35	08/07/15 16:34
490-84595-5	OB-20B-080515	Water	08/05/15 14:10	08/07/15 16:34
490-84595-6	TB-02-080615	Water	08/06/15 01:01	08/07/15 16:34
490-84595-7	TB-02-080615	Water	08/06/15 01:01	08/07/15 16:34

Job ID: 490-84595-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 490-84595-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 8/7/2015 4:34 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.1º C, 1.5º C, 1.6º C and 4.2º C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples RW-6-080515 (490-84595-1), OB-20A-080515 (490-84595-2), OB-19-080515 (490-84595-3), RW-5-080515 (490-84595-4), OB-20B-080515 (490-84595-5), TB-02-080615 (490-84595-6) and TB-02-080615 (490-84595-7) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/18/2015 and 08/19/2015.

Carbon disulfide was detected in method blank MB 490-273831/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 490-274395 and 490-273958.

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

Job ID: 490-84595-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

VOLATILE ORGANIC COMPOUNDS (GC-MS SIM)

Samples RW-6-080515 (490-84595-1), OB-20A-080515 (490-84595-2), OB-19-080515 (490-84595-3), RW-5-080515 (490-84595-4), OB-20B-080515 (490-84595-5), TB-02-080615 (490-84595-6) and TB-02-080615 (490-84595-7) were analyzed for volatile organic compounds (GC-MS SIM) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/18/2015.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GC MS)

Samples RW-6-080515 (490-84595-1), OB-20A-080515 (490-84595-2), OB-19-080515 (490-84595-3), RW-5-080515 (490-84595-4) and OB-20B-080515 (490-84595-5) were analyzed for semivolatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared and analyzed on 08/11/2015.

Benzaldehyde failed the recovery criteria high for LCS 490-272218/2-A. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-272218 and analytical batch 490-272371.

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

POLYCHLORINATED BIPHENYLS (PCBS)

Samples RW-6-080515 (490-84595-1), OB-20A-080515 (490-84595-2), OB-19-080515 (490-84595-3), RW-5-080515 (490-84595-4) and OB-20B-080515 (490-84595-5) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 08/18/2015 and analyzed on 08/20/2015.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 490-273908.

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

POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

Samples RW-6-080515 (490-84595-1), OB-20A-080515 (490-84595-2), OB-19-080515 (490-84595-3), RW-5-080515 (490-84595-4) and OB-20B-080515 (490-84595-5) were analyzed for polycyclic aromatic hydrocarbons (PAHs) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/11/2015 and 08/14/2015 and analyzed on 08/11/2015 and 08/15/2015.

Pentachlorophenol failed the recovery criteria low for LCS 490-272220/2-A. The associated sample was re-prepared and re-analyzed outside holding time. Both sets of data have been reported.

Reanalysis of the following samples was performed outside of the analytical holding time due to low PCP in the LCS : RW-6-080515 (490-84595-1), OB-20A-080515 (490-84595-2), OB-19-080515 (490-84595-3), RW-5-080515 (490-84595-4) and OB-20B-080515 (490-84595-5). Both sets of data have been reported.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-272220 and analytical batch 490-272273.

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

DISSOLVED METALS (ICPMS)

Samples RW-6-080515 (490-84595-1), OB-20A-080515 (490-84595-2), OB-19-080515 (490-84595-3), RW-5-080515 (490-84595-4) and OB-20B-080515 (490-84595-5) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/11/2015 and analyzed on 08/11/2015, 08/12/2015, 08/13/2015 and 08/14/2015.

Arsenic and Vanadium were detected in method blank MB 490-272304/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore,

Job ID: 490-84595-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

re-extraction and/or re-analysis of samples was not performed.

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

METALS (ICPMS)

Samples RW-6-080515 (490-84595-1), OB-20A-080515 (490-84595-2), OB-19-080515 (490-84595-3), RW-5-080515 (490-84595-4) and OB-20B-080515 (490-84595-5) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/10/2015 and 08/13/2015 and analyzed on 08/12/2015, 08/13/2015, 08/14/2015, 08/19/2015 and 08/25/2015.

Arsenic and Vanadium were detected in method blank MB 490-272053/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Vanadium was detected in method blank MB 490-272910/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Samples RW-6-080515 (490-84595-1)[10X] and OB-20B-080515 (490-84595-5)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

DISSOLVED MERCURY (CVAA)

Samples RW-6-080515 (490-84595-1), OB-20A-080515 (490-84595-2), OB-19-080515 (490-84595-3), RW-5-080515 (490-84595-4) and OB-20B-080515 (490-84595-5) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/11/2015 and analyzed on 08/13/2015.

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

TOTAL MERCURY

Samples RW-6-080515 (490-84595-1), OB-20A-080515 (490-84595-2), OB-19-080515 (490-84595-3), RW-5-080515 (490-84595-4) and OB-20B-080515 (490-84595-5) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/11/2015 and analyzed on 08/12/2015.

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

ALKALINITY

Samples RW-6-080515 (490-84595-1), OB-20A-080515 (490-84595-2), OB-19-080515 (490-84595-3), RW-5-080515 (490-84595-4) and OB-20B-080515 (490-84595-5) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/11/2015.

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

TOTAL CYANIDE

Samples RW-6-080515 (490-84595-1), OB-20A-080515 (490-84595-2), OB-19-080515 (490-84595-3), RW-5-080515 (490-84595-4) and OB-20B-080515 (490-84595-5) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared on 08/08/2015 and analyzed on 08/11/2015.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

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

ANIONS

Samples RW-6-080515 (490-84595-1), OB-20A-080515 (490-84595-2), OB-19-080515 (490-84595-3), RW-5-080515 (490-84595-4) and OB-20B-080515 (490-84595-5) were analyzed for anions in accordance with SW-846 Method 9056. The samples were analyzed on 08/19/2015.

Job ID: 490-84595-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

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

ORGANIC PREP

Method(s) 3510C: The following sample was improperly preserved in the field: RW-5-080515 (490-84595-4). The preservative used is not compatible with the analytes requested. pH was 2.0

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
E	Result exceeded calibration range.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: RW-6-080515
Date Collected: 08/05/15 10:30
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 15:13	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 15:13	1
1,4-Dioxane	**1.5**	**J**	10	0.27	ug/L			08/18/15 15:13	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/18/15 15:13*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/18/15 15:13*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/18/15 15:13*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/18/15 15:13*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 04:14	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 04:14	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 04:14	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 04:14	1
1,1-Dichloroethane	**0.62**	**J**	1.0	0.24	ug/L			08/18/15 04:14	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 04:14	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 04:14	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 04:14	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 04:14	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 04:14	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 04:14	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 04:14	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 04:14	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 04:14	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 04:14	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 04:14	1
Benzene	**1.2**		1.0	0.20	ug/L			08/18/15 04:14	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 04:14	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 04:14	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 04:14	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 04:14	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 04:14	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 04:14	1
Chloroethane	**3.3**		1.0	0.36	ug/L			08/18/15 04:14	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 04:14	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 04:14	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 04:14	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 04:14	1
Cyclohexane	**0.48**	**J**	5.0	0.13	ug/L			08/18/15 04:14	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 04:14	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 04:14	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 04:14	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 04:14	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 04:14	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 04:14	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 04:14	1
Methylcyclohexane	**0.33**	**J**	5.0	0.090	ug/L			08/18/15 04:14	1

Client Sample ID: RW-6-080515
Date Collected: 08/05/15 10:30
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 04:14	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 04:14	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 04:14	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 04:14	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 04:14	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 04:14	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 04:14	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 04:14	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 04:14	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 04:14	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 04:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 04:14*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 04:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*08/18/15 04:14*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*08/18/15 04:14*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/18/15 04:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*08/18/15 04:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 18:56	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 18:56	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 18:56	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/11/15 08:16	08/11/15 18:56	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/11/15 08:16	08/11/15 18:56	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/11/15 08:16	08/11/15 18:56	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		08/11/15 08:16	08/11/15 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*49*		*29 - 120*	*08/11/15 08:16*	*08/11/15 18:56*	*1*
Nitrobenzene-d5	*42*		*27 - 120*	*08/11/15 08:16*	*08/11/15 18:56*	*1*
Terphenyl-d14	*60*		*13 - 120*	*08/11/15 08:16*	*08/11/15 18:56*	*1*
2,4,6-Tribromophenol	*46*		*10 - 120*	*08/11/15 08:16*	*08/11/15 18:56*	*1*
2-Fluorophenol	*36*		*10 - 120*	*08/11/15 08:16*	*08/11/15 18:56*	*1*
Phenol-d5	*26*		*10 - 120*	*08/11/15 08:16*	*08/11/15 18:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	**0.10**	**J H**	0.30	0.10	ug/L		08/14/15 16:10	08/15/15 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*90*		*10 - 120*	*08/14/15 16:10*	*08/15/15 20:21*	*1*
2-Fluorophenol	*73*		*10 - 120*	*08/14/15 16:10*	*08/15/15 20:21*	*1*
Phenol-d5	*66*		*10 - 120*	*08/14/15 16:10*	*08/15/15 20:21*	*1*

Client Sample ID: RW-6-080515
Date Collected: 08/05/15 10:30
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 21:14	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/11/15 08:09	08/11/15 21:14	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/11/15 08:09	08/11/15 21:14	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/11/15 08:09	08/11/15 21:14	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/11/15 08:09	08/11/15 21:14	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/11/15 08:09	08/11/15 21:14	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 21:14	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/11/15 08:09	08/11/15 21:14	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/11/15 08:09	08/11/15 21:14	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 21:14	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 21:14	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/11/15 08:09	08/11/15 21:14	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/11/15 08:09	08/11/15 21:14	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 21:14	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/11/15 08:09	08/11/15 21:14	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/11/15 08:09	08/11/15 21:14	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/11/15 08:09	08/11/15 21:14	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 21:14	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/11/15 08:09	08/11/15 21:14	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/11/15 08:09	08/11/15 21:14	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 21:14	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/11/15 08:09	08/11/15 21:14	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 21:14	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 21:14	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/11/15 08:09	08/11/15 21:14	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/11/15 08:09	08/11/15 21:14	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 21:14	1
Acetophenone	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 21:14	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/11/15 08:09	08/11/15 21:14	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/11/15 08:09	08/11/15 21:14	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/11/15 08:09	08/11/15 21:14	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/11/15 08:09	08/11/15 21:14	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 21:14	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 21:14	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 21:14	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/11/15 08:09	08/11/15 21:14	1
Carbazole	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 21:14	1
Caprolactam	2.4	U	10	2.4	ug/L		08/11/15 08:09	08/11/15 21:14	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/11/15 08:09	08/11/15 21:14	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/11/15 08:09	08/11/15 21:14	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 21:14	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/11/15 08:09	08/11/15 21:14	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 21:14	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 21:14	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 21:14	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 21:14	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/11/15 08:09	08/11/15 21:14	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/11/15 08:09	08/11/15 21:14	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/11/15 08:09	08/11/15 21:14	1

Client Sample ID: RW-6-080515
Date Collected: 08/05/15 10:30
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 21:14	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/11/15 08:09	08/11/15 21:14	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 21:14	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/11/15 08:09	08/11/15 21:14	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/11/15 08:09	08/11/15 21:14	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/11/15 08:09	08/11/15 21:14	1
Phenol	1.5	U	10	1.5	ug/L		08/11/15 08:09	08/11/15 21:14	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 21:14	1
Diphenyl	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 21:14	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 21:14	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 21:14	1
Atrazine	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 21:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Diethyltoluamide	*7.4*	*J N*	*ug/L*		*6.81*	*134-62-3*	*08/11/15 08:09*	*08/11/15 21:14*	*1*
Benzenesulfonamide, N-cyclohexyl-4-methy	*3.4*	*J N*	*ug/L*		*8.87*	*80-30-8*	*08/11/15 08:09*	*08/11/15 21:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*86*		*10 - 120*	*08/11/15 08:09*	*08/11/15 21:14*	*1*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*	*08/11/15 08:09*	*08/11/15 21:14*	*1*
2-Fluorophenol (Surr)	*51*		*10 - 120*	*08/11/15 08:09*	*08/11/15 21:14*	*1*
Nitrobenzene-d5 (Surr)	*75*		*27 - 120*	*08/11/15 08:09*	*08/11/15 21:14*	*1*
Phenol-d5 (Surr)	*33*		*10 - 120*	*08/11/15 08:09*	*08/11/15 21:14*	*1*
Terphenyl-d14 (Surr)	*92*		*13 - 120*	*08/11/15 08:09*	*08/11/15 21:14*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/18/15 06:45	08/20/15 08:08	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/18/15 06:45	08/20/15 08:08	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/18/15 06:45	08/20/15 08:08	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/18/15 06:45	08/20/15 08:08	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/18/15 06:45	08/20/15 08:08	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/18/15 06:45	08/20/15 08:08	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/18/15 06:45	08/20/15 08:08	1
Polychlorinated biphenyls, Total	0.50	U	0.50	0.50	ug/L		08/18/15 06:45	08/20/15 08:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*63*		*10 - 150*	*08/18/15 06:45*	*08/20/15 08:08*	*1*
Tetrachloro-m-xylene	*57*		*10 - 150*	*08/18/15 06:45*	*08/20/15 08:08*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.97**		1.00	0.70	mg/L			08/19/15 00:47	1
Sulfate	**1.41**		1.00	0.60	mg/L			08/19/15 00:47	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.012**	**J**	0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 16:20	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 16:20	1
Arsenic	**0.0015**	**J B**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 16:20	1

Client Sample ID: RW-6-080515
Date Collected: 08/05/15 10:30
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-1
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.44**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 16:20	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 16:20	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 16:20	1
Calcium	**77.0**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 16:20	1
Chromium	**0.0029**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 16:20	1
Cobalt	**0.0016**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 16:20	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 16:10	1
Iron	**36.3**		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 16:20	1
Lead	**0.00025**	**J**	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 16:20	1
Magnesium	**13.6**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 16:20	1
Manganese	**7.4**		0.020	0.0050	mg/L		08/10/15 10:44	08/14/15 21:13	10
Nickel	**0.0011**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 16:10	1
Potassium	**2.9**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 16:20	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 16:20	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 16:20	1
Sodium	**6.8**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 16:20	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 16:20	1
Vanadium	**0.0027**	**B**	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 16:20	1
Zinc	0.010	U	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 16:20	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/11/15 10:38	08/12/15 18:37	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:37	1
Arsenic	**0.0011**	**J B**	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:37	1
Barium	**0.38**		0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:37	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:37	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/11/15 10:38	08/12/15 18:37	1
Calcium	**75.4**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:37	1
Chromium	**0.00087**	**J**	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:37	1
Cobalt	**0.0014**	**J**	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:37	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/13/15 19:54	1
Iron	**26.1**		0.025	0.010	mg/L		08/11/15 10:38	08/12/15 18:37	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 18:37	1
Magnesium	**13.7**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:37	1
Manganese	**7.4**	**B**	0.020	0.0050	mg/L		08/11/15 10:38	08/14/15 15:43	10
Nickel	**0.0019**	**J**	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:57	1
Potassium	**2.9**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:37	1
Selenium	**0.00066**	**J**	0.0020	0.00060	mg/L		08/11/15 10:38	08/12/15 18:37	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:37	1
Sodium	**6.5**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:37	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 18:37	1
Vanadium	**0.0014**	**J B**	0.0020	0.00010	mg/L		08/11/15 10:38	08/12/15 18:37	1
Zinc	0.010	U	0.025	0.010	mg/L		08/11/15 10:38	08/12/15 18:37	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:35	08/12/15 18:30	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: RW-6-080515
Date Collected: 08/05/15 10:30
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-1
Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 16:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0072	J	0.010	0.0070	mg/L		08/08/15 18:12	08/11/15 11:18	1
Bicarbonate Alkalinity as CaCO3	284		10.0	5.0	mg/L			08/11/15 18:34	1
Total Alkalinity as CaCO3	284		10.0	5.0	mg/L			08/11/15 18:34	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: OB-20A-080515
Date Collected: 08/05/15 10:35
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 15:42	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 15:42	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/18/15 15:42	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*08/18/15 15:42*	*1*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*08/18/15 15:42*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/18/15 15:42*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*08/18/15 15:42*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 04:42	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 04:42	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 04:42	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 04:42	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 04:42	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 04:42	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 04:42	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 04:42	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 04:42	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 04:42	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 04:42	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 04:42	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 04:42	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 04:42	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 04:42	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 04:42	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 04:42	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 04:42	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 04:42	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 04:42	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 04:42	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 04:42	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 04:42	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 04:42	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 04:42	1
Chloromethane	**0.37**	**J**	1.0	0.36	ug/L			08/18/15 04:42	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 04:42	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 04:42	1
Cyclohexane	**0.19**	**J**	5.0	0.13	ug/L			08/18/15 04:42	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 04:42	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 04:42	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 04:42	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 04:42	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 04:42	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 04:42	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 04:42	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 04:42	1

Client Sample ID: OB-20A-080515

Date Collected: 08/05/15 10:35
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	**0.35**	**J**	5.0	0.22	ug/L			08/18/15 04:42	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 04:42	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 04:42	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 04:42	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 04:42	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 04:42	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 04:42	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 04:42	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 04:42	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 04:42	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 04:42	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 04:42*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 04:42*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/18/15 04:42*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*08/18/15 04:42*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/18/15 04:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*08/18/15 04:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 19:24	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 19:24	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 19:24	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/11/15 08:16	08/11/15 19:24	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/11/15 08:16	08/11/15 19:24	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/11/15 08:16	08/11/15 19:24	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		08/11/15 08:16	08/11/15 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*63*		*29 - 120*	*08/11/15 08:16*	*08/11/15 19:24*	*1*
Nitrobenzene-d5	*56*		*27 - 120*	*08/11/15 08:16*	*08/11/15 19:24*	*1*
Terphenyl-d14	*68*		*13 - 120*	*08/11/15 08:16*	*08/11/15 19:24*	*1*
2,4,6-Tribromophenol	*54*		*10 - 120*	*08/11/15 08:16*	*08/11/15 19:24*	*1*
2-Fluorophenol	*49*		*10 - 120*	*08/11/15 08:16*	*08/11/15 19:24*	*1*
Phenol-d5	*35*		*10 - 120*	*08/11/15 08:16*	*08/11/15 19:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U H	0.30	0.10	ug/L		08/14/15 16:10	08/15/15 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*98*		*10 - 120*	*08/14/15 16:10*	*08/15/15 20:48*	*1*
2-Fluorophenol	*76*		*10 - 120*	*08/14/15 16:10*	*08/15/15 20:48*	*1*
Phenol-d5	*69*		*10 - 120*	*08/14/15 16:10*	*08/15/15 20:48*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: OB-20A-080515
Date Collected: 08/05/15 10:35
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 21:38	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/11/15 08:09	08/11/15 21:38	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/11/15 08:09	08/11/15 21:38	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/11/15 08:09	08/11/15 21:38	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/11/15 08:09	08/11/15 21:38	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/11/15 08:09	08/11/15 21:38	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 21:38	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/11/15 08:09	08/11/15 21:38	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/11/15 08:09	08/11/15 21:38	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 21:38	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 21:38	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/11/15 08:09	08/11/15 21:38	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/11/15 08:09	08/11/15 21:38	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 21:38	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/11/15 08:09	08/11/15 21:38	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/11/15 08:09	08/11/15 21:38	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/11/15 08:09	08/11/15 21:38	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 21:38	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/11/15 08:09	08/11/15 21:38	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/11/15 08:09	08/11/15 21:38	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 21:38	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/11/15 08:09	08/11/15 21:38	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 21:38	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 21:38	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/11/15 08:09	08/11/15 21:38	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/11/15 08:09	08/11/15 21:38	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 21:38	1
Acetophenone	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 21:38	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/11/15 08:09	08/11/15 21:38	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/11/15 08:09	08/11/15 21:38	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/11/15 08:09	08/11/15 21:38	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/11/15 08:09	08/11/15 21:38	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 21:38	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 21:38	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 21:38	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/11/15 08:09	08/11/15 21:38	1
Carbazole	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 21:38	1
Caprolactam	2.4	U	10	2.4	ug/L		08/11/15 08:09	08/11/15 21:38	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/11/15 08:09	08/11/15 21:38	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/11/15 08:09	08/11/15 21:38	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 21:38	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/11/15 08:09	08/11/15 21:38	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 21:38	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 21:38	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 21:38	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 21:38	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/11/15 08:09	08/11/15 21:38	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/11/15 08:09	08/11/15 21:38	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/11/15 08:09	08/11/15 21:38	1

Client Sample ID: OB-20A-080515
Date Collected: 08/05/15 10:35
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 21:38	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/11/15 08:09	08/11/15 21:38	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 21:38	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/11/15 08:09	08/11/15 21:38	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/11/15 08:09	08/11/15 21:38	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/11/15 08:09	08/11/15 21:38	1
Phenol	1.5	U	10	1.5	ug/L		08/11/15 08:09	08/11/15 21:38	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 21:38	1
Diphenyl	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 21:38	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 21:38	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 21:38	1
Atrazine	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 21:38	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzenesulfonamide, N-cyclohexyl-4-methy	*4.2*	*J N*	*ug/L*		*8.87*	*80-30-8*	*08/11/15 08:09*	*08/11/15 21:38*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*97*		*10 - 120*	*08/11/15 08:09*	*08/11/15 21:38*	*1*
2-Fluorobiphenyl (Surr)	*87*		*29 - 120*	*08/11/15 08:09*	*08/11/15 21:38*	*1*
2-Fluorophenol (Surr)	*57*		*10 - 120*	*08/11/15 08:09*	*08/11/15 21:38*	*1*
Nitrobenzene-d5 (Surr)	*83*		*27 - 120*	*08/11/15 08:09*	*08/11/15 21:38*	*1*
Phenol-d5 (Surr)	*37*		*10 - 120*	*08/11/15 08:09*	*08/11/15 21:38*	*1*
Terphenyl-d14 (Surr)	*97*		*13 - 120*	*08/11/15 08:09*	*08/11/15 21:38*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/18/15 06:45	08/20/15 01:19	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/18/15 06:45	08/20/15 01:19	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/18/15 06:45	08/20/15 01:19	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/18/15 06:45	08/20/15 01:19	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/18/15 06:45	08/20/15 01:19	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/18/15 06:45	08/20/15 01:19	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/18/15 06:45	08/20/15 01:19	1
Polychlorinated biphenyls, Total	0.50	U	0.50	0.50	ug/L		08/18/15 06:45	08/20/15 01:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*63*		*10 - 150*	*08/18/15 06:45*	*08/20/15 01:19*	*1*
Tetrachloro-m-xylene	*51*		*10 - 150*	*08/18/15 06:45*	*08/20/15 01:19*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.75**		1.00	0.70	mg/L			08/19/15 01:45	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/19/15 01:45	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.084**		0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 16:25	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 16:25	1
Arsenic	**0.0071**	**B**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 16:25	1
Barium	**0.14**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 16:25	1

Client Sample ID: OB-20A-080515

Date Collected: 08/05/15 10:35
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-2

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 16:25	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 16:25	1
Calcium	**28.2**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 16:25	1
Chromium	**0.0011**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 16:25	1
Cobalt	**0.00099**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 16:25	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 16:26	1
Iron	**31.7**		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 16:25	1
Lead	**0.00044**	**J**	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 16:25	1
Magnesium	**2.9**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 16:25	1
Manganese	**0.76**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 16:25	1
Nickel	**0.0011**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 16:26	1
Potassium	**2.1**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 16:25	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 16:25	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 16:25	1
Sodium	**3.3**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 16:25	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 16:25	1
Vanadium	**0.0026**	**B**	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 16:25	1
Zinc	**0.017**	**J**	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 16:25	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/11/15 10:38	08/12/15 18:53	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:53	1
Arsenic	**0.0020**	**B**	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:53	1
Barium	**0.12**		0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:53	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:53	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/11/15 10:38	08/12/15 18:53	1
Calcium	**28.1**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:53	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:53	1
Cobalt	**0.00088**	**J**	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:53	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/13/15 20:00	1
Iron	**19.8**		0.025	0.010	mg/L		08/11/15 10:38	08/12/15 18:53	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 18:53	1
Magnesium	**2.9**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:53	1
Manganese	**0.79**	**B**	0.0020	0.00050	mg/L		08/11/15 10:38	08/14/15 15:49	1
Nickel	**0.0018**	**J**	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 00:15	1
Potassium	**2.0**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:53	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/11/15 10:38	08/12/15 18:53	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:53	1
Sodium	**3.1**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:53	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 18:53	1
Vanadium	**0.0011**	**J B**	0.0020	0.00010	mg/L		08/11/15 10:38	08/12/15 18:53	1
Zinc	0.010	U	0.025	0.010	mg/L		08/11/15 10:38	08/12/15 18:53	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:35	08/12/15 18:33	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: OB-20A-080515
Date Collected: 08/05/15 10:35
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-2
Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 16:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/08/15 18:12	08/11/15 11:20	1
Bicarbonate Alkalinity as CaCO3	122		10.0	5.0	mg/L			08/11/15 18:39	1
Total Alkalinity as CaCO3	122		10.0	5.0	mg/L			08/11/15 18:39	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: OB-19-080515
Date Collected: 08/05/15 10:40
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 16:10	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 16:10	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/18/15 16:10	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/18/15 16:10*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/18/15 16:10*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/18/15 16:10*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/18/15 16:10*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 05:10	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 05:10	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 05:10	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 05:10	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 05:10	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 05:10	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 05:10	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 05:10	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 05:10	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 05:10	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 05:10	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 05:10	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 05:10	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 05:10	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 05:10	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 05:10	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 05:10	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 05:10	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 05:10	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 05:10	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 05:10	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 05:10	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 05:10	1
Chloroethane	**0.39**	**J**	1.0	0.36	ug/L			08/18/15 05:10	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 05:10	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 05:10	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 05:10	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 05:10	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 05:10	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 05:10	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 05:10	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 05:10	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 05:10	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 05:10	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 05:10	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 05:10	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 05:10	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: OB-19-080515
Date Collected: 08/05/15 10:40
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 05:10	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 05:10	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 05:10	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 05:10	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 05:10	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 05:10	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 05:10	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 05:10	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 05:10	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 05:10	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 05:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 05:10*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 05:10*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/18/15 05:10*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*08/18/15 05:10*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/18/15 05:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*08/18/15 05:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 19:52	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 19:52	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 19:52	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/11/15 08:16	08/11/15 19:52	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/11/15 08:16	08/11/15 19:52	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/11/15 08:16	08/11/15 19:52	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		08/11/15 08:16	08/11/15 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*62*		*29 - 120*	*08/11/15 08:16*	*08/11/15 19:52*	*1*
Nitrobenzene-d5	*53*		*27 - 120*	*08/11/15 08:16*	*08/11/15 19:52*	*1*
Terphenyl-d14	*66*		*13 - 120*	*08/11/15 08:16*	*08/11/15 19:52*	*1*
2,4,6-Tribromophenol	*48*		*10 - 120*	*08/11/15 08:16*	*08/11/15 19:52*	*1*
2-Fluorophenol	*45*		*10 - 120*	*08/11/15 08:16*	*08/11/15 19:52*	*1*
Phenol-d5	*33*		*10 - 120*	*08/11/15 08:16*	*08/11/15 19:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U H	0.30	0.10	ug/L		08/14/15 16:10	08/15/15 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*38*		*10 - 120*	*08/14/15 16:10*	*08/15/15 21:15*	*1*
2-Fluorophenol	*45*		*10 - 120*	*08/14/15 16:10*	*08/15/15 21:15*	*1*
Phenol-d5	*43*		*10 - 120*	*08/14/15 16:10*	*08/15/15 21:15*	*1*

Client Sample ID: OB-19-080515
Date Collected: 08/05/15 10:40
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 22:01	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/11/15 08:09	08/11/15 22:01	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/11/15 08:09	08/11/15 22:01	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/11/15 08:09	08/11/15 22:01	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/11/15 08:09	08/11/15 22:01	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/11/15 08:09	08/11/15 22:01	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 22:01	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/11/15 08:09	08/11/15 22:01	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/11/15 08:09	08/11/15 22:01	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 22:01	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 22:01	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/11/15 08:09	08/11/15 22:01	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/11/15 08:09	08/11/15 22:01	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 22:01	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/11/15 08:09	08/11/15 22:01	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/11/15 08:09	08/11/15 22:01	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/11/15 08:09	08/11/15 22:01	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 22:01	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/11/15 08:09	08/11/15 22:01	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/11/15 08:09	08/11/15 22:01	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 22:01	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/11/15 08:09	08/11/15 22:01	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 22:01	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 22:01	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/11/15 08:09	08/11/15 22:01	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/11/15 08:09	08/11/15 22:01	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 22:01	1
Acetophenone	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 22:01	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/11/15 08:09	08/11/15 22:01	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/11/15 08:09	08/11/15 22:01	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/11/15 08:09	08/11/15 22:01	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/11/15 08:09	08/11/15 22:01	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 22:01	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 22:01	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 22:01	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/11/15 08:09	08/11/15 22:01	1
Carbazole	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 22:01	1
Caprolactam	2.4	U	10	2.4	ug/L		08/11/15 08:09	08/11/15 22:01	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/11/15 08:09	08/11/15 22:01	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/11/15 08:09	08/11/15 22:01	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 22:01	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/11/15 08:09	08/11/15 22:01	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 22:01	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 22:01	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 22:01	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 22:01	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/11/15 08:09	08/11/15 22:01	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/11/15 08:09	08/11/15 22:01	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/11/15 08:09	08/11/15 22:01	1

Client Sample ID: OB-19-080515
Date Collected: 08/05/15 10:40
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 22:01	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/11/15 08:09	08/11/15 22:01	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 22:01	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/11/15 08:09	08/11/15 22:01	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/11/15 08:09	08/11/15 22:01	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/11/15 08:09	08/11/15 22:01	1
Phenol	1.5	U	10	1.5	ug/L		08/11/15 08:09	08/11/15 22:01	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 22:01	1
Diphenyl	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 22:01	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 22:01	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 22:01	1
Atrazine	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 22:01	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/11/15 08:09*	*08/11/15 22:01*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*85*		*10 - 120*	*08/11/15 08:09*	*08/11/15 22:01*	*1*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*	*08/11/15 08:09*	*08/11/15 22:01*	*1*
2-Fluorophenol (Surr)	*51*		*10 - 120*	*08/11/15 08:09*	*08/11/15 22:01*	*1*
Nitrobenzene-d5 (Surr)	*75*		*27 - 120*	*08/11/15 08:09*	*08/11/15 22:01*	*1*
Phenol-d5 (Surr)	*33*		*10 - 120*	*08/11/15 08:09*	*08/11/15 22:01*	*1*
Terphenyl-d14 (Surr)	*91*		*13 - 120*	*08/11/15 08:09*	*08/11/15 22:01*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/18/15 06:45	08/20/15 01:35	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/18/15 06:45	08/20/15 01:35	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/18/15 06:45	08/20/15 01:35	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/18/15 06:45	08/20/15 01:35	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/18/15 06:45	08/20/15 01:35	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/18/15 06:45	08/20/15 01:35	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/18/15 06:45	08/20/15 01:35	1
Polychlorinated biphenyls, Total	0.50	U	0.50	0.50	ug/L		08/18/15 06:45	08/20/15 01:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*112*		*10 - 150*	*08/18/15 06:45*	*08/20/15 01:35*	*1*
Tetrachloro-m-xylene	*93*		*10 - 150*	*08/18/15 06:45*	*08/20/15 01:35*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.21**		1.00	0.70	mg/L			08/19/15 02:04	1
Sulfate	**1.14**		1.00	0.60	mg/L			08/19/15 02:04	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.071**		0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 15:22	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:22	1
Arsenic	**0.0016**	**J B**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:22	1
Barium	**0.086**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:22	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:22	1

Client Sample ID: OB-19-080515

Date Collected: 08/05/15 10:40
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-3

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 15:22	1
Calcium	**13.1**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:22	1
Chromium	**0.00095**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:22	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:22	1
Copper	**0.0075**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:50	1
Iron	**16.5**		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 15:22	1
Lead	**0.00044**	**J**	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 15:22	1
Magnesium	**2.5**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:22	1
Manganese	**0.29**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:22	1
Nickel	**0.0020**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:50	1
Potassium	**0.80**	**J**	1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:22	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 15:22	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:22	1
Sodium	**3.3**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:22	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 15:22	1
Vanadium	**0.0041**	**B**	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 15:22	1
Zinc	0.010	U	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 15:22	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/11/15 10:38	08/12/15 18:58	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:58	1
Arsenic	**0.00087**	**J B**	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:58	1
Barium	**0.076**		0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:58	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:58	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/11/15 10:38	08/12/15 18:58	1
Calcium	**12.7**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:58	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:58	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:58	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/13/15 20:06	1
Iron	**4.7**		0.025	0.010	mg/L		08/11/15 10:38	08/12/15 18:58	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 18:58	1
Magnesium	**2.4**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:58	1
Manganese	**0.31**	**B**	0.0020	0.00050	mg/L		08/11/15 10:38	08/14/15 15:55	1
Nickel	**0.0015**	**J**	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 00:21	1
Potassium	**0.79**	**J**	1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:58	1
Selenium	**0.00069**	**J**	0.0020	0.00060	mg/L		08/11/15 10:38	08/12/15 18:58	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:58	1
Sodium	**3.2**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:58	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 18:58	1
Vanadium	**0.0011**	**J B**	0.0020	0.00010	mg/L		08/11/15 10:38	08/12/15 18:58	1
Zinc	0.010	U	0.025	0.010	mg/L		08/11/15 10:38	08/12/15 18:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:35	08/12/15 18:35	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 16:31	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: OB-19-080515
Date Collected: 08/05/15 10:40
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/08/15 18:12	08/11/15 11:22	1
Bicarbonate Alkalinity as CaCO3	**53.0**		10.0	5.0	mg/L			08/11/15 18:44	1
Total Alkalinity as CaCO3	**53.0**		10.0	5.0	mg/L			08/11/15 18:44	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: RW-5-080515
Date Collected: 08/05/15 14:35
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 16:39	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 16:39	1
1,4-Dioxane	**6.7**	**J**	10	0.27	ug/L			08/18/15 16:39	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*125*		*70 - 130*		*08/18/15 16:39*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*08/18/15 16:39*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/18/15 16:39*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/18/15 16:39*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/19/15 17:51	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/19/15 17:51	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/19/15 17:51	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/19/15 17:51	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/19/15 17:51	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/19/15 17:51	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/19/15 17:51	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/19/15 17:51	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/19/15 17:51	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/19/15 17:51	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/19/15 17:51	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/19/15 17:51	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/19/15 17:51	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/19/15 17:51	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/19/15 17:51	1
Acetone	**4.9**	**J**	25	2.7	ug/L			08/19/15 17:51	1
Benzene	0.20	U	1.0	0.20	ug/L			08/19/15 17:51	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/19/15 17:51	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/19/15 17:51	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/19/15 17:51	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/19/15 17:51	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/19/15 17:51	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/19/15 17:51	1
Chloroethane	**1.4**		1.0	0.36	ug/L			08/19/15 17:51	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/19/15 17:51	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/19/15 17:51	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/19/15 17:51	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/19/15 17:51	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/19/15 17:51	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/19/15 17:51	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/19/15 17:51	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/19/15 17:51	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/19/15 17:51	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/19/15 17:51	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/19/15 17:51	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/19/15 17:51	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/19/15 17:51	1

Client Sample ID: RW-5-080515
Date Collected: 08/05/15 14:35
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/19/15 17:51	1
Styrene	0.28	U	1.0	0.28	ug/L			08/19/15 17:51	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/19/15 17:51	1
Toluene	0.17	U	1.0	0.17	ug/L			08/19/15 17:51	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/19/15 17:51	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/19/15 17:51	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/19/15 17:51	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/19/15 17:51	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/19/15 17:51	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/19/15 17:51	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/19/15 17:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/19/15 17:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*08/19/15 17:51*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*08/19/15 17:51*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/19/15 17:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*08/19/15 17:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 20:20	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 20:20	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 20:20	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/11/15 08:16	08/11/15 20:20	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/11/15 08:16	08/11/15 20:20	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/11/15 08:16	08/11/15 20:20	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		08/11/15 08:16	08/11/15 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*62*		*29 - 120*	*08/11/15 08:16*	*08/11/15 20:20*	*1*
Nitrobenzene-d5	*53*		*27 - 120*	*08/11/15 08:16*	*08/11/15 20:20*	*1*
Terphenyl-d14	*71*		*13 - 120*	*08/11/15 08:16*	*08/11/15 20:20*	*1*
2,4,6-Tribromophenol	*54*		*10 - 120*	*08/11/15 08:16*	*08/11/15 20:20*	*1*
2-Fluorophenol	*42*		*10 - 120*	*08/11/15 08:16*	*08/11/15 20:20*	*1*
Phenol-d5	*30*		*10 - 120*	*08/11/15 08:16*	*08/11/15 20:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U H	0.30	0.10	ug/L		08/14/15 16:10	08/15/15 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*89*		*10 - 120*	*08/14/15 16:10*	*08/15/15 21:41*	*1*
2-Fluorophenol	*67*		*10 - 120*	*08/14/15 16:10*	*08/15/15 21:41*	*1*
Phenol-d5	*68*		*10 - 120*	*08/14/15 16:10*	*08/15/15 21:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 22:25	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: RW-5-080515
Date Collected: 08/05/15 14:35
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/11/15 08:09	08/11/15 22:25	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/11/15 08:09	08/11/15 22:25	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/11/15 08:09	08/11/15 22:25	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/11/15 08:09	08/11/15 22:25	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/11/15 08:09	08/11/15 22:25	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 22:25	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/11/15 08:09	08/11/15 22:25	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/11/15 08:09	08/11/15 22:25	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 22:25	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 22:25	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/11/15 08:09	08/11/15 22:25	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/11/15 08:09	08/11/15 22:25	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 22:25	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/11/15 08:09	08/11/15 22:25	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/11/15 08:09	08/11/15 22:25	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/11/15 08:09	08/11/15 22:25	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 22:25	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/11/15 08:09	08/11/15 22:25	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/11/15 08:09	08/11/15 22:25	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 22:25	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/11/15 08:09	08/11/15 22:25	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 22:25	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 22:25	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/11/15 08:09	08/11/15 22:25	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/11/15 08:09	08/11/15 22:25	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 22:25	1
Acetophenone	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 22:25	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/11/15 08:09	08/11/15 22:25	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/11/15 08:09	08/11/15 22:25	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/11/15 08:09	08/11/15 22:25	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/11/15 08:09	08/11/15 22:25	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 22:25	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 22:25	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 22:25	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/11/15 08:09	08/11/15 22:25	1
Carbazole	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 22:25	1
Caprolactam	2.4	U	10	2.4	ug/L		08/11/15 08:09	08/11/15 22:25	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/11/15 08:09	08/11/15 22:25	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/11/15 08:09	08/11/15 22:25	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 22:25	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/11/15 08:09	08/11/15 22:25	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 22:25	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 22:25	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 22:25	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 22:25	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/11/15 08:09	08/11/15 22:25	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/11/15 08:09	08/11/15 22:25	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/11/15 08:09	08/11/15 22:25	1
Isophorone	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 22:25	1

Client Sample ID: RW-5-080515
Date Collected: 08/05/15 14:35
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.37	U	2.0	0.37	ug/L		08/11/15 08:09	08/11/15 22:25	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 22:25	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/11/15 08:09	08/11/15 22:25	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/11/15 08:09	08/11/15 22:25	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/11/15 08:09	08/11/15 22:25	1
Phenol	1.5	U	10	1.5	ug/L		08/11/15 08:09	08/11/15 22:25	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 22:25	1
Diphenyl	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 22:25	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 22:25	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 22:25	1
Atrazine	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 22:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/11/15 08:09*	*08/11/15 22:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*101*		*10 - 120*	*08/11/15 08:09*	*08/11/15 22:25*	*1*
2-Fluorobiphenyl (Surr)	*86*		*29 - 120*	*08/11/15 08:09*	*08/11/15 22:25*	*1*
2-Fluorophenol (Surr)	*52*		*10 - 120*	*08/11/15 08:09*	*08/11/15 22:25*	*1*
Nitrobenzene-d5 (Surr)	*80*		*27 - 120*	*08/11/15 08:09*	*08/11/15 22:25*	*1*
Phenol-d5 (Surr)	*34*		*10 - 120*	*08/11/15 08:09*	*08/11/15 22:25*	*1*
Terphenyl-d14 (Surr)	*103*		*13 - 120*	*08/11/15 08:09*	*08/11/15 22:25*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/18/15 06:45	08/20/15 01:51	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/18/15 06:45	08/20/15 01:51	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/18/15 06:45	08/20/15 01:51	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/18/15 06:45	08/20/15 01:51	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/18/15 06:45	08/20/15 01:51	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/18/15 06:45	08/20/15 01:51	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/18/15 06:45	08/20/15 01:51	1
Polychlorinated biphenyls, Total	0.50	U	0.50	0.50	ug/L		08/18/15 06:45	08/20/15 01:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*130*		*10 - 150*	*08/18/15 06:45*	*08/20/15 01:51*	*1*
Tetrachloro-m-xylene	*96*		*10 - 150*	*08/18/15 06:45*	*08/20/15 01:51*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.54**		1.00	0.70	mg/L			08/19/15 02:23	1
Sulfate	**16.0**		1.00	0.60	mg/L			08/19/15 02:23	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.40**		0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 15:28	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:28	1
Arsenic	**0.0089**	**B**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:28	1
Barium	**0.0094**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:28	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:28	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 15:28	1

Client Sample ID: RW-5-080515
Date Collected: 08/05/15 14:35
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-4
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	17.7		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:28	1
Chromium	0.0037		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:28	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:28	1
Copper	0.0089		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:55	1
Iron	2.3		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 15:28	1
Lead	0.0066		0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 15:28	1
Magnesium	3.2		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:28	1
Manganese	0.29		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:28	1
Nickel	0.0036		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:55	1
Potassium	58.6		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:28	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 15:28	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:28	1
Sodium	44.0		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:28	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 15:28	1
Vanadium	0.0049	B	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 15:28	1
Zinc	0.22		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 15:28	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.16		0.020	0.0096	mg/L		08/11/15 10:38	08/12/15 19:03	1
Antimony	0.00069	J	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:03	1
Arsenic	0.0072	B	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:03	1
Barium	0.0055		0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:03	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:03	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/11/15 10:38	08/12/15 19:03	1
Calcium	13.6		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 19:03	1
Chromium	0.0014	J	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:03	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:03	1
Copper	0.0045		0.0020	0.00050	mg/L		08/11/15 10:38	08/13/15 20:12	1
Iron	0.73		0.025	0.010	mg/L		08/11/15 10:38	08/12/15 19:03	1
Lead	0.0024		0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 19:03	1
Magnesium	2.6		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 19:03	1
Manganese	0.11	B	0.0020	0.00050	mg/L		08/11/15 10:38	08/14/15 16:00	1
Nickel	0.0034		0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 00:26	1
Potassium	53.5		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 19:03	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/11/15 10:38	08/12/15 19:03	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:03	1
Sodium	40.6		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 19:03	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 19:03	1
Vanadium	0.0034	B	0.0020	0.00010	mg/L		08/11/15 10:38	08/12/15 19:03	1
Zinc	0.069		0.025	0.010	mg/L		08/11/15 10:38	08/12/15 19:03	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:35	08/12/15 18:38	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 16:34	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: RW-5-080515
Date Collected: 08/05/15 14:35
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/08/15 18:12	08/11/15 11:24	1
Bicarbonate Alkalinity as CaCO3	**46.1**		10.0	5.0	mg/L			08/11/15 19:04	1
Total Alkalinity as CaCO3	**178**		10.0	5.0	mg/L			08/11/15 19:04	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: OB-20B-080515
Date Collected: 08/05/15 14:10
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 17:07	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 17:07	1
1,4-Dioxane	**0.95**	**J**	10	0.27	ug/L			08/18/15 17:07	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*08/18/15 17:07*	*1*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*08/18/15 17:07*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*08/18/15 17:07*	*1*
Toluene-d8 (Surr)	*88*		*70 - 130*		*08/18/15 17:07*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 18:57	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 18:57	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 18:57	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 18:57	1
1,1-Dichloroethane	**0.26**	**J**	1.0	0.24	ug/L			08/18/15 18:57	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 18:57	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 18:57	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 18:57	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 18:57	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 18:57	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 18:57	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 18:57	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 18:57	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 18:57	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 18:57	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 18:57	1
Benzene	**0.27**	**J**	1.0	0.20	ug/L			08/18/15 18:57	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 18:57	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 18:57	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 18:57	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 18:57	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 18:57	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 18:57	1
Chloroethane	**1.8**		1.0	0.36	ug/L			08/18/15 18:57	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 18:57	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 18:57	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 18:57	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 18:57	1
Cyclohexane	**0.87**	**J**	5.0	0.13	ug/L			08/18/15 18:57	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 18:57	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 18:57	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 18:57	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 18:57	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 18:57	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 18:57	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 18:57	1
Methylcyclohexane	**0.54**	**J**	5.0	0.090	ug/L			08/18/15 18:57	1

Client Sample ID: OB-20B-080515

Date Collected: 08/05/15 14:10
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 18:57	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 18:57	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 18:57	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 18:57	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 18:57	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 18:57	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 18:57	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 18:57	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 18:57	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 18:57	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 18:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexane	*0.21*	*J*	*ug/L*		*4.73*	*110-54-3*		*08/18/15 18:57*	*1*
1,2,3-Trimethylbenzene	*0.26*	*J*	*ug/L*		*15.53*	*526-73-8*		*08/18/15 18:57*	*1*
Benzene, 1,4-diethyl-	*3.6*	*J N*	*ug/L*		*15.81*	*105-05-5*		*08/18/15 18:57*	*1*
Benzene, 2-ethenyl-1,4-dimethyl-	*2.8*	*J N*	*ug/L*		*17.59*	*2039-89-6*		*08/18/15 18:57*	*1*
Naphthalene	*1.6*	*J*	*ug/L*		*18.41*	*91-20-3*		*08/18/15 18:57*	*1*
Total Alkanes TIC	*0.21*	*J*	*ug/L*					*08/18/15 18:57*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*08/18/15 18:57*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/18/15 18:57*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/18/15 18:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*08/18/15 18:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 20:47	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 20:47	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 20:47	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/11/15 08:16	08/11/15 20:47	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/11/15 08:16	08/11/15 20:47	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/11/15 08:16	08/11/15 20:47	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		08/11/15 08:16	08/11/15 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*57*		*29 - 120*	*08/11/15 08:16*	*08/11/15 20:47*	*1*
Nitrobenzene-d5	*49*		*27 - 120*	*08/11/15 08:16*	*08/11/15 20:47*	*1*
Terphenyl-d14	*69*		*13 - 120*	*08/11/15 08:16*	*08/11/15 20:47*	*1*
2,4,6-Tribromophenol	*57*		*10 - 120*	*08/11/15 08:16*	*08/11/15 20:47*	*1*
2-Fluorophenol	*42*		*10 - 120*	*08/11/15 08:16*	*08/11/15 20:47*	*1*
Phenol-d5	*30*		*10 - 120*	*08/11/15 08:16*	*08/11/15 20:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U H	0.30	0.10	ug/L		08/14/15 16:10	08/15/15 22:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*77*		*10 - 120*	*08/14/15 16:10*	*08/15/15 22:08*	*1*
2-Fluorophenol	*58*		*10 - 120*	*08/14/15 16:10*	*08/15/15 22:08*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: OB-20B-080515
Date Collected: 08/05/15 14:10
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenol-d5	55		10 - 120	08/14/15 16:10	08/15/15 22:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 22:48	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/11/15 08:09	08/11/15 22:48	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/11/15 08:09	08/11/15 22:48	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/11/15 08:09	08/11/15 22:48	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/11/15 08:09	08/11/15 22:48	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/11/15 08:09	08/11/15 22:48	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 22:48	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/11/15 08:09	08/11/15 22:48	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/11/15 08:09	08/11/15 22:48	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 22:48	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 22:48	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/11/15 08:09	08/11/15 22:48	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/11/15 08:09	08/11/15 22:48	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 22:48	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/11/15 08:09	08/11/15 22:48	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/11/15 08:09	08/11/15 22:48	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/11/15 08:09	08/11/15 22:48	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 22:48	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/11/15 08:09	08/11/15 22:48	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/11/15 08:09	08/11/15 22:48	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 22:48	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/11/15 08:09	08/11/15 22:48	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 22:48	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 22:48	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/11/15 08:09	08/11/15 22:48	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/11/15 08:09	08/11/15 22:48	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 22:48	1
Acetophenone	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 22:48	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/11/15 08:09	08/11/15 22:48	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/11/15 08:09	08/11/15 22:48	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/11/15 08:09	08/11/15 22:48	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/11/15 08:09	08/11/15 22:48	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 22:48	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 22:48	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 22:48	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/11/15 08:09	08/11/15 22:48	1
Carbazole	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 22:48	1
Caprolactam	2.4	U	10	2.4	ug/L		08/11/15 08:09	08/11/15 22:48	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/11/15 08:09	08/11/15 22:48	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/11/15 08:09	08/11/15 22:48	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 22:48	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/11/15 08:09	08/11/15 22:48	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 22:48	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 22:48	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 22:48	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: OB-20B-080515
Date Collected: 08/05/15 14:10
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 22:48	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/11/15 08:09	08/11/15 22:48	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/11/15 08:09	08/11/15 22:48	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/11/15 08:09	08/11/15 22:48	1
Isophorone	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 22:48	1
Naphthalene	**1.0**	**J**	2.0	0.37	ug/L		08/11/15 08:09	08/11/15 22:48	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 22:48	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/11/15 08:09	08/11/15 22:48	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/11/15 08:09	08/11/15 22:48	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/11/15 08:09	08/11/15 22:48	1
Phenol	1.5	U	10	1.5	ug/L		08/11/15 08:09	08/11/15 22:48	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 22:48	1
Diphenyl	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 22:48	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 22:48	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 22:48	1
Atrazine	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 22:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzenesulfonamide, N-cyclohexyl-4-methy	*4.4*	*J N*	*ug/L*		*8.87*	*80-30-8*	*08/11/15 08:09*	*08/11/15 22:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*81*		*10 - 120*	*08/11/15 08:09*	*08/11/15 22:48*	*1*
2-Fluorobiphenyl (Surr)	*71*		*29 - 120*	*08/11/15 08:09*	*08/11/15 22:48*	*1*
2-Fluorophenol (Surr)	*42*		*10 - 120*	*08/11/15 08:09*	*08/11/15 22:48*	*1*
Nitrobenzene-d5 (Surr)	*66*		*27 - 120*	*08/11/15 08:09*	*08/11/15 22:48*	*1*
Phenol-d5 (Surr)	*28*		*10 - 120*	*08/11/15 08:09*	*08/11/15 22:48*	*1*
Terphenyl-d14 (Surr)	*85*		*13 - 120*	*08/11/15 08:09*	*08/11/15 22:48*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/18/15 06:45	08/20/15 02:06	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/18/15 06:45	08/20/15 02:06	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/18/15 06:45	08/20/15 02:06	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/18/15 06:45	08/20/15 02:06	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/18/15 06:45	08/20/15 02:06	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/18/15 06:45	08/20/15 02:06	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/18/15 06:45	08/20/15 02:06	1
Polychlorinated biphenyls, Total	0.50	U	0.50	0.50	ug/L		08/18/15 06:45	08/20/15 02:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*140*		*10 - 150*	*08/18/15 06:45*	*08/20/15 02:06*	*1*
Tetrachloro-m-xylene	*94*		*10 - 150*	*08/18/15 06:45*	*08/20/15 02:06*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.62**		1.00	0.70	mg/L			08/19/15 02:42	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/19/15 02:42	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: OB-20B-080515

Date Collected: 08/05/15 14:10
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-5

Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.066**		0.020	0.0096	mg/L		08/13/15 10:37	08/14/15 23:08	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/13/15 21:13	1
Arsenic	**0.0015**	**J**	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:08	1
Barium	**0.084**		0.0020	0.00050	mg/L		08/13/15 10:37	08/13/15 21:13	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/13/15 21:13	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/13/15 10:37	08/13/15 21:13	1
Calcium	**62.6**		1.0	0.13	mg/L		08/13/15 10:37	08/13/15 21:13	1
Chromium	**0.00069**	**J**	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:08	1
Cobalt	**0.030**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:08	1
Copper	**0.00065**	**J**	0.0020	0.00050	mg/L		08/13/15 10:37	08/19/15 12:45	1
Iron	**42.5**		0.025	0.010	mg/L		08/13/15 10:37	08/13/15 21:13	1
Lead	**0.00028**	**J**	0.0020	0.00020	mg/L		08/13/15 10:37	08/13/15 21:13	1
Magnesium	**11.6**		1.0	0.13	mg/L		08/13/15 10:37	08/13/15 21:13	1
Manganese	**10.2**		0.020	0.0050	mg/L		08/13/15 10:37	08/25/15 18:44	10
Nickel	**0.0058**		0.0020	0.00050	mg/L		08/13/15 10:37	08/19/15 12:45	1
Potassium	**3.0**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:08	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/13/15 10:37	08/13/15 21:13	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/13/15 21:13	1
Sodium	**4.8**		1.0	0.13	mg/L		08/13/15 10:37	08/13/15 21:13	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/13/15 21:13	1
Vanadium	**0.0039**	**B**	0.0020	0.00010	mg/L		08/13/15 10:37	08/13/15 21:13	1
Zinc	0.010	U	0.025	0.010	mg/L		08/13/15 10:37	08/19/15 12:45	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/11/15 10:38	08/12/15 19:09	1
Antimony	**0.00050**	**J**	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:09	1
Arsenic	**0.0011**	**J B**	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:09	1
Barium	**0.063**		0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:09	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:09	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/11/15 10:38	08/12/15 19:09	1
Calcium	**58.9**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 19:09	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:09	1
Cobalt	**0.028**		0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:09	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/13/15 20:18	1
Iron	**28.3**		0.025	0.010	mg/L		08/11/15 10:38	08/12/15 19:09	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 19:09	1
Magnesium	**11.2**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 19:09	1
Manganese	**10.6**	**B**	0.20	0.050	mg/L		08/11/15 10:38	08/14/15 16:06	100
Nickel	**0.0072**		0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 00:32	1
Potassium	**2.8**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 19:09	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/11/15 10:38	08/12/15 19:09	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 19:09	1
Sodium	**4.8**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 19:09	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 19:09	1
Vanadium	**0.0011**	**J B**	0.0020	0.00010	mg/L		08/11/15 10:38	08/12/15 19:09	1
Zinc	0.010	U	0.025	0.010	mg/L		08/11/15 10:38	08/12/15 19:09	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: OB-20B-080515
Date Collected: 08/05/15 14:10
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-5
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:35	08/12/15 18:45	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 16:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/08/15 18:12	08/11/15 11:27	1
Bicarbonate Alkalinity as CaCO3	**261**		10.0	5.0	mg/L			08/11/15 19:09	1
Total Alkalinity as CaCO3	**261**		10.0	5.0	mg/L			08/11/15 19:09	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: TB-02-080615
Date Collected: 08/06/15 01:01
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 14:16	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 14:16	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/18/15 14:16	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/18/15 14:16*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*08/18/15 14:16*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/18/15 14:16*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/18/15 14:16*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 02:51	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 02:51	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 02:51	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 02:51	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 02:51	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 02:51	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 02:51	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 02:51	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 02:51	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 02:51	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 02:51	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 02:51	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 02:51	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 02:51	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 02:51	1
Acetone	**7.5**	**J**	25	2.7	ug/L			08/18/15 02:51	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 02:51	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 02:51	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 02:51	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 02:51	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 02:51	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 02:51	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 02:51	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 02:51	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 02:51	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 02:51	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 02:51	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 02:51	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 02:51	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 02:51	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 02:51	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 02:51	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 02:51	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 02:51	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 02:51	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 02:51	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 02:51	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: TB-02-080615
Date Collected: 08/06/15 01:01
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 02:51	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 02:51	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 02:51	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 02:51	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 02:51	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 02:51	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 02:51	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 02:51	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 02:51	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 02:51	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 02:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 02:51*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 02:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*08/18/15 02:51*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*08/18/15 02:51*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/18/15 02:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*08/18/15 02:51*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: TB-02-080615
Date Collected: 08/06/15 01:01
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 14:44	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 14:44	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/18/15 14:44	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/18/15 14:44*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*08/18/15 14:44*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/18/15 14:44*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/18/15 14:44*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 03:19	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 03:19	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 03:19	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 03:19	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 03:19	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 03:19	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 03:19	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 03:19	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 03:19	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 03:19	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 03:19	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 03:19	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 03:19	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 03:19	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 03:19	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 03:19	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 03:19	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 03:19	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 03:19	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 03:19	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 03:19	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 03:19	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 03:19	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 03:19	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 03:19	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 03:19	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 03:19	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 03:19	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 03:19	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 03:19	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 03:19	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 03:19	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 03:19	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 03:19	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 03:19	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 03:19	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 03:19	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: TB-02-080615
Date Collected: 08/06/15 01:01
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 03:19	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 03:19	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 03:19	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 03:19	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 03:19	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 03:19	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 03:19	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 03:19	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 03:19	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 03:19	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 03:19	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 03:19*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 03:19*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*		*08/18/15 03:19*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*08/18/15 03:19*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/18/15 03:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*08/18/15 03:19*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-273831/6
Matrix: Water
Analysis Batch: 273831

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 01:01	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 01:01	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 01:01	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 01:01	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 01:01	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 01:01	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 01:01	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 01:01	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 01:01	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 01:01	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 01:01	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 01:01	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 01:01	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 01:01	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 01:01	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 01:01	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 01:01	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 01:01	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 01:01	1
Carbon disulfide	0.258	J	1.0	0.22	ug/L			08/18/15 01:01	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 01:01	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 01:01	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 01:01	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 01:01	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 01:01	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 01:01	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 01:01	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 01:01	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 01:01	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 01:01	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 01:01	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 01:01	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 01:01	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 01:01	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 01:01	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 01:01	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 01:01	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 01:01	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 01:01	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 01:01	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 01:01	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 01:01	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 01:01	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 01:01	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 01:01	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 01:01	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 01:01	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 01:01	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/18/15 01:01	1
Total Alkanes TIC	None		ug/L					08/18/15 01:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130		08/18/15 01:01	1
Dibromofluoromethane (Surr)	109		70 - 130		08/18/15 01:01	1
Toluene-d8 (Surr)	97		70 - 130		08/18/15 01:01	1
1,2-Dichloroethane-d4 (Surr)	108		70 - 130		08/18/15 01:01	1

Lab Sample ID: LCS 490-273831/3
Matrix: Water
Analysis Batch: 273831

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	47.0		ug/L		94	78 - 135
Freon-113	50.0	50.7		ug/L		101	77 - 129
1,1,2,2-Tetrachloroethane	50.0	52.3		ug/L		105	69 - 131
1,1,2-Trichloroethane	50.0	50.5		ug/L		101	80 - 124
1,1-Dichloroethane	50.0	48.9		ug/L		98	78 - 125
1,1-Dichloroethene	50.0	48.8		ug/L		98	79 - 124
1,2,4-Trichlorobenzene	50.0	51.3		ug/L		103	63 - 133
1,2-Dibromo-3-Chloropropane	50.0	51.8		ug/L		104	54 - 125
1,2-Dichlorobenzene	50.0	52.0		ug/L		104	80 - 121
1,2-Dichloropropane	50.0	50.2		ug/L		100	75 - 120
1,3-Dichlorobenzene	50.0	50.0		ug/L		100	80 - 122
1,4-Dichlorobenzene	50.0	49.4		ug/L		99	80 - 120
2-Butanone (MEK)	250	271		ug/L		109	62 - 133
2-Hexanone	250	256		ug/L		102	60 - 142
4-Methyl-2-pentanone (MIBK)	250	287		ug/L		115	60 - 137
Acetone	250	280		ug/L		112	54 - 145
Benzene	50.0	49.0		ug/L		98	80 - 121
Bromoform	50.0	51.5		ug/L		103	46 - 145
Bromomethane	50.0	45.9		ug/L		92	41 - 150
Carbon disulfide	50.0	52.7		ug/L		105	77 - 126
Carbon tetrachloride	50.0	49.6		ug/L		99	64 - 147
Chlorobenzene	50.0	48.2		ug/L		96	80 - 120
Chlorodibromomethane	50.0	53.1		ug/L		106	69 - 133
Chloroethane	50.0	46.7		ug/L		93	72 - 120
Chloroform	50.0	54.5		ug/L		109	73 - 129
Chloromethane	50.0	48.3		ug/L		97	12 - 150
cis-1,2-Dichloroethene	50.0	50.2		ug/L		100	76 - 125
cis-1,3-Dichloropropene	50.0	51.5		ug/L		103	74 - 140
Cyclohexane	50.0	50.3		ug/L		101	73 - 122
Dichlorobromomethane	50.0	49.9		ug/L		100	75 - 129
Dichlorodifluoromethane	50.0	49.4		ug/L		99	37 - 127
Ethylbenzene	50.0	49.1		ug/L		98	80 - 130
1,2-Dibromoethane	50.0	51.7		ug/L		103	80 - 129
Isopropylbenzene	50.0	51.0		ug/L		102	80 - 141
Methyl acetate	250	289		ug/L		115	64 - 150
Methyl tert-butyl ether	50.0	50.2		ug/L		100	72 - 133
Methylcyclohexane	50.0	46.1		ug/L		92	71 - 129
Methylene Chloride	50.0	51.5		ug/L		103	79 - 123
Styrene	50.0	48.3		ug/L		97	80 - 127

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

Lab Sample ID: LCS 490-273831/3
Matrix: Water
Analysis Batch: 273831

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	50.0	46.1		ug/L		92	80 - 126
Toluene	50.0	47.7		ug/L		95	80 - 126
trans-1,2-Dichloroethene	50.0	49.8		ug/L		100	79 - 126
trans-1,3-Dichloropropene	50.0	52.7		ug/L		105	63 - 134
Trichloroethene	50.0	48.8		ug/L		98	80 - 123
Trichlorofluoromethane	50.0	45.1		ug/L		90	65 - 124
Vinyl chloride	50.0	47.2		ug/L		94	68 - 120
1,2-Dichloroethane	50.0	48.2		ug/L		96	77 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*

Lab Sample ID: 490-85052-A-7 MS
Matrix: Water
Analysis Batch: 273831

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.26	J	50.0	55.3		ug/L		110	76 - 149
Freon-113	0.15	U	50.0	62.6		ug/L		125	72 - 148
1,1,2,2-Tetrachloroethane	0.19	U	50.0	53.7		ug/L		107	56 - 143
1,1,2-Trichloroethane	0.19	U	50.0	53.3		ug/L		107	74 - 134
1,1-Dichloroethane	2.1		50.0	57.4		ug/L		110	71 - 139
1,1-Dichloroethene	2.6		50.0	61.1		ug/L		117	70 - 142
1,2,4-Trichlorobenzene	0.20	U	50.0	48.8		ug/L		98	60 - 136
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	50.0		ug/L		100	52 - 126
1,2-Dichlorobenzene	0.19	U	50.0	53.4		ug/L		107	79 - 128
1,2-Dichloropropane	0.25	U	50.0	55.9		ug/L		112	67 - 131
1,3-Dichlorobenzene	0.18	U	50.0	52.4		ug/L		105	77 - 131
1,4-Dichlorobenzene	0.17	U	50.0	51.7		ug/L		103	78 - 126
2-Butanone (MEK)	2.6	U	250	273		ug/L		109	50 - 138
2-Hexanone	1.3	U	250	263		ug/L		105	50 - 150
4-Methyl-2-pentanone (MIBK)	0.81	U	250	297		ug/L		119	50 - 147
Acetone	2.7	U	250	281		ug/L		112	45 - 141
Benzene	0.20	U	50.0	54.7		ug/L		109	75 - 133
Bromoform	0.29	U	50.0	55.3		ug/L		111	42 - 147
Bromomethane	0.35	U	50.0	41.9		ug/L		84	16 - 163
Carbon disulfide	0.22	U	50.0	63.4		ug/L		127	48 - 152
Carbon tetrachloride	0.18	U	50.0	59.3		ug/L		119	62 - 164
Chlorobenzene	0.18	U	50.0	53.4		ug/L		107	80 - 129
Chlorodibromomethane	0.25	U	50.0	57.4		ug/L		115	66 - 140
Chloroethane	0.36	U	50.0	53.9		ug/L		108	58 - 137
Chloroform	1.1		50.0	62.0		ug/L		122	66 - 138
Chloromethane	0.36	U	50.0	51.5		ug/L		103	10 - 169
cis-1,2-Dichloroethene	0.21	U	50.0	56.6		ug/L		113	68 - 138
cis-1,3-Dichloropropene	0.17	U	50.0	52.8		ug/L		106	71 - 141

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

Lab Sample ID: 490-85052-A-7 MS
Matrix: Water
Analysis Batch: 273831

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	0.13	U	50.0	60.5		ug/L		121	58 - 144
Dichlorobromomethane	0.17	U	50.0	54.9		ug/L		110	70 - 140
Dichlorodifluoromethane	0.17	U	50.0	57.1		ug/L		114	40 - 127
Ethylbenzene	0.19	U	50.0	55.3		ug/L		111	79 - 139
1,2-Dibromoethane	0.21	U	50.0	54.7		ug/L		109	75 - 137
Isopropylbenzene	0.33	U	50.0	57.4		ug/L		115	80 - 153
Methyl acetate	0.58	U	250	266		ug/L		106	30 - 165
Methyl tert-butyl ether	0.35	J	50.0	54.1		ug/L		107	66 - 141
Methylcyclohexane	0.090	U	50.0	53.2		ug/L		106	59 - 151
Methylene Chloride	0.22	U	50.0	57.3		ug/L		115	64 - 139
Styrene	0.28	U	50.0	52.0		ug/L		104	61 - 148
Tetrachloroethene	1.1	J	50.0	53.5		ug/L		105	72 - 145
Toluene	0.17	U	50.0	53.0		ug/L		106	75 - 136
trans-1,2-Dichloroethene	0.23	U	50.0	57.9		ug/L		116	66 - 143
trans-1,3-Dichloropropene	0.17	U	50.0	54.6		ug/L		109	59 - 135
Trichloroethene	0.20	U	50.0	53.9		ug/L		108	73 - 144
Trichlorofluoromethane	0.21	U	50.0	57.3		ug/L		115	58 - 139
Vinyl chloride	0.18	U	50.0	55.7		ug/L		111	56 - 129
1,2-Dichloroethane	0.20	U	50.0	51.6		ug/L		103	64 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*

Lab Sample ID: 490-85052-A-7 MSD
Matrix: Water
Analysis Batch: 273831

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.26	J	50.0	55.8		ug/L		111	76 - 149	1	17
Freon-113	0.15	U	50.0	62.1		ug/L		124	72 - 148	1	18
1,1,2,2-Tetrachloroethane	0.19	U	50.0	56.5		ug/L		113	56 - 143	5	20
1,1,2-Trichloroethane	0.19	U	50.0	54.4		ug/L		109	74 - 134	2	15
1,1-Dichloroethane	2.1		50.0	56.2		ug/L		108	71 - 139	2	17
1,1-Dichloroethene	2.6		50.0	61.0		ug/L		117	70 - 142	0	17
1,2,4-Trichlorobenzene	0.20	U	50.0	53.5		ug/L		107	60 - 136	9	19
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	55.4		ug/L		111	52 - 126	10	24
1,2-Dichlorobenzene	0.19	U	50.0	55.2		ug/L		110	79 - 128	3	15
1,2-Dichloropropane	0.25	U	50.0	55.4		ug/L		111	67 - 131	1	17
1,3-Dichlorobenzene	0.18	U	50.0	54.2		ug/L		108	77 - 131	3	15
1,4-Dichlorobenzene	0.17	U	50.0	53.4		ug/L		107	78 - 126	3	15
2-Butanone (MEK)	2.6	U	250	288		ug/L		115	50 - 138	6	19
2-Hexanone	1.3	U	250	279		ug/L		111	50 - 150	6	15
4-Methyl-2-pentanone (MIBK)	0.81	U	250	312		ug/L		125	50 - 147	5	17
Acetone	2.7	U	250	294		ug/L		117	45 - 141	4	21
Benzene	0.20	U	50.0	55.2		ug/L		110	75 - 133	1	17

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

Lab Sample ID: 490-85052-A-7 MSD
Matrix: Water
Analysis Batch: 273831

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	0.29	U	50.0	57.2		ug/L		114	42 - 147	4	16
Bromomethane	0.35	U	50.0	44.2		ug/L		88	16 - 163	5	50
Carbon disulfide	0.22	U	50.0	62.5		ug/L		125	48 - 152	1	21
Carbon tetrachloride	0.18	U	50.0	59.7		ug/L		119	62 - 164	1	19
Chlorobenzene	0.18	U	50.0	53.4		ug/L		107	80 - 129	0	14
Chlorodibromomethane	0.25	U	50.0	57.6		ug/L		115	66 - 140	0	15
Chloroethane	0.36	U	50.0	53.3		ug/L		107	58 - 137	1	20
Chloroform	1.1		50.0	61.8		ug/L		121	66 - 138	0	18
Chloromethane	0.36	U	50.0	53.3		ug/L		107	10 - 169	4	31
cis-1,2-Dichloroethene	0.21	U	50.0	56.8		ug/L		114	68 - 138	0	17
cis-1,3-Dichloropropene	0.17	U	50.0	53.2		ug/L		106	71 - 141	1	15
Cyclohexane	0.13	U	50.0	62.0		ug/L		124	58 - 144	3	16
Dichlorobromomethane	0.17	U	50.0	55.3		ug/L		111	70 - 140	1	18
Dichlorodifluoromethane	0.17	U	50.0	57.6		ug/L		115	40 - 127	1	18
Ethylbenzene	0.19	U	50.0	55.9		ug/L		112	79 - 139	1	15
1,2-Dibromoethane	0.21	U	50.0	55.4		ug/L		111	75 - 137	1	15
Isopropylbenzene	0.33	U	50.0	58.6		ug/L		117	80 - 153	2	16
Methyl acetate	0.58	U	250	269		ug/L		108	30 - 165	1	31
Methyl tert-butyl ether	0.35	J	50.0	54.7		ug/L		109	66 - 141	1	16
Methylcyclohexane	0.090	U	50.0	55.5		ug/L		111	59 - 151	4	19
Methylene Chloride	0.22	U	50.0	56.3		ug/L		113	64 - 139	2	17
Styrene	0.28	U	50.0	52.6		ug/L		105	61 - 148	1	24
Tetrachloroethene	1.1	J	50.0	54.7		ug/L		107	72 - 145	2	16
Toluene	0.17	U	50.0	53.1		ug/L		106	75 - 136	0	15
trans-1,2-Dichloroethene	0.23	U	50.0	57.2		ug/L		114	66 - 143	1	16
trans-1,3-Dichloropropene	0.17	U	50.0	56.2		ug/L		112	59 - 135	3	14
Trichloroethene	0.20	U	50.0	55.4		ug/L		111	73 - 144	3	17
Trichlorofluoromethane	0.21	U	50.0	56.4		ug/L		113	58 - 139	2	18
Vinyl chloride	0.18	U	50.0	56.6		ug/L		113	56 - 129	2	17
1,2-Dichloroethane	0.20	U	50.0	53.1		ug/L		106	64 - 136	3	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 490-273958/7
Matrix: Water
Analysis Batch: 273958

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 13:55	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 13:55	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 13:55	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 13:55	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 13:55	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 13:55	1

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

Lab Sample ID: MB 490-273958/7
Matrix: Water
Analysis Batch: 273958

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 13:55	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 13:55	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 13:55	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 13:55	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 13:55	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 13:55	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 13:55	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 13:55	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 13:55	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 13:55	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 13:55	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 13:55	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 13:55	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 13:55	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 13:55	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 13:55	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 13:55	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 13:55	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 13:55	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 13:55	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 13:55	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 13:55	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 13:55	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 13:55	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 13:55	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 13:55	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 13:55	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 13:55	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 13:55	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 13:55	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 13:55	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 13:55	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 13:55	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 13:55	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 13:55	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 13:55*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 13:55*	*1*

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

Lab Sample ID: MB 490-273958/7
Matrix: Water
Analysis Batch: 273958

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130		08/18/15 13:55	1
Dibromofluoromethane (Surr)	112		70 - 130		08/18/15 13:55	1
Toluene-d8 (Surr)	98		70 - 130		08/18/15 13:55	1
1,2-Dichloroethane-d4 (Surr)	113		70 - 130		08/18/15 13:55	1

Lab Sample ID: LCS 490-273958/3
Matrix: Water
Analysis Batch: 273958

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	50.2		ug/L		100	78 - 135
Freon-113	50.0	55.4		ug/L		111	77 - 129
1,1,2,2-Tetrachloroethane	50.0	54.8		ug/L		110	69 - 131
1,1,2-Trichloroethane	50.0	52.3		ug/L		105	80 - 124
1,1-Dichloroethane	50.0	50.0		ug/L		100	78 - 125
1,1-Dichloroethene	50.0	52.6		ug/L		105	79 - 124
1,2,4-Trichlorobenzene	50.0	51.6		ug/L		103	63 - 133
1,2-Dibromo-3-Chloropropane	50.0	54.0		ug/L		108	54 - 125
1,2-Dichlorobenzene	50.0	54.7		ug/L		109	80 - 121
1,2-Dichloropropane	50.0	51.4		ug/L		103	75 - 120
1,3-Dichlorobenzene	50.0	53.4		ug/L		107	80 - 122
1,4-Dichlorobenzene	50.0	53.1		ug/L		106	80 - 120
2-Butanone (MEK)	250	286		ug/L		114	62 - 133
2-Hexanone	250	271		ug/L		108	60 - 142
4-Methyl-2-pentanone (MIBK)	250	300		ug/L		120	60 - 137
Acetone	250	284		ug/L		114	54 - 145
Benzene	50.0	50.8		ug/L		102	80 - 121
Bromoform	50.0	54.3		ug/L		109	46 - 145
Bromomethane	50.0	43.1		ug/L		86	41 - 150
Carbon disulfide	50.0	54.4		ug/L		109	77 - 126
Carbon tetrachloride	50.0	52.6		ug/L		105	64 - 147
Chlorobenzene	50.0	50.2		ug/L		100	80 - 120
Chlorodibromomethane	50.0	55.2		ug/L		110	69 - 133
Chloroethane	50.0	49.1		ug/L		98	72 - 120
Chloroform	50.0	56.5		ug/L		113	73 - 129
Chloromethane	50.0	49.9		ug/L		100	12 - 150
cis-1,2-Dichloroethene	50.0	54.6		ug/L		109	76 - 125
cis-1,3-Dichloropropene	50.0	53.6		ug/L		107	74 - 140
Cyclohexane	50.0	54.4		ug/L		109	73 - 122
Dichlorobromomethane	50.0	52.4		ug/L		105	75 - 129
Dichlorodifluoromethane	50.0	57.0		ug/L		114	37 - 127
Ethylbenzene	50.0	51.7		ug/L		103	80 - 130
1,2-Dibromoethane	50.0	54.4		ug/L		109	80 - 129
Isopropylbenzene	50.0	53.0		ug/L		106	80 - 141
Methyl acetate	250	295		ug/L		118	64 - 150
Methyl tert-butyl ether	50.0	52.6		ug/L		105	72 - 133
Methylcyclohexane	50.0	50.1		ug/L		100	71 - 129
Methylene Chloride	50.0	53.1		ug/L		106	79 - 123

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

Lab Sample ID: LCS 490-273958/3
Matrix: Water
Analysis Batch: 273958

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Styrene			50.0	50.9		ug/L		102	80 - 127		
Tetrachloroethene			50.0	48.4		ug/L		97	80 - 126		
Toluene			50.0	49.0		ug/L		98	80 - 126		
trans-1,2-Dichloroethene			50.0	51.8		ug/L		104	79 - 126		
trans-1,3-Dichloropropene			50.0	55.1		ug/L		110	63 - 134		
Trichloroethene			50.0	49.8		ug/L		100	80 - 123		
Trichlorofluoromethane			50.0	50.4		ug/L		101	65 - 124		
Vinyl chloride			50.0	51.7		ug/L		103	68 - 120		
1,2-Dichloroethane			50.0	50.0		ug/L		100	77 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 490-273958/4
Matrix: Water
Analysis Batch: 273958

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			50.0	48.2		ug/L		96	78 - 135	4	17
Freon-113			50.0	53.3		ug/L		107	77 - 129	4	18
1,1,2,2-Tetrachloroethane			50.0	54.9		ug/L		110	69 - 131	0	20
1,1,2-Trichloroethane			50.0	52.6		ug/L		105	80 - 124	1	15
1,1-Dichloroethane			50.0	48.4		ug/L		97	78 - 125	3	17
1,1-Dichloroethene			50.0	50.5		ug/L		101	79 - 124	4	17
1,2,4-Trichlorobenzene			50.0	51.7		ug/L		103	63 - 133	0	19
1,2-Dibromo-3-Chloropropane			50.0	55.2		ug/L		110	54 - 125	2	24
1,2-Dichlorobenzene			50.0	53.6		ug/L		107	80 - 121	2	15
1,2-Dichloropropane			50.0	50.9		ug/L		102	75 - 120	1	17
1,3-Dichlorobenzene			50.0	52.2		ug/L		104	80 - 122	2	15
1,4-Dichlorobenzene			50.0	51.4		ug/L		103	80 - 120	3	15
2-Butanone (MEK)			250	263		ug/L		105	62 - 133	8	19
2-Hexanone			250	279		ug/L		112	60 - 142	3	15
4-Methyl-2-pentanone (MIBK)			250	308		ug/L		123	60 - 137	3	17
Acetone			250	288		ug/L		115	54 - 145	1	21
Benzene			50.0	49.4		ug/L		99	80 - 121	3	17
Bromoform			50.0	55.2		ug/L		110	46 - 145	2	16
Bromomethane			50.0	42.7		ug/L		85	41 - 150	1	50
Carbon disulfide			50.0	52.9		ug/L		106	77 - 126	3	21
Carbon tetrachloride			50.0	51.6		ug/L		103	64 - 147	2	19
Chlorobenzene			50.0	49.4		ug/L		99	80 - 120	2	14
Chlorodibromomethane			50.0	55.4		ug/L		111	69 - 133	0	15
Chloroethane			50.0	48.0		ug/L		96	72 - 120	2	20
Chloroform			50.0	54.9		ug/L		110	73 - 129	3	18
Chloromethane			50.0	49.0		ug/L		98	12 - 150	2	31
cis-1,2-Dichloroethene			50.0	49.2		ug/L		98	76 - 125	10	17

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

Lab Sample ID: LCSD 490-273958/4
Matrix: Water
Analysis Batch: 273958

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene			50.0	54.3		ug/L		109	74 - 140	1	15
Cyclohexane			50.0	53.1		ug/L		106	73 - 122	2	16
Dichlorobromomethane			50.0	51.6		ug/L		103	75 - 129	1	18
Dichlorodifluoromethane			50.0	55.0		ug/L		110	37 - 127	4	18
Ethylbenzene			50.0	50.5		ug/L		101	80 - 130	2	15
1,2-Dibromoethane			50.0	54.0		ug/L		108	80 - 129	1	15
Isopropylbenzene			50.0	51.9		ug/L		104	80 - 141	2	16
Methyl acetate			250	296		ug/L		119	64 - 150	1	31
Methyl tert-butyl ether			50.0	52.1		ug/L		104	72 - 133	1	16
Methylcyclohexane			50.0	48.1		ug/L		96	71 - 129	4	19
Methylene Chloride			50.0	51.6		ug/L		103	79 - 123	3	17
Styrene			50.0	50.2		ug/L		100	80 - 127	1	24
Tetrachloroethene			50.0	47.2		ug/L		94	80 - 126	2	16
Toluene			50.0	48.5		ug/L		97	80 - 126	1	15
trans-1,2-Dichloroethene			50.0	49.8		ug/L		100	79 - 126	4	16
trans-1,3-Dichloropropene			50.0	56.4		ug/L		113	63 - 134	2	14
Trichloroethene			50.0	49.9		ug/L		100	80 - 123	0	17
Trichlorofluoromethane			50.0	49.5		ug/L		99	65 - 124	2	18
Vinyl chloride			50.0	49.8		ug/L		100	68 - 120	4	17
1,2-Dichloroethane			50.0	49.8		ug/L		100	77 - 121	0	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*

Lab Sample ID: MB 490-274395/7
Matrix: Water
Analysis Batch: 274395

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/19/15 13:27	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/19/15 13:27	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/19/15 13:27	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/19/15 13:27	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/19/15 13:27	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/19/15 13:27	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/19/15 13:27	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/19/15 13:27	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/19/15 13:27	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/19/15 13:27	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/19/15 13:27	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/19/15 13:27	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/19/15 13:27	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/19/15 13:27	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/19/15 13:27	1
Acetone	2.7	U	25	2.7	ug/L			08/19/15 13:27	1

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

Lab Sample ID: MB 490-274395/7
Matrix: Water
Analysis Batch: 274395

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.20	U	1.0	0.20	ug/L			08/19/15 13:27	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/19/15 13:27	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/19/15 13:27	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/19/15 13:27	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/19/15 13:27	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/19/15 13:27	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/19/15 13:27	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/19/15 13:27	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/19/15 13:27	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/19/15 13:27	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/19/15 13:27	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/19/15 13:27	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/19/15 13:27	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/19/15 13:27	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/19/15 13:27	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/19/15 13:27	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/19/15 13:27	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/19/15 13:27	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/19/15 13:27	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/19/15 13:27	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/19/15 13:27	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/19/15 13:27	1
Styrene	0.28	U	1.0	0.28	ug/L			08/19/15 13:27	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/19/15 13:27	1
Toluene	0.17	U	1.0	0.17	ug/L			08/19/15 13:27	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/19/15 13:27	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/19/15 13:27	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/19/15 13:27	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/19/15 13:27	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/19/15 13:27	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/19/15 13:27	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/19/15 13:27	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/19/15 13:27*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/19/15 13:27*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/19/15 13:27*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*08/19/15 13:27*	*1*
Toluene-d8 (Surr)	*109*		*70 - 130*		*08/19/15 13:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/19/15 13:27*	*1*

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

Lab Sample ID: LCS 490-274395/3
Matrix: Water
Analysis Batch: 274395

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	50.4		ug/L		101	78 - 135
Freon-113	50.0	53.0		ug/L		106	77 - 129
1,1,2,2-Tetrachloroethane	50.0	51.1		ug/L		102	69 - 131
1,1,2-Trichloroethane	50.0	54.4		ug/L		109	80 - 124
1,1-Dichloroethane	50.0	52.9		ug/L		106	78 - 125
1,1-Dichloroethene	50.0	53.6		ug/L		107	79 - 124
1,2,4-Trichlorobenzene	50.0	51.0		ug/L		102	63 - 133
1,2-Dibromo-3-Chloropropane	50.0	51.7		ug/L		103	54 - 125
1,2-Dichlorobenzene	50.0	54.2		ug/L		108	80 - 121
1,2-Dichloropropane	50.0	53.9		ug/L		108	75 - 120
1,3-Dichlorobenzene	50.0	54.7		ug/L		109	80 - 122
1,4-Dichlorobenzene	50.0	50.5		ug/L		101	80 - 120
2-Butanone (MEK)	250	278		ug/L		111	62 - 133
2-Hexanone	250	306		ug/L		122	60 - 142
4-Methyl-2-pentanone (MIBK)	250	278		ug/L		111	60 - 137
Acetone	250	276		ug/L		110	54 - 145
Benzene	50.0	53.0		ug/L		106	80 - 121
Bromoform	50.0	50.4		ug/L		101	46 - 145
Bromomethane	50.0	42.5		ug/L		85	41 - 150
Carbon disulfide	50.0	53.8		ug/L		108	77 - 126
Carbon tetrachloride	50.0	48.2		ug/L		96	64 - 147
Chlorobenzene	50.0	53.1		ug/L		106	80 - 120
Chlorodibromomethane	50.0	54.9		ug/L		110	69 - 133
Chloroethane	50.0	54.7		ug/L		109	72 - 120
Chloroform	50.0	51.3		ug/L		103	73 - 129
Chloromethane	50.0	43.7		ug/L		87	12 - 150
cis-1,2-Dichloroethene	50.0	53.1		ug/L		106	76 - 125
cis-1,3-Dichloropropene	50.0	55.0		ug/L		110	74 - 140
Cyclohexane	50.0	51.6		ug/L		103	73 - 122
Dichlorobromomethane	50.0	53.9		ug/L		108	75 - 129
Dichlorodifluoromethane	50.0	40.4		ug/L		81	37 - 127
Ethylbenzene	50.0	56.6		ug/L		113	80 - 130
1,2-Dibromoethane	50.0	55.4		ug/L		111	80 - 129
Isopropylbenzene	50.0	55.9		ug/L		112	80 - 141
Methyl acetate	250	282		ug/L		113	64 - 150
Methyl tert-butyl ether	50.0	51.9		ug/L		104	72 - 133
Methylcyclohexane	50.0	50.5		ug/L		101	71 - 129
Methylene Chloride	50.0	55.8		ug/L		112	79 - 123
Styrene	50.0	50.4		ug/L		101	80 - 127
Tetrachloroethene	50.0	50.6		ug/L		101	80 - 126
Toluene	50.0	52.2		ug/L		104	80 - 126
trans-1,2-Dichloroethene	50.0	54.0		ug/L		108	79 - 126
trans-1,3-Dichloropropene	50.0	55.0		ug/L		110	63 - 134
Trichloroethene	50.0	51.0		ug/L		102	80 - 123
Trichlorofluoromethane	50.0	49.9		ug/L		100	65 - 124
Vinyl chloride	50.0	51.1		ug/L		102	68 - 120
1,2-Dichloroethane	50.0	52.2		ug/L		104	77 - 121

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

Lab Sample ID: LCS 490-274395/3
Matrix: Water
Analysis Batch: 274395

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 490-274395/4
Matrix: Water
Analysis Batch: 274395

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			50.0	55.5		ug/L		111	78 - 135	10	17
Freon-113			50.0	53.3		ug/L		107	77 - 129	1	18
1,1,2,2-Tetrachloroethane			50.0	53.1		ug/L		106	69 - 131	4	20
1,1,2-Trichloroethane			50.0	54.6		ug/L		109	80 - 124	0	15
1,1-Dichloroethane			50.0	54.5		ug/L		109	78 - 125	3	17
1,1-Dichloroethene			50.0	55.0		ug/L		110	79 - 124	3	17
1,2,4-Trichlorobenzene			50.0	51.1		ug/L		102	63 - 133	0	19
1,2-Dibromo-3-Chloropropane			50.0	54.3		ug/L		109	54 - 125	5	24
1,2-Dichlorobenzene			50.0	54.4		ug/L		109	80 - 121	0	15
1,2-Dichloropropane			50.0	54.3		ug/L		109	75 - 120	1	17
1,3-Dichlorobenzene			50.0	55.3		ug/L		111	80 - 122	1	15
1,4-Dichlorobenzene			50.0	51.7		ug/L		103	80 - 120	2	15
2-Butanone (MEK)			250	303		ug/L		121	62 - 133	9	19
2-Hexanone			250	317		ug/L		127	60 - 142	4	15
4-Methyl-2-pentanone (MIBK)			250	287		ug/L		115	60 - 137	3	17
Acetone			250	295		ug/L		118	54 - 145	7	21
Benzene			50.0	54.0		ug/L		108	80 - 121	2	17
Bromoform			50.0	49.7		ug/L		99	46 - 145	1	16
Bromomethane			50.0	44.2		ug/L		88	41 - 150	4	50
Carbon disulfide			50.0	55.3		ug/L		111	77 - 126	3	21
Carbon tetrachloride			50.0	53.3		ug/L		107	64 - 147	10	19
Chlorobenzene			50.0	52.5		ug/L		105	80 - 120	1	14
Chlorodibromomethane			50.0	55.1		ug/L		110	69 - 133	0	15
Chloroethane			50.0	55.0		ug/L		110	72 - 120	0	20
Chloroform			50.0	54.9		ug/L		110	73 - 129	7	18
Chloromethane			50.0	43.8		ug/L		88	12 - 150	0	31
cis-1,2-Dichloroethene			50.0	54.9		ug/L		110	76 - 125	3	17
cis-1,3-Dichloropropene			50.0	55.8		ug/L		112	74 - 140	1	15
Cyclohexane			50.0	54.2		ug/L		108	73 - 122	5	16
Dichlorobromomethane			50.0	52.7		ug/L		105	75 - 129	2	18
Dichlorodifluoromethane			50.0	40.6		ug/L		81	37 - 127	1	18
Ethylbenzene			50.0	56.3		ug/L		113	80 - 130	1	15
1,2-Dibromoethane			50.0	55.5		ug/L		111	80 - 129	0	15
Isopropylbenzene			50.0	55.7		ug/L		111	80 - 141	1	16
Methyl acetate			250	290		ug/L		116	64 - 150	3	31
Methyl tert-butyl ether			50.0	54.4		ug/L		109	72 - 133	5	16
Methylcyclohexane			50.0	49.7		ug/L		99	71 - 129	2	19
Methylene Chloride			50.0	58.6		ug/L		117	79 - 123	5	17

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

Lab Sample ID: LCSD 490-274395/4
Matrix: Water
Analysis Batch: 274395

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Styrene			50.0	49.9		ug/L		100	80 - 127	1	24
Tetrachloroethene			50.0	51.4		ug/L		103	80 - 126	2	16
Toluene			50.0	53.6		ug/L		107	80 - 126	3	15
trans-1,2-Dichloroethene			50.0	55.7		ug/L		111	79 - 126	3	16
trans-1,3-Dichloropropene			50.0	55.4		ug/L		111	63 - 134	1	14
Trichloroethene			50.0	50.2		ug/L		100	80 - 123	2	17
Trichlorofluoromethane			50.0	50.9		ug/L		102	65 - 124	2	18
Vinyl chloride			50.0	52.4		ug/L		105	68 - 120	3	17
1,2-Dichloroethane			50.0	52.5		ug/L		105	77 - 121	1	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 490-273991/7
Matrix: Water
Analysis Batch: 273991

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 13:47	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 13:47	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/18/15 13:47	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 13:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/18/15 13:47*	*1*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*08/18/15 13:47*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/18/15 13:47*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/18/15 13:47*	*1*

Lab Sample ID: LCS 490-273991/3
Matrix: Water
Analysis Batch: 273991

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.500	0.480		ug/L		96	70 - 131		
1,2-Dibromo-3-Chloropropane			0.500	0.454		ug/L		91	40 - 160		
1,4-Dioxane			10.0	9.87	J	ug/L		99	40 - 160		
Ethylene Dibromide			0.500	0.470		ug/L		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*

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

Lab Sample ID: LCS 490-273991/3
Matrix: Water
Analysis Batch: 273991

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 490-273991/4
Matrix: Water
Analysis Batch: 273991

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.500	0.480		ug/L		96	70 - 131	0	19
1,2-Dibromo-3-Chloropropane			0.500	0.456		ug/L		91	40 - 160	0	20
1,4-Dioxane			10.0	9.92	J	ug/L		99	40 - 160	0	20
Ethylene Dibromide			0.500	0.466		ug/L		93	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: 490-84672-C-1 MS
Matrix: Water
Analysis Batch: 273991

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.010	U	0.500	0.464		ug/L		93	53 - 144
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.421		ug/L		84	40 - 160
1,4-Dioxane	0.27	U	10.0	9.08	J	ug/L		91	40 - 160
Ethylene Dibromide	0.010	U	0.500	0.437		ug/L		87	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: 490-84672-C-1 MSD
Matrix: Water
Analysis Batch: 273991

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.010	U	0.500	0.478		ug/L		96	53 - 144	3	19
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.404		ug/L		81	40 - 160	4	20
1,4-Dioxane	0.27	U	10.0	8.96	J	ug/L		90	40 - 160	1	20
Ethylene Dibromide	0.010	U	0.500	0.451		ug/L		90	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*

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

Lab Sample ID: 490-84672-C-1 MSD
Matrix: Water
Analysis Batch: 273991

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

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

Lab Sample ID: MB 490-272218/1-A
Matrix: Water
Analysis Batch: 272371

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272218

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 19:40	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 19:40	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 19:40	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/11/15 08:09	08/11/15 19:40	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/11/15 08:09	08/11/15 19:40	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 19:40	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/11/15 08:09	08/11/15 19:40	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/11/15 08:09	08/11/15 19:40	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/11/15 08:09	08/11/15 19:40	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 19:40	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/11/15 08:09	08/11/15 19:40	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/11/15 08:09	08/11/15 19:40	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 19:40	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/11/15 08:09	08/11/15 19:40	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/11/15 08:09	08/11/15 19:40	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 19:40	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/11/15 08:09	08/11/15 19:40	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/11/15 08:09	08/11/15 19:40	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 19:40	1
Acetophenone	2.3	U	10	2.3	ug/L		08/11/15 08:09	08/11/15 19:40	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/11/15 08:09	08/11/15 19:40	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/11/15 08:09	08/11/15 19:40	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/11/15 08:09	08/11/15 19:40	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/11/15 08:09	08/11/15 19:40	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 19:40	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 19:40	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 19:40	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/11/15 08:09	08/11/15 19:40	1
Carbazole	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 19:40	1

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

Lab Sample ID: MB 490-272218/1-A
Matrix: Water
Analysis Batch: 272371

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272218

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	2.4	U	10	2.4	ug/L		08/11/15 08:09	08/11/15 19:40	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/11/15 08:09	08/11/15 19:40	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/11/15 08:09	08/11/15 19:40	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 19:40	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/11/15 08:09	08/11/15 19:40	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 19:40	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 19:40	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 19:40	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/11/15 08:09	08/11/15 19:40	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/11/15 08:09	08/11/15 19:40	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/11/15 08:09	08/11/15 19:40	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/11/15 08:09	08/11/15 19:40	1
Isophorone	3.1	U	10	3.1	ug/L		08/11/15 08:09	08/11/15 19:40	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/11/15 08:09	08/11/15 19:40	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/11/15 08:09	08/11/15 19:40	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/11/15 08:09	08/11/15 19:40	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/11/15 08:09	08/11/15 19:40	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/11/15 08:09	08/11/15 19:40	1
Phenol	1.5	U	10	1.5	ug/L		08/11/15 08:09	08/11/15 19:40	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/11/15 08:09	08/11/15 19:40	1
Diphenyl	2.2	U	10	2.2	ug/L		08/11/15 08:09	08/11/15 19:40	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/11/15 08:09	08/11/15 19:40	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/11/15 08:09	08/11/15 19:40	1
Atrazine	2.9	U	10	2.9	ug/L		08/11/15 08:09	08/11/15 19:40	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/11/15 08:09*	*08/11/15 19:40*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*86*		*10 - 120*	*08/11/15 08:09*	*08/11/15 19:40*	*1*
2-Fluorobiphenyl (Surr)	*78*		*29 - 120*	*08/11/15 08:09*	*08/11/15 19:40*	*1*
2-Fluorophenol (Surr)	*50*		*10 - 120*	*08/11/15 08:09*	*08/11/15 19:40*	*1*
Nitrobenzene-d5 (Surr)	*75*		*27 - 120*	*08/11/15 08:09*	*08/11/15 19:40*	*1*
Phenol-d5 (Surr)	*33*		*10 - 120*	*08/11/15 08:09*	*08/11/15 19:40*	*1*
Terphenyl-d14 (Surr)	*98*		*13 - 120*	*08/11/15 08:09*	*08/11/15 19:40*	*1*

Lab Sample ID: LCS 490-272218/2-A
Matrix: Water
Analysis Batch: 272371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272218

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	40.0	33.6		ug/L		84	46 - 120
1,2,4,5-Tetrachlorobenzene	40.0	31.1		ug/L		78	25 - 120
2,3,4,6-Tetrachlorophenol	40.0	36.3		ug/L		91	31 - 148
2,4,5-Trichlorophenol	40.0	35.0		ug/L		87	40 - 129
2,4,6-Trichlorophenol	40.0	34.2		ug/L		85	39 - 135
2,4-Dichlorophenol	40.0	31.1		ug/L		78	38 - 120

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

Lab Sample ID: LCS 490-272218/2-A
Matrix: Water
Analysis Batch: 272371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272218

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	40.0	29.8		ug/L		74	21 - 126
2,4-Dinitrophenol	80.0	57.8		ug/L		72	20 - 150
2,4-Dinitrotoluene	40.0	37.1		ug/L		93	46 - 132
2,6-Dinitrotoluene	40.0	36.4		ug/L		91	54 - 128
2-Chloronaphthalene	40.0	32.1		ug/L		80	39 - 120
2-Chlorophenol	40.0	29.2		ug/L		73	40 - 120
2-Methylnaphthalene	40.0	30.0		ug/L		75	31 - 120
2-Methylphenol	40.0	27.7		ug/L		69	38 - 120
2-Nitroaniline	40.0	37.0		ug/L		93	46 - 131
2-Nitrophenol	40.0	32.3		ug/L		81	32 - 120
3,3'-Dichlorobenzidine	40.0	39.5		ug/L		99	46 - 129
3 & 4 Methylphenol	40.0	26.1		ug/L		65	33 - 120
3-Nitroaniline	40.0	34.9		ug/L		87	54 - 121
4,6-Dinitro-2-methylphenol	80.0	72.0		ug/L		90	19 - 150
4-Bromophenyl phenyl ether	40.0	34.6		ug/L		86	47 - 127
4-Chloro-3-methylphenol	40.0	33.7		ug/L		84	44 - 120
4-Chloroaniline	40.0	29.2		ug/L		73	44 - 120
4-Chlorophenyl phenyl ether	40.0	33.8		ug/L		84	50 - 120
4-Nitroaniline	40.0	38.3		ug/L		96	55 - 123
4-Nitrophenol	80.0	31.5		ug/L		39	10 - 120
Acenaphthylene	40.0	32.2		ug/L		81	48 - 120
Acetophenone	40.0	31.1		ug/L		78	52 - 133
Anthracene	40.0	35.2		ug/L		88	58 - 130
Benzaldehyde	40.0	52.8	*	ug/L		132	34 - 120
Benzo[g,h,i]perylene	40.0	36.3		ug/L		91	51 - 123
Benzo[k]fluoranthene	40.0	33.7		ug/L		84	51 - 120
Bis(2-chloroethoxy)methane	40.0	31.0		ug/L		78	44 - 120
Bis(2-chloroethyl)ether	40.0	30.1		ug/L		75	47 - 120
Butyl benzyl phthalate	40.0	38.5		ug/L		96	51 - 146
Bis(2-ethylhexyl) phthalate	40.0	39.4		ug/L		99	47 - 138
Carbazole	40.0	35.9		ug/L		90	54 - 123
Caprolactam	40.0	12.0		ug/L		30	10 - 120
Chrysene	40.0	34.6		ug/L		86	55 - 120
Dibenz(a,h)anthracene	40.0	37.0		ug/L		93	50 - 125
Dibenzofuran	40.0	33.3		ug/L		83	50 - 120
Diethyl phthalate	40.0	36.4		ug/L		91	54 - 128
Dimethyl phthalate	40.0	35.1		ug/L		88	53 - 127
Di-n-butyl phthalate	40.0	37.3		ug/L		93	54 - 140
Fluoranthene	40.0	36.2		ug/L		91	56 - 120
Fluorene	40.0	34.7		ug/L		87	52 - 120
Hexachlorocyclopentadiene	40.0	23.2		ug/L		58	17 - 120
Hexachloroethane	40.0	28.7		ug/L		72	30 - 120
Indeno[1,2,3-cd]pyrene	40.0	35.7		ug/L		89	54 - 125
Isophorone	40.0	26.7		ug/L		67	47 - 120
Naphthalene	40.0	30.3		ug/L		76	37 - 120
Nitrobenzene	40.0	30.4		ug/L		76	36 - 120
N-Nitrosodi-n-propylamine	40.0	32.5		ug/L		81	51 - 120
N-Nitrosodiphenylamine	80.0	70.0		ug/L		87	58 - 149

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

Lab Sample ID: LCS 490-272218/2-A
Matrix: Water
Analysis Batch: 272371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272218

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenanthrene	40.0	34.3		ug/L		86	56 - 120
Phenol	40.0	14.2		ug/L		36	14 - 120
Pyrene	40.0	34.9		ug/L		87	53 - 129
Diphenyl	40.0	32.3		ug/L		81	10 - 146
Di-n-octyl phthalate	40.0	39.4		ug/L		98	50 - 142
2,2'-oxybis[1-chloropropane]	40.0	30.4		ug/L		76	44 - 120
Atrazine	40.0	16.2		ug/L		41	24 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*93*		*10 - 120*
2-Fluorobiphenyl (Surr)	*81*		*29 - 120*
2-Fluorophenol (Surr)	*48*		*10 - 120*
Nitrobenzene-d5 (Surr)	*77*		*27 - 120*
Phenol-d5 (Surr)	*33*		*10 - 120*
Terphenyl-d14 (Surr)	*91*		*13 - 120*

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

Lab Sample ID: MB 490-272220/1-A
Matrix: Water
Analysis Batch: 272273

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272220

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 17:04	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 17:04	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/11/15 08:16	08/11/15 17:04	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/11/15 08:16	08/11/15 17:04	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/11/15 08:16	08/11/15 17:04	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/11/15 08:16	08/11/15 17:04	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/11/15 08:16	08/11/15 17:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*52*		*29 - 120*	*08/11/15 08:16*	*08/11/15 17:04*	*1*
Nitrobenzene-d5	*46*		*27 - 120*	*08/11/15 08:16*	*08/11/15 17:04*	*1*
Terphenyl-d14	*59*		*13 - 120*	*08/11/15 08:16*	*08/11/15 17:04*	*1*
2,4,6-Tribromophenol	*50*		*10 - 120*	*08/11/15 08:16*	*08/11/15 17:04*	*1*
2-Fluorophenol	*42*		*10 - 120*	*08/11/15 08:16*	*08/11/15 17:04*	*1*
Phenol-d5	*31*		*10 - 120*	*08/11/15 08:16*	*08/11/15 17:04*	*1*

Lab Sample ID: LCS 490-272220/2-A
Matrix: Water
Analysis Batch: 272273

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272220

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.685		ug/L		86	57 - 120
Benzo[a]pyrene	0.800	0.618		ug/L		77	57 - 124
Benzo[b]fluoranthene	0.800	0.642		ug/L		80	51 - 125

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

Lab Sample ID: LCS 490-272220/2-A
Matrix: Water
Analysis Batch: 272273

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272220

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobenzene	0.800	0.593		ug/L		74	48 - 131
Hexachlorobutadiene	0.800	0.539		ug/L		67	28 - 120
N-Nitrosodimethylamine	0.800	0.386	J	ug/L		48	20 - 120
Pentachlorophenol	1.60	0.10	U *	ug/L		5	21 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*
Nitrobenzene-d5	*68*		*27 - 120*
Terphenyl-d14	*78*		*13 - 120*
2,4,6-Tribromophenol	*69*		*10 - 120*
2-Fluorophenol	*50*		*10 - 120*
Phenol-d5	*37*		*10 - 120*

Lab Sample ID: MB 490-273404/1-A
Matrix: Water
Analysis Batch: 273467

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 273404

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/14/15 16:10	08/15/15 19:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*89*		*29 - 120*	*08/14/15 16:10*	*08/15/15 19:26*	*1*
Nitrobenzene-d5	*78*		*27 - 120*	*08/14/15 16:10*	*08/15/15 19:26*	*1*
Terphenyl-d14	*92*		*13 - 120*	*08/14/15 16:10*	*08/15/15 19:26*	*1*
2,4,6-Tribromophenol	*95*		*10 - 120*	*08/14/15 16:10*	*08/15/15 19:26*	*1*
2-Fluorophenol	*85*		*10 - 120*	*08/14/15 16:10*	*08/15/15 19:26*	*1*
Phenol-d5	*76*		*10 - 120*	*08/14/15 16:10*	*08/15/15 19:26*	*1*

Lab Sample ID: LCS 490-273404/2-A
Matrix: Water
Analysis Batch: 273467

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 273404

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	1.60	1.47		ug/L		92	21 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*80*		*29 - 120*
Nitrobenzene-d5	*77*		*27 - 120*
Terphenyl-d14	*85*		*13 - 120*
2,4,6-Tribromophenol	*90*		*10 - 120*
2-Fluorophenol	*72*		*10 - 120*
Phenol-d5	*64*		*10 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-273908/1-A
Matrix: Water
Analysis Batch: 274717

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 273908

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/18/15 06:45	08/20/15 00:01	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/18/15 06:45	08/20/15 00:01	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/18/15 06:45	08/20/15 00:01	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/18/15 06:45	08/20/15 00:01	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/18/15 06:45	08/20/15 00:01	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/18/15 06:45	08/20/15 00:01	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/18/15 06:45	08/20/15 00:01	1
Polychlorinated biphenyls, Total	0.50	U	0.50	0.50	ug/L		08/18/15 06:45	08/20/15 00:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*100*		*10 - 150*	*08/18/15 06:45*	*08/20/15 00:01*	*1*
Tetrachloro-m-xylene	*85*		*10 - 150*	*08/18/15 06:45*	*08/20/15 00:01*	*1*

Lab Sample ID: LCS 490-273908/2-A
Matrix: Water
Analysis Batch: 274717

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 273908

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	3.83		ug/L		96	23 - 139
PCB-1260	4.00	4.37	E	ug/L		109	36 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*111*		*10 - 150*
Tetrachloro-m-xylene	*96*		*10 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 490-274358/3
Matrix: Water
Analysis Batch: 274358

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			08/18/15 23:50	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/18/15 23:50	1

Lab Sample ID: LCS 490-274358/4
Matrix: Water
Analysis Batch: 274358

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	95.92		mg/L		96	80 - 120
Sulfate	100	93.83		mg/L		94	80 - 120

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 490-274358/5
Matrix: Water
Analysis Batch: 274358

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	95.86		mg/L		96	80 - 120	0	20
Sulfate			100	93.89		mg/L		94	80 - 120	0	20

Lab Sample ID: 490-84595-1 MS
Matrix: Water
Analysis Batch: 274358

Client Sample ID: RW-6-080515
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.97		100	104.2		mg/L		98	80 - 120
Sulfate	1.41		100	97.48		mg/L		96	80 - 120

Lab Sample ID: 490-84595-1 MSD
Matrix: Water
Analysis Batch: 274358

Client Sample ID: RW-6-080515
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5.97		100	98.51		mg/L		93	80 - 120	6	20
Sulfate	1.41		100	91.32		mg/L		90	80 - 120	7	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 490-272053/1-A
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272053

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 13:53	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Arsenic	0.000582	J	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 13:53	1
Calcium	0.13	U	1.0	0.13	mg/L		08/10/15 10:44	08/12/15 13:53	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Iron	0.010	U	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 13:53	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 13:53	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/10/15 10:44	08/12/15 13:53	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Potassium	0.13	U	1.0	0.13	mg/L		08/10/15 10:44	08/12/15 13:53	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 13:53	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Sodium	0.13	U	1.0	0.13	mg/L		08/10/15 10:44	08/12/15 13:53	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 13:53	1
Vanadium	0.00122	J	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 13:53	1
Zinc	0.010	U	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 13:53	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 490-272053/1-A
Matrix: Water
Analysis Batch: 273153

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272053

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 14:16	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 14:16	1

Lab Sample ID: LCS 490-272053/2-A
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.02		mg/L		102	80 - 120
Antimony	0.100	0.111		mg/L		111	80 - 120
Arsenic	0.100	0.102		mg/L		102	80 - 120
Barium	0.100	0.106		mg/L		106	80 - 120
Beryllium	0.100	0.107		mg/L		107	80 - 120
Cadmium	0.100	0.105		mg/L		105	80 - 120
Calcium	10.0	10.27		mg/L		103	80 - 120
Chromium	0.100	0.104		mg/L		104	80 - 120
Cobalt	0.100	0.102		mg/L		102	80 - 120
Iron	1.00	1.03		mg/L		103	80 - 120
Lead	0.100	0.106		mg/L		106	80 - 120
Magnesium	10.0	10.08		mg/L		101	80 - 120
Manganese	0.100	0.101		mg/L		101	80 - 120
Potassium	10.0	10.19		mg/L		102	80 - 120
Selenium	0.100	0.103		mg/L		103	80 - 120
Silver	0.100	0.105		mg/L		105	80 - 120
Sodium	10.0	10.12		mg/L		101	80 - 120
Thallium	0.100	0.105		mg/L		105	80 - 120
Vanadium	0.100	0.107		mg/L		107	80 - 120
Zinc	0.100	0.0971		mg/L		97	80 - 120

Lab Sample ID: LCS 490-272053/2-A
Matrix: Water
Analysis Batch: 273153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.100	0.0997		mg/L		100	80 - 120
Nickel	0.100	0.104		mg/L		104	80 - 120

Lab Sample ID: 490-84672-G-1-B MS
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.38		1.00	1.47		mg/L		109	75 - 125
Antimony	0.00050	U	0.100	0.109		mg/L		109	75 - 125
Arsenic	0.00074	J B	0.100	0.102		mg/L		101	75 - 125
Barium	0.0021		0.100	0.111		mg/L		109	75 - 125
Beryllium	0.00050	U	0.100	0.112		mg/L		112	75 - 125
Cadmium	0.00040	U	0.100	0.109		mg/L		109	75 - 125
Calcium	12.1		10.0	21.81		mg/L		97	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-84672-G-1-B MS
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.00050	U	0.100	0.102		mg/L		102	75 - 125
Cobalt	0.00050	U	0.100	0.100		mg/L		100	75 - 125
Iron	0.26		1.00	1.30		mg/L		105	75 - 125
Lead	0.00048	J	0.100	0.108		mg/L		107	75 - 125
Magnesium	4.2		10.0	14.11		mg/L		99	75 - 125
Manganese	0.0032	F1 F2	0.100	0.104		mg/L		101	75 - 125
Potassium	0.90	J	10.0	10.95		mg/L		100	75 - 125
Selenium	0.00060	U	0.100	0.104		mg/L		104	75 - 125
Silver	0.00050	U	0.100	0.109		mg/L		109	75 - 125
Sodium	4.2		10.0	14.40		mg/L		102	75 - 125
Thallium	0.00037	J	0.100	0.107		mg/L		106	75 - 125
Vanadium	0.0019	J B	0.100	0.107		mg/L		105	75 - 125
Zinc	0.010	U F1 F2	0.100	0.0999		mg/L		100	75 - 125

Lab Sample ID: 490-84672-G-1-B MS
Matrix: Water
Analysis Batch: 273153

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.0012	J	0.100	0.107		mg/L		106	75 - 125
Nickel	0.00051	J	0.100	0.110		mg/L		109	75 - 125

Lab Sample ID: 490-84672-G-1-C MSD
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.38		1.00	1.53		mg/L		115	75 - 125	4	20
Antimony	0.00050	U	0.100	0.108		mg/L		108	75 - 125	1	20
Arsenic	0.00074	J B	0.100	0.101		mg/L		100	75 - 125	1	20
Barium	0.0021		0.100	0.120		mg/L		118	75 - 125	8	20
Beryllium	0.00050	U	0.100	0.112		mg/L		112	75 - 125	0	20
Cadmium	0.00040	U	0.100	0.109		mg/L		109	75 - 125	0	20
Calcium	12.1		10.0	24.42		mg/L		123	75 - 125	11	20
Chromium	0.00050	U	0.100	0.101		mg/L		101	75 - 125	2	20
Cobalt	0.00050	U	0.100	0.0994		mg/L		99	75 - 125	1	20
Iron	0.26		1.00	1.42		mg/L		116	75 - 125	9	20
Lead	0.00048	J	0.100	0.105		mg/L		105	75 - 125	2	20
Magnesium	4.2		10.0	14.11		mg/L		99	75 - 125	0	20
Manganese	0.0032	F1 F2	0.100	0.151	F1 F2	mg/L		148	75 - 125	36	20
Potassium	0.90	J	10.0	10.99		mg/L		101	75 - 125	0	20
Selenium	0.00060	U	0.100	0.102		mg/L		102	75 - 125	2	20
Silver	0.00050	U	0.100	0.108		mg/L		108	75 - 125	0	20
Sodium	4.2		10.0	13.92		mg/L		98	75 - 125	3	20
Thallium	0.00037	J	0.100	0.105		mg/L		105	75 - 125	2	20
Vanadium	0.0019	J B	0.100	0.105		mg/L		103	75 - 125	2	20
Zinc	0.010	U F1 F2	0.100	0.126	F1 F2	mg/L		126	75 - 125	23	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-84672-G-1-C MSD
Matrix: Water
Analysis Batch: 273153

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	0.0012	J	0.100	0.104		mg/L		103	75 - 125	3	20
Nickel	0.00051	J	0.100	0.105		mg/L		104	75 - 125	5	20

Lab Sample ID: MB 490-272910/1-A
Matrix: Water
Analysis Batch: 273153

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272910

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/13/15 20:05	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/13/15 20:05	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/13/15 20:05	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/13/15 10:37	08/13/15 20:05	1
Calcium	0.13	U	1.0	0.13	mg/L		08/13/15 10:37	08/13/15 20:05	1
Iron	0.010	U	0.025	0.010	mg/L		08/13/15 10:37	08/13/15 20:05	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/13/15 20:05	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/13/15 10:37	08/13/15 20:05	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/13/15 10:37	08/13/15 20:05	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/13/15 20:05	1
Sodium	0.13	U	1.0	0.13	mg/L		08/13/15 10:37	08/13/15 20:05	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/13/15 20:05	1
Vanadium	0.00236		0.0020	0.00010	mg/L		08/13/15 10:37	08/13/15 20:05	1

Lab Sample ID: MB 490-272910/1-A
Matrix: Water
Analysis Batch: 278731

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272910

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/13/15 10:37	08/14/15 21:53	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 21:53	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 21:53	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 21:53	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 21:53	1
Potassium	0.13	U	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 21:53	1

Lab Sample ID: LCS 490-272910/2-A
Matrix: Water
Analysis Batch: 273153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.100	0.105		mg/L		105	80 - 120
Barium	0.100	0.105		mg/L		105	80 - 120
Beryllium	0.100	0.103		mg/L		103	80 - 120
Cadmium	0.100	0.100		mg/L		100	80 - 120
Calcium	10.0	10.14		mg/L		101	80 - 120
Iron	1.00	1.10		mg/L		110	80 - 120
Lead	0.100	0.0985		mg/L		99	80 - 120
Magnesium	10.0	9.85		mg/L		98	80 - 120
Selenium	0.100	0.0860		mg/L		86	80 - 120
Silver	0.100	0.102		mg/L		102	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-272910/2-A
Matrix: Water
Analysis Batch: 273153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	10.0	9.83		mg/L		98	80 - 120
Thallium	0.100	0.0957		mg/L		96	80 - 120
Vanadium	0.100	0.0982		mg/L		98	80 - 120

Lab Sample ID: LCS 490-272910/2-A
Matrix: Water
Analysis Batch: 278731

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.08		mg/L		108	80 - 120
Arsenic	0.100	0.0977		mg/L		98	80 - 120
Chromium	0.100	0.106		mg/L		106	80 - 120
Cobalt	0.100	0.104		mg/L		104	80 - 120
Manganese	0.100	0.104		mg/L		104	80 - 120
Potassium	10.0	11.05		mg/L		111	80 - 120

Lab Sample ID: 490-84924-G-5-B MS
Matrix: Water
Analysis Batch: 273153

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 272910

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.00050	U	0.100	0.100		mg/L		100	75 - 125
Barium	0.026		0.100	0.131		mg/L		106	75 - 125
Beryllium	0.00050	U	0.100	0.106		mg/L		106	75 - 125
Cadmium	0.00040	U	0.100	0.101		mg/L		101	75 - 125
Calcium	76.0		10.0	91.76	4	mg/L		158	75 - 125
Iron	28.5		1.00	30.80	4	mg/L		233	75 - 125
Lead	0.00020	U	0.100	0.0995		mg/L		100	75 - 125
Magnesium	36.5	F1	10.0	49.00		mg/L		125	75 - 125
Selenium	0.00060	U F1	0.100	0.0644	F1	mg/L		64	75 - 125
Silver	0.00050	U	0.100	0.101		mg/L		101	75 - 125
Sodium	29.1	F1	10.0	41.33		mg/L		122	75 - 125
Thallium	0.00073	J	0.100	0.0980		mg/L		97	75 - 125
Vanadium	0.0030	B	0.100	0.102		mg/L		99	75 - 125

Lab Sample ID: 490-84924-G-5-B MS
Matrix: Water
Analysis Batch: 278731

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 272910

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0096	U	1.00	1.03		mg/L		103	75 - 125
Arsenic	0.00050	U	0.100	0.0935		mg/L		94	75 - 125
Chromium	0.00050	U	0.100	0.101		mg/L		101	75 - 125
Cobalt	0.0052		0.100	0.114		mg/L		108	75 - 125
Potassium	3.6		10.0	13.95		mg/L		104	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-84924-G-5-C MSD
Matrix: Water
Analysis Batch: 273153

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 272910

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.00050	U	0.100	0.102		mg/L		102	75 - 125	2	20
Barium	0.026		0.100	0.129		mg/L		104	75 - 125	2	20
Beryllium	0.00050	U	0.100	0.104		mg/L		104	75 - 125	2	20
Cadmium	0.00040	U	0.100	0.106		mg/L		106	75 - 125	4	20
Calcium	76.0		10.0	92.55	4	mg/L		166	75 - 125	1	20
Iron	28.5		1.00	32.27	4	mg/L		380	75 - 125	5	20
Lead	0.00020	U	0.100	0.0979		mg/L		98	75 - 125	2	20
Magnesium	36.5	F1	10.0	50.08	F1	mg/L		136	75 - 125	2	20
Selenium	0.00060	U F1	0.100	0.0611	F1	mg/L		61	75 - 125	5	20
Silver	0.00050	U	0.100	0.107		mg/L		107	75 - 125	5	20
Sodium	29.1	F1	10.0	42.34	F1	mg/L		133	75 - 125	2	20
Thallium	0.00073	J	0.100	0.0985		mg/L		98	75 - 125	0	20
Vanadium	0.0030	B	0.100	0.103		mg/L		100	75 - 125	1	20

Lab Sample ID: 490-84924-G-5-C MSD
Matrix: Water
Analysis Batch: 278731

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 272910

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0096	U	1.00	1.04		mg/L		104	75 - 125	1	20
Arsenic	0.00050	U	0.100	0.0945		mg/L		94	75 - 125	1	20
Chromium	0.00050	U	0.100	0.102		mg/L		102	75 - 125	1	20
Cobalt	0.0052		0.100	0.113		mg/L		108	75 - 125	1	20
Potassium	3.6		10.0	14.37		mg/L		108	75 - 125	3	20

Lab Sample ID: MB 490-272304/1-A
Matrix: Water
Analysis Batch: 272623

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 21:56	1

Lab Sample ID: MB 490-272304/1-A
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/11/15 10:38	08/12/15 16:46	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 16:46	1
Arsenic	0.000571	J	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 16:46	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 16:46	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 16:46	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/11/15 10:38	08/12/15 16:46	1
Calcium	0.13	U	1.0	0.13	mg/L		08/11/15 10:38	08/12/15 16:46	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 16:46	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 16:46	1
Iron	0.010	U	0.025	0.010	mg/L		08/11/15 10:38	08/12/15 16:46	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 16:46	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/11/15 10:38	08/12/15 16:46	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 490-272304/1-A
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	0.13	U	1.0	0.13	mg/L		08/11/15 10:38	08/12/15 16:46	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/11/15 10:38	08/12/15 16:46	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 16:46	1
Sodium	0.13	U	1.0	0.13	mg/L		08/11/15 10:38	08/12/15 16:46	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/12/15 16:46	1
Vanadium	0.000961	J	0.0020	0.00010	mg/L		08/11/15 10:38	08/12/15 16:46	1
Zinc	0.010	U	0.025	0.010	mg/L		08/11/15 10:38	08/12/15 16:46	1

Lab Sample ID: MB 490-272304/1-A
Matrix: Water
Analysis Batch: 273149

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/13/15 18:45	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/13/15 18:45	1

Lab Sample ID: LCS 490-272304/2-A
Matrix: Water
Analysis Batch: 272623

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	0.100	0.109		mg/L		109	80 - 120

Lab Sample ID: LCS 490-272304/2-A
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.08		mg/L		108	80 - 120
Antimony	0.100	0.113		mg/L		113	80 - 120
Arsenic	0.100	0.107		mg/L		107	80 - 120
Barium	0.100	0.114		mg/L		114	80 - 120
Beryllium	0.100	0.107		mg/L		107	80 - 120
Cadmium	0.100	0.111		mg/L		111	80 - 120
Calcium	10.0	10.67		mg/L		107	80 - 120
Chromium	0.100	0.107		mg/L		107	80 - 120
Cobalt	0.100	0.106		mg/L		106	80 - 120
Iron	1.00	1.05		mg/L		105	80 - 120
Lead	0.100	0.108		mg/L		108	80 - 120
Magnesium	10.0	10.52		mg/L		105	80 - 120
Potassium	10.0	10.65		mg/L		107	80 - 120
Selenium	0.100	0.110		mg/L		110	80 - 120
Silver	0.100	0.108		mg/L		108	80 - 120
Sodium	10.0	10.45		mg/L		105	80 - 120
Thallium	0.100	0.105		mg/L		105	80 - 120
Vanadium	0.100	0.111		mg/L		111	80 - 120
Zinc	0.100	0.104		mg/L		104	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-272304/2-A
Matrix: Water
Analysis Batch: 273149

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.100	0.102		mg/L		102	80 - 120
Manganese	0.100	0.107		mg/L		107	80 - 120

Lab Sample ID: 490-84554-O-1-B MS
Matrix: Water
Analysis Batch: 272623

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	0.00050	U	0.100	0.104		mg/L		104	75 - 125

Lab Sample ID: 490-84554-O-1-B MS
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0096	U	1.00	0.986		mg/L		99	75 - 125
Antimony	0.00050	U	0.100	0.111		mg/L		111	75 - 125
Arsenic	0.00093	J B	0.100	0.102		mg/L		101	75 - 125
Barium	0.013		0.100	0.121		mg/L		108	75 - 125
Beryllium	0.00050	U	0.100	0.105		mg/L		105	75 - 125
Cadmium	0.00040	U	0.100	0.106		mg/L		106	75 - 125
Calcium	81.4		10.0	88.94	4	mg/L		75	75 - 125
Chromium	0.00050	U	0.100	0.0994		mg/L		99	75 - 125
Cobalt	0.00050	U	0.100	0.0984		mg/L		98	75 - 125
Iron	0.20		1.00	1.18		mg/L		98	75 - 125
Lead	0.00020	U	0.100	0.104		mg/L		104	75 - 125
Magnesium	22.0		10.0	30.94		mg/L		90	75 - 125
Potassium	4.3		10.0	13.74		mg/L		94	75 - 125
Selenium	0.00060	U	0.100	0.100		mg/L		100	75 - 125
Silver	0.00050	U	0.100	0.103		mg/L		103	75 - 125
Sodium	72.6		10.0	80.72	4	mg/L		81	75 - 125
Thallium	0.00044	J	0.100	0.102		mg/L		102	75 - 125
Vanadium	0.0010	J B	0.100	0.105		mg/L		104	75 - 125
Zinc	0.010	U	0.100	0.0986		mg/L		99	75 - 125

Lab Sample ID: 490-84554-O-1-B MS
Matrix: Water
Analysis Batch: 273149

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.00050	U	0.100	0.103		mg/L		103	75 - 125

Lab Sample ID: 490-84554-O-1-C MSD
Matrix: Water
Analysis Batch: 272623

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nickel	0.00050	U	0.100	0.0972		mg/L		97	75 - 125	7	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-84554-O-1-C MSD
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0096	U	1.00	0.993		mg/L		99	75 - 125	1	20
Antimony	0.00050	U	0.100	0.108		mg/L		108	75 - 125	3	20
Arsenic	0.00093	J B	0.100	0.100		mg/L		99	75 - 125	1	20
Barium	0.013		0.100	0.119		mg/L		106	75 - 125	2	20
Beryllium	0.00050	U	0.100	0.102		mg/L		102	75 - 125	2	20
Cadmium	0.00040	U	0.100	0.110		mg/L		110	75 - 125	4	20
Calcium	81.4		10.0	92.71	4	mg/L		113	75 - 125	4	20
Chromium	0.00050	U	0.100	0.100		mg/L		100	75 - 125	1	20
Cobalt	0.00050	U	0.100	0.0992		mg/L		99	75 - 125	1	20
Iron	0.20		1.00	1.21		mg/L		101	75 - 125	3	20
Lead	0.00020	U	0.100	0.100		mg/L		100	75 - 125	4	20
Magnesium	22.0		10.0	31.75		mg/L		98	75 - 125	3	20
Potassium	4.3		10.0	13.97		mg/L		97	75 - 125	2	20
Selenium	0.00060	U	0.100	0.102		mg/L		102	75 - 125	2	20
Silver	0.00050	U	0.100	0.104		mg/L		104	75 - 125	1	20
Sodium	72.6		10.0	83.36	4	mg/L		108	75 - 125	3	20
Thallium	0.00044	J	0.100	0.0985		mg/L		98	75 - 125	4	20
Vanadium	0.0010	J B	0.100	0.105		mg/L		104	75 - 125	1	20
Zinc	0.010	U	0.100	0.0995		mg/L		99	75 - 125	1	20

Lab Sample ID: 490-84554-O-1-C MSD
Matrix: Water
Analysis Batch: 273149

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	0.00050	U	0.100	0.0994		mg/L		99	75 - 125	4	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 490-272423/1-A
Matrix: Water
Analysis Batch: 272825

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272423

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:35	08/12/15 18:16	1

Lab Sample ID: LCS 490-272423/2-A
Matrix: Water
Analysis Batch: 272825

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272423

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000889		mg/L		89	80 - 120

Lab Sample ID: LCSD 490-272423/3-A
Matrix: Water
Analysis Batch: 272825

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 272423

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00100	0.000907		mg/L		91	80 - 120	2	20

Lab Sample ID: 490-84586-J-1-C MS
Matrix: Water
Analysis Batch: 272825

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 272423

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U F1	0.00100	0.000658	F1	mg/L		66	75 - 125

Lab Sample ID: 490-84586-J-1-D MSD
Matrix: Water
Analysis Batch: 272825

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 272423

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U F1	0.00100	0.000655	F1	mg/L		66	75 - 125	0	20

Lab Sample ID: MB 490-272424/1-B
Matrix: Water
Analysis Batch: 273136

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 272902

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 15:50	1

Lab Sample ID: LCS 490-272424/2-B
Matrix: Water
Analysis Batch: 273136

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 272902

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000858		mg/L		86	80 - 120

Lab Sample ID: 490-84672-I-1-K MS
Matrix: Water
Analysis Batch: 273136

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 272902

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000811		mg/L		81	75 - 125

Lab Sample ID: 490-84672-I-1-L MSD
Matrix: Water
Analysis Batch: 273136

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 272902

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000796		mg/L		80	75 - 125	2	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 490-271876/1-A
Matrix: Water
Analysis Batch: 272365

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 271876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/08/15 18:12	08/11/15 11:02	1

Lab Sample ID: LCS 490-271876/2-A
Matrix: Water
Analysis Batch: 272365

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 271876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.103		mg/L		103	90 - 110

Lab Sample ID: LCSD 490-271876/3-A
Matrix: Water
Analysis Batch: 272365

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 271876

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.105		mg/L		105	90 - 110	2	20

Lab Sample ID: 490-84586-L-1-C MS
Matrix: Water
Analysis Batch: 272365

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 271876

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	0.0070	U F1 F2	0.100	0.0176	F1	mg/L		18	70 - 130		

Lab Sample ID: 490-84586-L-1-D MSD
Matrix: Water
Analysis Batch: 272365

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 271876

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1 F2	0.100	0.0686	F1 F2	mg/L		69	70 - 130	118	46

Lab Sample ID: 490-84672-H-9-B MS
Matrix: Water
Analysis Batch: 272365

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 271876

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	0.0070	U F1	0.100	0.0666	F1	mg/L		67	70 - 130		

Lab Sample ID: 490-84672-H-9-C MSD
Matrix: Water
Analysis Batch: 272365

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 271876

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1	0.100	0.0710		mg/L		71	70 - 130	6	46

Lab Sample ID: 490-84672-A-1-A DU
Matrix: Water
Analysis Batch: 272365

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 271876

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.0070	U	0.0070	U	mg/L		NC	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 490-274025/14
Matrix: Water
Analysis Batch: 274025

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/11/15 17:25	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/11/15 17:25	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 490-274025/15
Matrix: Water
Analysis Batch: 274025

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity as CaCO3			100	90.18		mg/L		90	90 - 110		

Lab Sample ID: LCSD 490-274025/16
Matrix: Water
Analysis Batch: 274025

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Alkalinity as CaCO3			100	91.21		mg/L		91	90 - 110	1	20

Lab Sample ID: 490-84542-H-2 DU
Matrix: Water
Analysis Batch: 274025

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	1200			1192		mg/L				0.3	20
Total Alkalinity as CaCO3	1200			1192		mg/L				0.3	20

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Analysis Batch: 273831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1	RW-6-080515	Total/NA	Water	8260C	
490-84595-2	OB-20A-080515	Total/NA	Water	8260C	
490-84595-3	OB-19-080515	Total/NA	Water	8260C	
490-84595-6	TB-02-080615	Total/NA	Water	8260C	
490-84595-7	TB-02-080615	Total/NA	Water	8260C	
490-85052-A-7 MS	Matrix Spike	Total/NA	Water	8260C	
490-85052-A-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	
LCS 490-273831/3	Lab Control Sample	Total/NA	Water	8260C	
MB 490-273831/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 273958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-5	OB-20B-080515	Total/NA	Water	8260C	
LCS 490-273958/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-273958/4	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 490-273958/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 273991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1	RW-6-080515	Total/NA	Water	8260C SIM	
490-84595-2	OB-20A-080515	Total/NA	Water	8260C SIM	
490-84595-3	OB-19-080515	Total/NA	Water	8260C SIM	
490-84595-4	RW-5-080515	Total/NA	Water	8260C SIM	
490-84595-5	OB-20B-080515	Total/NA	Water	8260C SIM	
490-84595-6	TB-02-080615	Total/NA	Water	8260C SIM	
490-84595-7	TB-02-080615	Total/NA	Water	8260C SIM	
490-84672-C-1 MS	Matrix Spike	Total/NA	Water	8260C SIM	
490-84672-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C SIM	
LCS 490-273991/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-273991/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-273991/7	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 274395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-4	RW-5-080515	Total/NA	Water	8260C	
LCS 490-274395/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-274395/4	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 490-274395/7	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 272218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1	RW-6-080515	Total/NA	Water	3510C	
490-84595-2	OB-20A-080515	Total/NA	Water	3510C	
490-84595-3	OB-19-080515	Total/NA	Water	3510C	
490-84595-4	RW-5-080515	Total/NA	Water	3510C	
490-84595-5	OB-20B-080515	Total/NA	Water	3510C	
LCS 490-272218/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-272218/1-A	Method Blank	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 272220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1	RW-6-080515	Total/NA	Water	3510C	
490-84595-2	OB-20A-080515	Total/NA	Water	3510C	
490-84595-3	OB-19-080515	Total/NA	Water	3510C	
490-84595-4	RW-5-080515	Total/NA	Water	3510C	
490-84595-5	OB-20B-080515	Total/NA	Water	3510C	
LCS 490-272220/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-272220/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 272273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1	RW-6-080515	Total/NA	Water	8270D SIM	272220
490-84595-2	OB-20A-080515	Total/NA	Water	8270D SIM	272220
490-84595-3	OB-19-080515	Total/NA	Water	8270D SIM	272220
490-84595-4	RW-5-080515	Total/NA	Water	8270D SIM	272220
490-84595-5	OB-20B-080515	Total/NA	Water	8270D SIM	272220
LCS 490-272220/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	272220
MB 490-272220/1-A	Method Blank	Total/NA	Water	8270D SIM	272220

Analysis Batch: 272371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1	RW-6-080515	Total/NA	Water	8270D	272218
490-84595-2	OB-20A-080515	Total/NA	Water	8270D	272218
490-84595-3	OB-19-080515	Total/NA	Water	8270D	272218
490-84595-4	RW-5-080515	Total/NA	Water	8270D	272218
490-84595-5	OB-20B-080515	Total/NA	Water	8270D	272218
LCS 490-272218/2-A	Lab Control Sample	Total/NA	Water	8270D	272218
MB 490-272218/1-A	Method Blank	Total/NA	Water	8270D	272218

Prep Batch: 273404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1 - RE	RW-6-080515	Total/NA	Water	3510C	
490-84595-2 - RE	OB-20A-080515	Total/NA	Water	3510C	
490-84595-3 - RE	OB-19-080515	Total/NA	Water	3510C	
490-84595-4 - RE	RW-5-080515	Total/NA	Water	3510C	
490-84595-5 - RE	OB-20B-080515	Total/NA	Water	3510C	
LCS 490-273404/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-273404/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 273467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1 - RE	RW-6-080515	Total/NA	Water	8270D SIM	273404
490-84595-2 - RE	OB-20A-080515	Total/NA	Water	8270D SIM	273404
490-84595-3 - RE	OB-19-080515	Total/NA	Water	8270D SIM	273404
490-84595-4 - RE	RW-5-080515	Total/NA	Water	8270D SIM	273404
490-84595-5 - RE	OB-20B-080515	Total/NA	Water	8270D SIM	273404
LCS 490-273404/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	273404
MB 490-273404/1-A	Method Blank	Total/NA	Water	8270D SIM	273404

GC Semi VOA

Prep Batch: 273908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1	RW-6-080515	Total/NA	Water	3510C	
490-84595-2	OB-20A-080515	Total/NA	Water	3510C	
490-84595-3	OB-19-080515	Total/NA	Water	3510C	
490-84595-4	RW-5-080515	Total/NA	Water	3510C	
490-84595-5	OB-20B-080515	Total/NA	Water	3510C	
LCS 490-273908/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-273908/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 274717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1	RW-6-080515	Total/NA	Water	8082A	273908
490-84595-2	OB-20A-080515	Total/NA	Water	8082A	273908
490-84595-3	OB-19-080515	Total/NA	Water	8082A	273908
490-84595-4	RW-5-080515	Total/NA	Water	8082A	273908
490-84595-5	OB-20B-080515	Total/NA	Water	8082A	273908
LCS 490-273908/2-A	Lab Control Sample	Total/NA	Water	8082A	273908
MB 490-273908/1-A	Method Blank	Total/NA	Water	8082A	273908

HPLC/IC

Analysis Batch: 274358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1	RW-6-080515	Total/NA	Water	9056A	
490-84595-1 MS	RW-6-080515	Total/NA	Water	9056A	
490-84595-1 MSD	RW-6-080515	Total/NA	Water	9056A	
490-84595-2	OB-20A-080515	Total/NA	Water	9056A	
490-84595-3	OB-19-080515	Total/NA	Water	9056A	
490-84595-4	RW-5-080515	Total/NA	Water	9056A	
490-84595-5	OB-20B-080515	Total/NA	Water	9056A	
LCS 490-274358/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-274358/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-274358/3	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 272053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1	RW-6-080515	Total/NA	Water	3010A	
490-84595-2	OB-20A-080515	Total/NA	Water	3010A	
490-84595-3	OB-19-080515	Total/NA	Water	3010A	
490-84595-4	RW-5-080515	Total/NA	Water	3010A	
490-84672-G-1-B MS	Matrix Spike	Total/NA	Water	3010A	
490-84672-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
LCS 490-272053/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-272053/1-A	Method Blank	Total/NA	Water	3010A	

Filtration Batch: 272302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1	RW-6-080515	Dissolved	Water	Filtration	
490-84595-2	OB-20A-080515	Dissolved	Water	Filtration	

Metals (Continued)

Filtration Batch: 272302 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-3	OB-19-080515	Dissolved	Water	Filtration	
490-84595-4	RW-5-080515	Dissolved	Water	Filtration	
490-84595-5	OB-20B-080515	Dissolved	Water	Filtration	

Prep Batch: 272304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84554-O-1-B MS	Matrix Spike	Dissolved	Water	3005A	
490-84554-O-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	
490-84595-1	RW-6-080515	Dissolved	Water	3005A	272302
490-84595-2	OB-20A-080515	Dissolved	Water	3005A	272302
490-84595-3	OB-19-080515	Dissolved	Water	3005A	272302
490-84595-4	RW-5-080515	Dissolved	Water	3005A	272302
490-84595-5	OB-20B-080515	Dissolved	Water	3005A	272302
LCS 490-272304/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 490-272304/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 272423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84586-J-1-C MS	Matrix Spike	Total/NA	Water	7470A	
490-84586-J-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
490-84595-1	RW-6-080515	Total/NA	Water	7470A	
490-84595-2	OB-20A-080515	Total/NA	Water	7470A	
490-84595-3	OB-19-080515	Total/NA	Water	7470A	
490-84595-4	RW-5-080515	Total/NA	Water	7470A	
490-84595-5	OB-20B-080515	Total/NA	Water	7470A	
LCS 490-272423/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 490-272423/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 490-272423/1-A	Method Blank	Total/NA	Water	7470A	

Filtration Batch: 272424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1	RW-6-080515	Dissolved	Water	Filtration	
490-84595-2	OB-20A-080515	Dissolved	Water	Filtration	
490-84595-3	OB-19-080515	Dissolved	Water	Filtration	
490-84595-4	RW-5-080515	Dissolved	Water	Filtration	
490-84595-5	OB-20B-080515	Dissolved	Water	Filtration	
490-84672-I-1-K MS	Matrix Spike	Dissolved	Water	Filtration	
490-84672-I-1-L MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	
LCS 490-272424/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-272424/1-B	Method Blank	Dissolved	Water	Filtration	

Analysis Batch: 272623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84554-O-1-B MS	Matrix Spike	Dissolved	Water	6020A	272304
490-84554-O-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	272304
490-84595-1	RW-6-080515	Dissolved	Water	6020A	272304
490-84595-2	OB-20A-080515	Dissolved	Water	6020A	272304
490-84595-3	OB-19-080515	Dissolved	Water	6020A	272304
490-84595-4	RW-5-080515	Dissolved	Water	6020A	272304
490-84595-5	OB-20B-080515	Dissolved	Water	6020A	272304
LCS 490-272304/2-A	Lab Control Sample	Total Recoverable	Water	6020A	272304

Metals (Continued)

Analysis Batch: 272623 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-272304/1-A	Method Blank	Total Recoverable	Water	6020A	272304

Analysis Batch: 272825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84586-J-1-C MS	Matrix Spike	Total/NA	Water	7470A	272423
490-84586-J-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	272423
490-84595-1	RW-6-080515	Total/NA	Water	7470A	272423
490-84595-2	OB-20A-080515	Total/NA	Water	7470A	272423
490-84595-3	OB-19-080515	Total/NA	Water	7470A	272423
490-84595-4	RW-5-080515	Total/NA	Water	7470A	272423
490-84595-5	OB-20B-080515	Total/NA	Water	7470A	272423
LCS 490-272423/2-A	Lab Control Sample	Total/NA	Water	7470A	272423
LCSD 490-272423/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	272423
MB 490-272423/1-A	Method Blank	Total/NA	Water	7470A	272423

Analysis Batch: 272841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84554-O-1-B MS	Matrix Spike	Dissolved	Water	6020A	272304
490-84554-O-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	272304
490-84595-1	RW-6-080515	Dissolved	Water	6020A	272304
490-84595-1	RW-6-080515	Total/NA	Water	6020A	272053
490-84595-2	OB-20A-080515	Dissolved	Water	6020A	272304
490-84595-2	OB-20A-080515	Total/NA	Water	6020A	272053
490-84595-3	OB-19-080515	Dissolved	Water	6020A	272304
490-84595-3	OB-19-080515	Total/NA	Water	6020A	272053
490-84595-4	RW-5-080515	Dissolved	Water	6020A	272304
490-84595-4	RW-5-080515	Total/NA	Water	6020A	272053
490-84595-5	OB-20B-080515	Dissolved	Water	6020A	272304
490-84672-G-1-B MS	Matrix Spike	Total/NA	Water	6020A	272053
490-84672-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	272053
LCS 490-272053/2-A	Lab Control Sample	Total/NA	Water	6020A	272053
LCS 490-272304/2-A	Lab Control Sample	Total Recoverable	Water	6020A	272304
MB 490-272053/1-A	Method Blank	Total/NA	Water	6020A	272053
MB 490-272304/1-A	Method Blank	Total Recoverable	Water	6020A	272304

Prep Batch: 272902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1	RW-6-080515	Dissolved	Water	7470A	272424
490-84595-2	OB-20A-080515	Dissolved	Water	7470A	272424
490-84595-3	OB-19-080515	Dissolved	Water	7470A	272424
490-84595-4	RW-5-080515	Dissolved	Water	7470A	272424
490-84595-5	OB-20B-080515	Dissolved	Water	7470A	272424
490-84672-I-1-K MS	Matrix Spike	Dissolved	Water	7470A	272424
490-84672-I-1-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	272424
LCS 490-272424/2-B	Lab Control Sample	Dissolved	Water	7470A	272424
MB 490-272424/1-B	Method Blank	Dissolved	Water	7470A	272424

Prep Batch: 272910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-5	OB-20B-080515	Total/NA	Water	3010A	
490-84924-G-5-B MS	Matrix Spike	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 272910 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-G-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
LCS 490-272910/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-272910/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 273136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1	RW-6-080515	Dissolved	Water	7470A	272902
490-84595-2	OB-20A-080515	Dissolved	Water	7470A	272902
490-84595-3	OB-19-080515	Dissolved	Water	7470A	272902
490-84595-4	RW-5-080515	Dissolved	Water	7470A	272902
490-84595-5	OB-20B-080515	Dissolved	Water	7470A	272902
490-84672-I-1-K MS	Matrix Spike	Dissolved	Water	7470A	272902
490-84672-I-1-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	272902
LCS 490-272424/2-B	Lab Control Sample	Dissolved	Water	7470A	272902
MB 490-272424/1-B	Method Blank	Dissolved	Water	7470A	272902

Analysis Batch: 273149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84554-O-1-B MS	Matrix Spike	Dissolved	Water	6020A	272304
490-84554-O-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	272304
490-84595-1	RW-6-080515	Dissolved	Water	6020A	272304
490-84595-2	OB-20A-080515	Dissolved	Water	6020A	272304
490-84595-3	OB-19-080515	Dissolved	Water	6020A	272304
490-84595-4	RW-5-080515	Dissolved	Water	6020A	272304
490-84595-5	OB-20B-080515	Dissolved	Water	6020A	272304
LCS 490-272304/2-A	Lab Control Sample	Total Recoverable	Water	6020A	272304
MB 490-272304/1-A	Method Blank	Total Recoverable	Water	6020A	272304

Analysis Batch: 273153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1	RW-6-080515	Total/NA	Water	6020A	272053
490-84595-2	OB-20A-080515	Total/NA	Water	6020A	272053
490-84595-3	OB-19-080515	Total/NA	Water	6020A	272053
490-84595-4	RW-5-080515	Total/NA	Water	6020A	272053
490-84595-5	OB-20B-080515	Total/NA	Water	6020A	272910
490-84672-G-1-B MS	Matrix Spike	Total/NA	Water	6020A	272053
490-84672-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	272053
490-84924-G-5-B MS	Matrix Spike	Total/NA	Water	6020A	272910
490-84924-G-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	272910
LCS 490-272053/2-A	Lab Control Sample	Total/NA	Water	6020A	272053
LCS 490-272910/2-A	Lab Control Sample	Total/NA	Water	6020A	272910
MB 490-272053/1-A	Method Blank	Total/NA	Water	6020A	272053
MB 490-272910/1-A	Method Blank	Total/NA	Water	6020A	272910

Analysis Batch: 274758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-5	OB-20B-080515	Total/NA	Water	6020A	272910

Analysis Batch: 276307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-5	OB-20B-080515	Total/NA	Water	6020A	272910

Analysis Batch: 278731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-1	RW-6-080515	Dissolved	Water	6020A	272304
490-84595-1	RW-6-080515	Total/NA	Water	6020A	272053
490-84595-2	OB-20A-080515	Dissolved	Water	6020A	272304
490-84595-3	OB-19-080515	Dissolved	Water	6020A	272304
490-84595-4	RW-5-080515	Dissolved	Water	6020A	272304
490-84595-5	OB-20B-080515	Dissolved	Water	6020A	272304
490-84595-5	OB-20B-080515	Total/NA	Water	6020A	272910
490-84924-G-5-B MS	Matrix Spike	Total/NA	Water	6020A	272910
490-84924-G-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	272910
LCS 490-272910/2-A	Lab Control Sample	Total/NA	Water	6020A	272910
MB 490-272910/1-A	Method Blank	Total/NA	Water	6020A	272910

General Chemistry

Prep Batch: 271876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84586-L-1-C MS	Matrix Spike	Total/NA	Water	9012B	
490-84586-L-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	
490-84595-1	RW-6-080515	Total/NA	Water	9012B	
490-84595-2	OB-20A-080515	Total/NA	Water	9012B	
490-84595-3	OB-19-080515	Total/NA	Water	9012B	
490-84595-4	RW-5-080515	Total/NA	Water	9012B	
490-84595-5	OB-20B-080515	Total/NA	Water	9012B	
490-84672-A-1-A DU	Duplicate	Total/NA	Water	9012B	
490-84672-H-9-B MS	Matrix Spike	Total/NA	Water	9012B	
490-84672-H-9-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	
LCS 490-271876/2-A	Lab Control Sample	Total/NA	Water	9012B	
LCSD 490-271876/3-A	Lab Control Sample Dup	Total/NA	Water	9012B	
MB 490-271876/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 272365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84586-L-1-C MS	Matrix Spike	Total/NA	Water	9012B	271876
490-84586-L-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	271876
490-84595-1	RW-6-080515	Total/NA	Water	9012B	271876
490-84595-2	OB-20A-080515	Total/NA	Water	9012B	271876
490-84595-3	OB-19-080515	Total/NA	Water	9012B	271876
490-84595-4	RW-5-080515	Total/NA	Water	9012B	271876
490-84595-5	OB-20B-080515	Total/NA	Water	9012B	271876
490-84672-A-1-A DU	Duplicate	Total/NA	Water	9012B	271876
490-84672-H-9-B MS	Matrix Spike	Total/NA	Water	9012B	271876
490-84672-H-9-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	271876
LCS 490-271876/2-A	Lab Control Sample	Total/NA	Water	9012B	271876
LCSD 490-271876/3-A	Lab Control Sample Dup	Total/NA	Water	9012B	271876
MB 490-271876/1-A	Method Blank	Total/NA	Water	9012B	271876

Analysis Batch: 274025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84542-H-2 DU	Duplicate	Total/NA	Water	SM 2320B	
490-84595-1	RW-6-080515	Total/NA	Water	SM 2320B	
490-84595-2	OB-20A-080515	Total/NA	Water	SM 2320B	
490-84595-3	OB-19-080515	Total/NA	Water	SM 2320B	
490-84595-4	RW-5-080515	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 274025 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84595-5	OB-20B-080515	Total/NA	Water	SM 2320B	
LCS 490-274025/15	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 490-274025/16	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 490-274025/14	Method Blank	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Client Sample ID: RW-6-080515

Date Collected: 08/05/15 10:30
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273831	08/18/15 04:14	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273991	08/18/15 15:13	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272218	08/11/15 08:09	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	272371	08/11/15 21:14	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272220	08/11/15 08:16	MRM	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272273	08/11/15 18:56	BES	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	273404	08/14/15 16:10	MLT	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	273467	08/15/15 20:21	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	273908	08/18/15 06:45	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	274717	08/20/15 08:08	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		274358	08/19/15 00:47	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272623	08/11/15 23:57	CME	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	273149	08/13/15 19:54	LEG	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		10	50 mL	50 mL	278731	08/14/15 15:43	KKK	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 18:37	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		10	50 mL	50 mL	278731	08/14/15 21:13	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 16:20	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	273153	08/13/15 16:10	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	272902	08/11/15 14:41	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	272424	08/11/15 14:41	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	273136	08/13/15 16:26	RDF	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	272423	08/11/15 14:35	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	272825	08/12/15 18:30	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	271876	08/08/15 18:12	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	272365	08/11/15 11:18	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274025	08/11/15 18:34	SMB	TAL NSH

Client Sample ID: OB-20A-080515

Date Collected: 08/05/15 10:35
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273831	08/18/15 04:42	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273991	08/18/15 15:42	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272218	08/11/15 08:09	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	272371	08/11/15 21:38	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272220	08/11/15 08:16	MRM	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272273	08/11/15 19:24	BES	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	273404	08/14/15 16:10	MLT	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	273467	08/15/15 20:48	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	273908	08/18/15 06:45	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	274717	08/20/15 01:19	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		274358	08/19/15 01:45	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272623	08/12/15 00:15	CME	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	273149	08/13/15 20:00	LEG	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 15:49	KKK	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 18:53	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 16:25	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	273153	08/13/15 16:26	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	272902	08/11/15 14:41	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	272424	08/11/15 14:41	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	273136	08/13/15 16:29	RDF	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	272423	08/11/15 14:35	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	272825	08/12/15 18:33	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	271876	08/08/15 18:12	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	272365	08/11/15 11:20	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274025	08/11/15 18:39	SMB	TAL NSH

Client Sample ID: OB-19-080515

Date Collected: 08/05/15 10:40
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273831	08/18/15 05:10	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273991	08/18/15 16:10	MJH	TAL NSH

Client Sample ID: OB-19-080515

Lab Sample ID: 490-84595-3

Date Collected: 08/05/15 10:40

Matrix: Water

Date Received: 08/07/15 16:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	272218	08/11/15 08:09	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	272371	08/11/15 22:01	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272220	08/11/15 08:16	MRM	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272273	08/11/15 19:52	BES	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	273404	08/14/15 16:10	MLT	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	273467	08/15/15 21:15	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	273908	08/18/15 06:45	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	274717	08/20/15 01:35	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		274358	08/19/15 02:04	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272623	08/12/15 00:21	CME	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	273149	08/13/15 20:06	LEG	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 15:55	KKK	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 18:58	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 15:22	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	273153	08/13/15 15:50	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	272902	08/11/15 14:41	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	272424	08/11/15 14:41	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	273136	08/13/15 16:31	RDF	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	272423	08/11/15 14:35	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	272825	08/12/15 18:35	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	271876	08/08/15 18:12	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	272365	08/11/15 11:22	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274025	08/11/15 18:44	SMB	TAL NSH

Client Sample ID: RW-5-080515

Lab Sample ID: 490-84595-4

Date Collected: 08/05/15 14:35

Matrix: Water

Date Received: 08/07/15 16:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	274395	08/19/15 17:51	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273991	08/18/15 16:39	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272218	08/11/15 08:09	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	272371	08/11/15 22:25	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272220	08/11/15 08:16	MRM	TAL NSH

Client Sample ID: RW-5-080515

Lab Sample ID: 490-84595-4

Date Collected: 08/05/15 14:35

Matrix: Water

Date Received: 08/07/15 16:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272273	08/11/15 20:20	BES	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	273404	08/14/15 16:10	MLT	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	273467	08/15/15 21:41	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	273908	08/18/15 06:45	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	274717	08/20/15 01:51	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		274358	08/19/15 02:23	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272623	08/12/15 00:26	CME	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	273149	08/13/15 20:12	LEG	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 16:00	KKK	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 19:03	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 15:28	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	273153	08/13/15 15:55	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	272902	08/11/15 14:41	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	272424	08/11/15 14:41	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	273136	08/13/15 16:34	RDF	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	272423	08/11/15 14:35	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	272825	08/12/15 18:38	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	271876	08/08/15 18:12	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	272365	08/11/15 11:24	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274025	08/11/15 19:04	SMB	TAL NSH

Client Sample ID: OB-20B-080515

Lab Sample ID: 490-84595-5

Date Collected: 08/05/15 14:10

Matrix: Water

Date Received: 08/07/15 16:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273958	08/18/15 18:57	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273991	08/18/15 17:07	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272218	08/11/15 08:09	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	272371	08/11/15 22:48	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272220	08/11/15 08:16	MRM	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272273	08/11/15 20:47	BES	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	273404	08/14/15 16:10	MLT	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	273467	08/15/15 22:08	BES	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	273908	08/18/15 06:45	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	274717	08/20/15 02:06	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		274358	08/19/15 02:42	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272623	08/12/15 00:32	CME	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	273149	08/13/15 20:18	LEG	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		100	50 mL	50 mL	278731	08/14/15 16:06	KKK	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 19:09	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 23:08	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274758	08/19/15 12:45	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	273153	08/13/15 21:13	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		10	50 mL	50 mL	276307	08/25/15 18:44	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	272902	08/11/15 14:41	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	272424	08/11/15 14:41	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	273136	08/13/15 16:36	RDF	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	272423	08/11/15 14:35	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	272825	08/12/15 18:45	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	271876	08/08/15 18:12	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	272365	08/11/15 11:27	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274025	08/11/15 19:09	SMB	TAL NSH

Client Sample ID: TB-02-080615

Date Collected: 08/06/15 01:01
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273831	08/18/15 02:51	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273991	08/18/15 14:16	MJH	TAL NSH

Client Sample ID: TB-02-080615

Date Collected: 08/06/15 01:01
Date Received: 08/07/15 16:34

Lab Sample ID: 490-84595-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273831	08/18/15 03:19	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273991	08/18/15 14:44	MJH	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
9056A	Anions, Ion Chromatography	SW846	TAL NSH
6020A	Metals (ICP/MS)	SW846	TAL NSH
7470A	Mercury (CVAA)	SW846	TAL NSH
9012B	Cyanide, Total andor Amenable	SW846	TAL NSH
SM 2320B	Alkalinity	SM	TAL NSH

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84595-1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	TN965	09-30-15

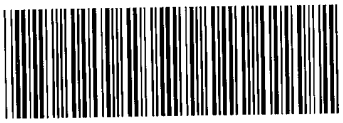
The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total
8260C		Water	Dichlorobromomethane
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	1,4-Dioxane
8260C SIM		Water	Ethylene Dibromide
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Michigan

COOLER RECEIPT FORM


490-84595 Chain of Custody

Cooler Received/Opened On 8/7/2015 @ 0900

1. Tracking # 1968 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960357

2. Temperature of rep. sample or temp blank when opened: 4.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA

4. Were custody seals on outside of cooler? YES..NO..NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO..NA

6. Were custody papers inside cooler? YES..NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) _____

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) _____

I certify that I attached a label with the unique LIMS number to each container (intial) _____

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# _____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
84595

Cooler Received/Opened On 8/7/2015 @ 0900

1. Tracking # 1979 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960357

2. Temperature of rep. sample or temp blank when opened: 1.6 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (intial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) _____

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) _____

I certify that I attached a label with the unique LIMS number to each container (intial) _____

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Albany

Loc: 490
84595

Cooler Received/Opened On 8/7/2015 @ 0900

1. Tracking # 1980 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960357

2. Temperature of rep. sample or temp blank when opened: 1.5 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA

4. Were custody seals on outside of cooler? YES..NO..NA

If yes, how many and where:

5. Were the seals intact, signed, and dated correctly? YES...NO..NA

6. Were custody papers inside cooler? YES..NO..NA

I certify that I opened the cooler and answered questions 1-6 (intial)

7. Were custody seals on containers: YES NO and Intact YES...NO..NA

Were these signed and dated correctly? YES...NO..NA

Lids only

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO..NA

b. Was there any observable headspace present in any VOA vial? YES...NO..NA

14. Was there a Trip Blank in this cooler? YES...NO..NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (intial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial)

I certify that I attached a label with the unique LIMS number to each container (intial)

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES...NO...#

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
84595

Cooler Received/Opened On 8/7/2015 @ 0900

1. Tracking # 1990 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960357

2. Temperature of rep. sample or temp blank when opened: 1.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (intial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) √

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) √

I certify that I attached a label with the unique LIMS number to each container (intial) _____

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
84595

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

9/14/2015

Client Information	Sampler: Robert Lowtenberg	Lab PM: Brown, Shali	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com	Page:
Company: Cornerstone Environmental Group, LLC/ FORD			Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:		
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package		
State, Zip: NY, 10941			
Phone: 845-695-0252(Tel)	PO #:		
Email: tim.roeper@cornerstoneeg.com	WO #:		
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
				Preservation Code:																		
1	RW-6-080515	8/5/15	10:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
2	OB-20A-080515	8/5/15	10:35	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
3	OB-19-080515	8/5/15	10:40	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
4	RW-5-080515	8/5/15	14:35	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
5	OB-20B-080515	8/5/15	14:40	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
6	TB-02-080615	8/6/15	—	—	Water	N	N	✓	✓													
					Water																	
					Water																	
					Water																	
					Water																	
					Water																	

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/6/15 810		James Thiesen	8/6/15 810	TA
2	James Thiesen	8/6/15 1342	TA		8/7/15 0800	TA
3		Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 490-84595-1

Login Number: 84595
List Number: 1
Creator: Buckingham, Paul

List Source: TestAmerica Nashville

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-84672-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Tim Roeper

Authorized for release by:
9/14/2015 5:47:15 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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

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

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

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Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-84672-1	RW-7-080615	Water	08/06/15 10:05	08/08/15 10:00
490-84672-2	OB-21-080615	Water	08/06/15 10:35	08/08/15 10:00
490-84672-3	Dup-01-080615	Water	08/06/15 12:00	08/08/15 10:00
490-84672-4	OB-6-080615	Water	08/06/15 10:05	08/08/15 10:00
490-84672-5	OB-11R-080615	Water	08/06/15 12:00	08/08/15 10:00
490-84672-6	OB-27-080615	Water	08/06/15 15:20	08/08/15 10:00
490-84672-7	OB-30C-080615	Water	08/06/15 15:05	08/08/15 10:00
490-84672-8	OB-30B-080615	Water	08/06/15 15:10	08/08/15 10:00
490-84672-9	RW-3 (77-87)-080615	Water	08/06/15 14:35	08/08/15 10:00
490-84672-10	TB-03-080715	Water	08/07/15 01:00	08/08/15 10:00

Job ID: 490-84672-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 490-84672-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 8/8/2015 9:45 AM and 8/11/2015 9:30AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 9 coolers at receipt time were 0.1º C, 0.1º C, 0.9º C, 0.9º C, 1.1º C, 1.1º C, 1.3º C, 1.6º C and 2.0º C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples RW-7-080615 (490-84672-1), OB-21-080615 (490-84672-2), Dup-01-080615 (490-84672-3), OB-6-080615 (490-84672-4), OB-11R-080615 (490-84672-5), OB-27-080615 (490-84672-6), OB-30C-080615 (490-84672-7), OB-30B-080615 (490-84672-8), RW-3 (77-87)-080615 (490-84672-9) and TB-03-080715 (490-84672-10) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/18/2015.

Carbon disulfide was detected in method blank MB 490-273831/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 490-273958.

Job ID: 490-84672-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

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

VOLATILE ORGANIC COMPOUNDS (GC-MS SIM)

Samples RW-7-080615 (490-84672-1), OB-21-080615 (490-84672-2), Dup-01-080615 (490-84672-3), OB-6-080615 (490-84672-4), OB-11R-080615 (490-84672-5), OB-27-080615 (490-84672-6), OB-30C-080615 (490-84672-7), OB-30B-080615 (490-84672-8), RW-3 (77-87)-080615 (490-84672-9) and TB-03-080715 (490-84672-10) were analyzed for volatile organic compounds (GC-MS SIM) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/18/2015 and 08/20/2015.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GC MS)

Samples RW-7-080615 (490-84672-1), OB-21-080615 (490-84672-2), Dup-01-080615 (490-84672-3), OB-6-080615 (490-84672-4), OB-11R-080615 (490-84672-5), OB-27-080615 (490-84672-6), OB-30C-080615 (490-84672-7), OB-30B-080615 (490-84672-8) and RW-3 (77-87)-080615 (490-84672-9) were analyzed for semivolatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/12/2015 and analyzed on 08/13/2015.

Benzaldehyde failed the recovery criteria high for LCS 490-272786/2-A. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data has been reported.

Several analytes failed the recovery criteria high for the MS of sample RW-7-080615MS (490-84672-1) in batch 490-273026.
Several analytes failed the recovery criteria high for the MSD of sample RW-7-080615MSD (490-84672-1) in batch 490-273026.
Caprolactam exceeded the RPD limit. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

POLYCHLORINATED BIPHENYLS (PCBS)

Samples RW-7-080615 (490-84672-1), OB-21-080615 (490-84672-2), Dup-01-080615 (490-84672-3), OB-6-080615 (490-84672-4), OB-11R-080615 (490-84672-5), OB-27-080615 (490-84672-6), OB-30C-080615 (490-84672-7), OB-30B-080615 (490-84672-8) and RW-3 (77-87)-080615 (490-84672-9) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 08/12/2015 and analyzed on 08/13/2015.

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

POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

Samples RW-7-080615 (490-84672-1), OB-21-080615 (490-84672-2), Dup-01-080615 (490-84672-3), OB-6-080615 (490-84672-4), OB-11R-080615 (490-84672-5), OB-27-080615 (490-84672-6), OB-30C-080615 (490-84672-7), OB-30B-080615 (490-84672-8) and RW-3 (77-87)-080615 (490-84672-9) were analyzed for polycyclic aromatic hydrocarbons (PAHs) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/12/2015 and 08/13/2015 and analyzed on 08/12/2015 and 08/17/2015.

Pentachlorophenol failed the recovery criteria low for LCS 490-274147/2-A. Refer to the QC report for details.

Pentachlorophenol exceeded the RPD limit for the MSD of sample RW-7-080615MSD (490-84672-1) in batch 490-273767. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) was within acceptance limits.

The continuing calibration verification (CCV) associated with batch 490-274426 recovered above the upper control limit for Benzo[a]pyrene. The samples associated with this CCV were non-detect for the affected analytes; therefore, the data has been reported. The following samples are impacted: OB-6-080615 (490-84672-4), (CCVIS 490-274426/2), (LCS 490-274147/2-A) and (MB 490-274147/1-A).

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

DISSOLVED METALS (ICPMS)

Samples RW-7-080615 (490-84672-1), OB-21-080615 (490-84672-2), Dup-01-080615 (490-84672-3), OB-6-080615 (490-84672-4),

Job ID: 490-84672-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

OB-11R-080615 (490-84672-5), OB-27-080615 (490-84672-6), OB-30C-080615 (490-84672-7), OB-30B-080615 (490-84672-8) and RW-3 (77-87)-080615 (490-84672-9) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/11/2015 and 08/12/2015 and analyzed on 08/11/2015, 08/12/2015, 08/13/2015, 08/14/2015 and 08/20/2015.

Arsenic, Vanadium and Vanadium were detected in method blank MB 490-272584/1-B at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Copper and Vanadium were detected in method blank MB 490-272304/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Samples OB-11R-080615 (490-84672-5)[100X] and OB-27-080615 (490-84672-6)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

METALS (ICPMS)

Samples RW-7-080615 (490-84672-1), OB-21-080615 (490-84672-2), Dup-01-080615 (490-84672-3), OB-6-080615 (490-84672-4), OB-11R-080615 (490-84672-5), OB-27-080615 (490-84672-6), OB-30C-080615 (490-84672-7), OB-30B-080615 (490-84672-8) and RW-3 (77-87)-080615 (490-84672-9) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/10/2015 and analyzed on 08/12/2015, 08/13/2015, 08/14/2015 and 08/20/2015.

Arsenic and Vanadium were detected in method blank MB 490-272053/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Zinc and Manganese failed the recovery criteria high for the MSD of sample RW-7-080615MSD (490-84672-1) in batch 490-273153. Zinc and Manganese exceeded the RPD limit. Refer to the QC report for details.

Samples OB-11R-080615 (490-84672-5)[100X] and OB-27-080615 (490-84672-6)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

DISSOLVED MERCURY (CVAA)

Samples RW-7-080615 (490-84672-1), OB-21-080615 (490-84672-2), Dup-01-080615 (490-84672-3), OB-6-080615 (490-84672-4), OB-11R-080615 (490-84672-5), OB-27-080615 (490-84672-6), OB-30C-080615 (490-84672-7), OB-30B-080615 (490-84672-8) and RW-3 (77-87)-080615 (490-84672-9) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/11/2015 and analyzed on 08/13/2015.

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

TOTAL MERCURY

Samples RW-7-080615 (490-84672-1), OB-21-080615 (490-84672-2), Dup-01-080615 (490-84672-3), OB-6-080615 (490-84672-4), OB-11R-080615 (490-84672-5), OB-27-080615 (490-84672-6), OB-30C-080615 (490-84672-7), OB-30B-080615 (490-84672-8) and RW-3 (77-87)-080615 (490-84672-9) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/11/2015 and analyzed on 08/12/2015.

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

ALKALINITY

Job ID: 490-84672-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

Samples RW-7-080615 (490-84672-1), OB-21-080615 (490-84672-2), Dup-01-080615 (490-84672-3), OB-6-080615 (490-84672-4), OB-11R-080615 (490-84672-5), OB-27-080615 (490-84672-6), OB-30C-080615 (490-84672-7), OB-30B-080615 (490-84672-8) and RW-3 (77-87)-080615 (490-84672-9) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/11/2015.

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

TOTAL CYANIDE

Samples RW-7-080615 (490-84672-1), OB-21-080615 (490-84672-2), Dup-01-080615 (490-84672-3), OB-6-080615 (490-84672-4), OB-11R-080615 (490-84672-5), OB-27-080615 (490-84672-6), OB-30C-080615 (490-84672-7), OB-30B-080615 (490-84672-8) and RW-3 (77-87)-080615 (490-84672-9) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared on 08/08/2015 and 08/12/2015 and analyzed on 08/11/2015 and 08/13/2015.

Cyanide, Total failed the recovery criteria low for the MS of sample RW-7-080615MS (490-84672-1) in batch 490-273142.
Cyanide, Total failed the recovery criteria low for the MSD of sample RW-7-080615MSD (490-84672-1) in batch 490-273142. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Cyanide, Total failed the recovery criteria low for the MS of sample RW-3 (77-87)-080615MS (490-84672-9) in batch 490-272365. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

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

ANIONS

Samples RW-7-080615 (490-84672-1), OB-21-080615 (490-84672-2), Dup-01-080615 (490-84672-3), OB-6-080615 (490-84672-4), OB-11R-080615 (490-84672-5), OB-27-080615 (490-84672-6), OB-30C-080615 (490-84672-7), OB-30B-080615 (490-84672-8) and RW-3 (77-87)-080615 (490-84672-9) were analyzed for anions in accordance with SW-846 Method 9056. The samples were analyzed on 08/20/2015.

Sample RW-3 (77-87)-080615 (490-84672-9)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
*	LCS or LCSD is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
^	Instrument related QC is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: RW-7-080615
Date Collected: 08/06/15 10:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 19:31	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 19:31	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/18/15 19:31	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*08/18/15 19:31*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/18/15 19:31*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/18/15 19:31*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/18/15 19:31*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 01:23	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 01:23	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 01:23	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 01:23	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 01:23	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 01:23	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 01:23	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 01:23	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 01:23	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 01:23	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 01:23	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 01:23	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 01:23	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 01:23	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 01:23	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 01:23	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 01:23	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 01:23	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 01:23	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 01:23	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 01:23	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 01:23	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 01:23	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 01:23	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 01:23	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 01:23	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 01:23	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 01:23	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 01:23	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 01:23	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 01:23	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 01:23	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 01:23	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 01:23	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 01:23	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 01:23	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 01:23	1

Client Sample ID: RW-7-080615
Date Collected: 08/06/15 10:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 01:23	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 01:23	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 01:23	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 01:23	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 01:23	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 01:23	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 01:23	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 01:23	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 01:23	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 01:23	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 01:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 01:23*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 01:23*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/18/15 01:23*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/18/15 01:23*	*1*
Toluene-d8 (Surr)	*113*		*70 - 130*		*08/18/15 01:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/18/15 01:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 13:40	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 13:40	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 13:40	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 11:18	08/17/15 13:40	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 11:18	08/17/15 13:40	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 11:18	08/17/15 13:40	1
Pentachlorophenol	0.10	U F2	0.30	0.10	ug/L		08/13/15 11:18	08/17/15 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*63*		*29 - 120*	*08/13/15 11:18*	*08/17/15 13:40*	*1*
Nitrobenzene-d5	*57*		*27 - 120*	*08/13/15 11:18*	*08/17/15 13:40*	*1*
Terphenyl-d14	*81*		*13 - 120*	*08/13/15 11:18*	*08/17/15 13:40*	*1*
2,4,6-Tribromophenol	*72*		*10 - 120*	*08/13/15 11:18*	*08/17/15 13:40*	*1*
2-Fluorophenol	*40*		*10 - 120*	*08/13/15 11:18*	*08/17/15 13:40*	*1*
Phenol-d5	*28*		*10 - 120*	*08/13/15 11:18*	*08/17/15 13:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U F1	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 19:02	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/12/15 17:47	08/13/15 19:02	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/12/15 17:47	08/13/15 19:02	1
2,4,5-Trichlorophenol	7.1	U F1	10	7.1	ug/L		08/12/15 17:47	08/13/15 19:02	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/12/15 17:47	08/13/15 19:02	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/12/15 17:47	08/13/15 19:02	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 19:02	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/12/15 17:47	08/13/15 19:02	1
2,4-Dinitrotoluene	3.2	U F1	10	3.2	ug/L		08/12/15 17:47	08/13/15 19:02	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: RW-7-080615
Date Collected: 08/06/15 10:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U F1	10	2.3	ug/L		08/12/15 17:47	08/13/15 19:02	1
2-Chloronaphthalene	2.8	U F1	10	2.8	ug/L		08/12/15 17:47	08/13/15 19:02	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/12/15 17:47	08/13/15 19:02	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/12/15 17:47	08/13/15 19:02	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 19:02	1
2-Nitroaniline	3.7	U F1	25	3.7	ug/L		08/12/15 17:47	08/13/15 19:02	1
2-Nitrophenol	5.3	U F1	10	5.3	ug/L		08/12/15 17:47	08/13/15 19:02	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/12/15 17:47	08/13/15 19:02	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 19:02	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/12/15 17:47	08/13/15 19:02	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/12/15 17:47	08/13/15 19:02	1
4-Bromophenyl phenyl ether	2.7	U F1	10	2.7	ug/L		08/12/15 17:47	08/13/15 19:02	1
4-Chloro-3-methylphenol	4.5	U F1	10	4.5	ug/L		08/12/15 17:47	08/13/15 19:02	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 19:02	1
4-Chlorophenyl phenyl ether	2.8	U F1	10	2.8	ug/L		08/12/15 17:47	08/13/15 19:02	1
4-Nitroaniline	3.1	U F1	25	3.1	ug/L		08/12/15 17:47	08/13/15 19:02	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/12/15 17:47	08/13/15 19:02	1
Acenaphthylene	0.35	U F1	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 19:02	1
Acetophenone	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 19:02	1
Anthracene	0.38	U F1	2.0	0.38	ug/L		08/12/15 17:47	08/13/15 19:02	1
Benzaldehyde	5.7	U F1 *	10	5.7	ug/L		08/12/15 17:47	08/13/15 19:02	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/12/15 17:47	08/13/15 19:02	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 19:02	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 19:02	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 19:02	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 19:02	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/12/15 17:47	08/13/15 19:02	1
Carbazole	2.8	U F1	10	2.8	ug/L		08/12/15 17:47	08/13/15 19:02	1
Caprolactam	2.4	U F2	10	2.4	ug/L		08/12/15 17:47	08/13/15 19:02	1
Chrysene	0.33	U F1	2.0	0.33	ug/L		08/12/15 17:47	08/13/15 19:02	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/12/15 17:47	08/13/15 19:02	1
Dibenzofuran	2.9	U F1	10	2.9	ug/L		08/12/15 17:47	08/13/15 19:02	1
Diethyl phthalate	3.0	U F1	10	3.0	ug/L		08/12/15 17:47	08/13/15 19:02	1
Dimethyl phthalate	3.1	U F1	10	3.1	ug/L		08/12/15 17:47	08/13/15 19:02	1
Di-n-butyl phthalate	2.5	U F1	10	2.5	ug/L		08/12/15 17:47	08/13/15 19:02	1
Fluoranthene	0.32	U F1	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 19:02	1
Fluorene	0.32	U F1	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 19:02	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/12/15 17:47	08/13/15 19:02	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/12/15 17:47	08/13/15 19:02	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/12/15 17:47	08/13/15 19:02	1
Isophorone	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 19:02	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 19:02	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 19:02	1
N-Nitrosodi-n-propylamine	3.4	U F1	10	3.4	ug/L		08/12/15 17:47	08/13/15 19:02	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/12/15 17:47	08/13/15 19:02	1
Phenanthrene	0.42	U F1	2.0	0.42	ug/L		08/12/15 17:47	08/13/15 19:02	1
Phenol	1.5	U	10	1.5	ug/L		08/12/15 17:47	08/13/15 19:02	1
Pyrene	0.35	U F1	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 19:02	1
Diphenyl	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 19:02	1

Client Sample ID: RW-7-080615
Date Collected: 08/06/15 10:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 19:02	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 19:02	1
Atrazine	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 19:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/12/15 17:47*	*08/13/15 19:02*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*85*		*10 - 120*	*08/12/15 17:47*	*08/13/15 19:02*	*1*
2-Fluorobiphenyl (Surr)	*74*		*29 - 120*	*08/12/15 17:47*	*08/13/15 19:02*	*1*
2-Fluorophenol (Surr)	*46*		*10 - 120*	*08/12/15 17:47*	*08/13/15 19:02*	*1*
Nitrobenzene-d5 (Surr)	*73*		*27 - 120*	*08/12/15 17:47*	*08/13/15 19:02*	*1*
Phenol-d5 (Surr)	*30*		*10 - 120*	*08/12/15 17:47*	*08/13/15 19:02*	*1*
Terphenyl-d14 (Surr)	*61*		*13 - 120*	*08/12/15 17:47*	*08/13/15 19:02*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.57	U	0.66	0.57	ug/L		08/12/15 06:54	08/13/15 19:28	1
PCB-1221	0.45	U	0.66	0.45	ug/L		08/12/15 06:54	08/13/15 19:28	1
PCB-1232	0.53	U	0.66	0.53	ug/L		08/12/15 06:54	08/13/15 19:28	1
PCB-1242	0.29	U	0.66	0.29	ug/L		08/12/15 06:54	08/13/15 19:28	1
PCB-1248	0.20	U	0.66	0.20	ug/L		08/12/15 06:54	08/13/15 19:28	1
PCB-1254	0.22	U	0.66	0.22	ug/L		08/12/15 06:54	08/13/15 19:28	1
PCB-1260	0.24	U	0.66	0.24	ug/L		08/12/15 06:54	08/13/15 19:28	1
Polychlorinated biphenyls, Total	0.66	U	0.66	0.66	ug/L		08/12/15 06:54	08/13/15 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*106*		*10 - 150*	*08/12/15 06:54*	*08/13/15 19:28*	*1*
Tetrachloro-m-xylene	*80*		*10 - 150*	*08/12/15 06:54*	*08/13/15 19:28*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.86**		1.00	0.70	mg/L			08/20/15 10:51	1
Sulfate	**10.8**		1.00	0.60	mg/L			08/20/15 10:51	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.38**		0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 14:04	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:04	1
Arsenic	**0.00074**	**J B**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:04	1
Barium	**0.0021**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:04	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:04	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 14:04	1
Calcium	**12.1**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:04	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:04	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:04	1
Copper	**0.0012**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 14:27	1
Iron	**0.26**		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 14:04	1
Lead	**0.00048**	**J**	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 14:04	1
Magnesium	**4.2**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:04	1
Manganese	**0.0042**	**F2 F1**	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 14:27	1

Client Sample ID: RW-7-080615
Date Collected: 08/06/15 10:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-1
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.00051**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 14:27	1
Potassium	**0.90**	**J**	1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:04	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 14:04	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:04	1
Sodium	**4.2**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:04	1
Thallium	**0.00037**	**J**	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 14:04	1
Vanadium	**0.0019**	**J B**	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 14:04	1
Zinc	0.010	U F2 F1	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 14:04	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.42**		0.020	0.0096	mg/L		08/12/15 09:56	08/13/15 00:20	1
Antimony	**0.0014**	**J**	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:20	1
Arsenic	**0.00072**	**J B**	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:20	1
Barium	**0.0014**	**J**	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:20	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:20	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/12/15 09:56	08/13/15 00:20	1
Calcium	**11.6**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:20	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:20	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:20	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/14/15 16:49	1
Iron	**0.14**		0.025	0.010	mg/L		08/12/15 09:56	08/13/15 00:20	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/12/15 09:56	08/13/15 00:20	1
Magnesium	**4.1**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:20	1
Manganese	**0.0019**	**J**	0.0020	0.00050	mg/L		08/12/15 09:56	08/14/15 16:49	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/14/15 16:49	1
Potassium	**0.86**	**J**	1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:20	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/12/15 09:56	08/13/15 00:20	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:20	1
Sodium	**3.9**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:20	1
Thallium	**0.00064**	**J**	0.0020	0.00020	mg/L		08/12/15 09:56	08/13/15 00:20	1
Vanadium	**0.0018**	**J B**	0.0020	0.00010	mg/L		08/12/15 09:56	08/13/15 00:20	1
Zinc	0.010	U	0.025	0.010	mg/L		08/12/15 09:56	08/13/15 00:20	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:27	08/12/15 19:31	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 15:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U F1	0.010	0.0070	mg/L		08/12/15 17:02	08/13/15 10:17	1
Bicarbonate Alkalinity as CaCO3	**40.8**		10.0	5.0	mg/L			08/11/15 20:50	1
Total Alkalinity as CaCO3	**40.8**		10.0	5.0	mg/L			08/11/15 20:50	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: OB-21-080615
Date Collected: 08/06/15 10:35
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 20:00	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 20:00	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/18/15 20:00	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/18/15 20:00*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/18/15 20:00*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/18/15 20:00*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/18/15 20:00*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 19:25	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 19:25	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 19:25	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 19:25	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 19:25	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 19:25	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 19:25	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 19:25	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 19:25	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 19:25	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 19:25	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 19:25	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 19:25	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 19:25	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 19:25	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 19:25	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 19:25	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 19:25	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 19:25	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 19:25	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 19:25	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 19:25	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 19:25	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 19:25	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 19:25	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 19:25	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 19:25	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 19:25	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 19:25	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 19:25	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 19:25	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 19:25	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 19:25	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 19:25	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 19:25	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 19:25	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 19:25	1

Client Sample ID: OB-21-080615

Date Collected: 08/06/15 10:35
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	**0.31**	**J**	5.0	0.22	ug/L			08/18/15 19:25	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 19:25	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 19:25	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 19:25	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 19:25	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 19:25	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 19:25	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 19:25	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 19:25	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 19:25	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 19:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 19:25*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 19:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*08/18/15 19:25*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*08/18/15 19:25*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/18/15 19:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*08/18/15 19:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 15:01	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 15:01	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 15:01	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 11:18	08/17/15 15:01	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 11:18	08/17/15 15:01	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 11:18	08/17/15 15:01	1
Pentachlorophenol	**0.10**	**J**	0.30	0.10	ug/L		08/13/15 11:18	08/17/15 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*61*		*29 - 120*	*08/13/15 11:18*	*08/17/15 15:01*	*1*
Nitrobenzene-d5	*54*		*27 - 120*	*08/13/15 11:18*	*08/17/15 15:01*	*1*
Terphenyl-d14	*79*		*13 - 120*	*08/13/15 11:18*	*08/17/15 15:01*	*1*
2,4,6-Tribromophenol	*75*		*10 - 120*	*08/13/15 11:18*	*08/17/15 15:01*	*1*
2-Fluorophenol	*41*		*10 - 120*	*08/13/15 11:18*	*08/17/15 15:01*	*1*
Phenol-d5	*31*		*10 - 120*	*08/13/15 11:18*	*08/17/15 15:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 20:13	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/12/15 17:47	08/13/15 20:13	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/12/15 17:47	08/13/15 20:13	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/12/15 17:47	08/13/15 20:13	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/12/15 17:47	08/13/15 20:13	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/12/15 17:47	08/13/15 20:13	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 20:13	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/12/15 17:47	08/13/15 20:13	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/12/15 17:47	08/13/15 20:13	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: OB-21-080615
Date Collected: 08/06/15 10:35
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 20:13	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 20:13	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/12/15 17:47	08/13/15 20:13	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/12/15 17:47	08/13/15 20:13	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 20:13	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/12/15 17:47	08/13/15 20:13	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/12/15 17:47	08/13/15 20:13	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/12/15 17:47	08/13/15 20:13	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 20:13	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/12/15 17:47	08/13/15 20:13	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/12/15 17:47	08/13/15 20:13	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 20:13	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/12/15 17:47	08/13/15 20:13	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 20:13	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 20:13	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/12/15 17:47	08/13/15 20:13	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/12/15 17:47	08/13/15 20:13	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 20:13	1
Acetophenone	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 20:13	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/12/15 17:47	08/13/15 20:13	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/12/15 17:47	08/13/15 20:13	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/12/15 17:47	08/13/15 20:13	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 20:13	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 20:13	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 20:13	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 20:13	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/12/15 17:47	08/13/15 20:13	1
Carbazole	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 20:13	1
Caprolactam	2.4	U	10	2.4	ug/L		08/12/15 17:47	08/13/15 20:13	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/12/15 17:47	08/13/15 20:13	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/12/15 17:47	08/13/15 20:13	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 20:13	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/12/15 17:47	08/13/15 20:13	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 20:13	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 20:13	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 20:13	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 20:13	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/12/15 17:47	08/13/15 20:13	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/12/15 17:47	08/13/15 20:13	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/12/15 17:47	08/13/15 20:13	1
Isophorone	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 20:13	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 20:13	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 20:13	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/12/15 17:47	08/13/15 20:13	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/12/15 17:47	08/13/15 20:13	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/12/15 17:47	08/13/15 20:13	1
Phenol	1.5	U	10	1.5	ug/L		08/12/15 17:47	08/13/15 20:13	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 20:13	1
Diphenyl	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 20:13	1

Client Sample ID: OB-21-080615
Date Collected: 08/06/15 10:35
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 20:13	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 20:13	1
Atrazine	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 20:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/12/15 17:47*	*08/13/15 20:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*65*		*10 - 120*	*08/12/15 17:47*	*08/13/15 20:13*	*1*
2-Fluorobiphenyl (Surr)	*59*		*29 - 120*	*08/12/15 17:47*	*08/13/15 20:13*	*1*
2-Fluorophenol (Surr)	*33*		*10 - 120*	*08/12/15 17:47*	*08/13/15 20:13*	*1*
Nitrobenzene-d5 (Surr)	*57*		*27 - 120*	*08/12/15 17:47*	*08/13/15 20:13*	*1*
Phenol-d5 (Surr)	*20*		*10 - 120*	*08/12/15 17:47*	*08/13/15 20:13*	*1*
Terphenyl-d14 (Surr)	*59*		*13 - 120*	*08/12/15 17:47*	*08/13/15 20:13*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.55	U	0.64	0.55	ug/L		08/12/15 06:54	08/13/15 20:15	1
PCB-1221	0.44	U	0.64	0.44	ug/L		08/12/15 06:54	08/13/15 20:15	1
PCB-1232	0.52	U	0.64	0.52	ug/L		08/12/15 06:54	08/13/15 20:15	1
PCB-1242	0.28	U	0.64	0.28	ug/L		08/12/15 06:54	08/13/15 20:15	1
PCB-1248	0.19	U	0.64	0.19	ug/L		08/12/15 06:54	08/13/15 20:15	1
PCB-1254	0.22	U	0.64	0.22	ug/L		08/12/15 06:54	08/13/15 20:15	1
PCB-1260	0.23	U	0.64	0.23	ug/L		08/12/15 06:54	08/13/15 20:15	1
Polychlorinated biphenyls, Total	0.64	U	0.64	0.64	ug/L		08/12/15 06:54	08/13/15 20:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*105*		*10 - 150*	*08/12/15 06:54*	*08/13/15 20:15*	*1*
Tetrachloro-m-xylene	*86*		*10 - 150*	*08/12/15 06:54*	*08/13/15 20:15*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.0**		1.00	0.70	mg/L			08/20/15 05:15	1
Sulfate	**10.5**		1.00	0.60	mg/L			08/20/15 05:15	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**2.2**		0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 14:30	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:30	1
Arsenic	**0.0014**	**J B**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:30	1
Barium	**0.016**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:30	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:30	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 14:30	1
Calcium	**11.6**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:30	1
Chromium	**0.0030**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:30	1
Cobalt	**0.0021**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:30	1
Copper	**0.016**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 14:58	1
Iron	**3.5**		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 14:30	1
Lead	**0.0018**	**J**	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 14:30	1
Magnesium	**5.5**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:30	1
Manganese	**0.15**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 14:58	1

Client Sample ID: OB-21-080615
Date Collected: 08/06/15 10:35
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-2
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.0050		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 14:58	1
Potassium	1.5		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:30	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 14:30	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:30	1
Sodium	3.9		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:30	1
Thallium	0.00055	J	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 14:30	1
Vanadium	0.0050	B	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 14:30	1
Zinc	0.085		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 14:30	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.64		0.020	0.0096	mg/L		08/12/15 09:56	08/13/15 00:46	1
Antimony	0.00070	J	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:46	1
Arsenic	0.00056	J B	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:46	1
Barium	0.0070		0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:46	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:46	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/12/15 09:56	08/13/15 00:46	1
Calcium	10.8		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:46	1
Chromium	0.00072	J	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:46	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:46	1
Copper	0.0016	J	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 16:18	1
Iron	0.50		0.025	0.010	mg/L		08/12/15 09:56	08/13/15 00:46	1
Lead	0.00024	J	0.0020	0.00020	mg/L		08/12/15 09:56	08/13/15 00:46	1
Magnesium	4.8		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:46	1
Manganese	0.0099		0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 16:18	1
Nickel	0.0011	J	0.0020	0.00050	mg/L		08/12/15 09:56	08/14/15 17:18	1
Potassium	1.1		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:46	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/12/15 09:56	08/13/15 00:46	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:46	1
Sodium	3.7		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:46	1
Thallium	0.00077	J	0.0020	0.00020	mg/L		08/12/15 09:56	08/13/15 00:46	1
Vanadium	0.0025	B	0.0020	0.00010	mg/L		08/12/15 09:56	08/13/15 00:46	1
Zinc	0.010	U	0.025	0.010	mg/L		08/12/15 09:56	08/13/15 00:46	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:27	08/12/15 19:43	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 16:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/08/15 18:12	08/11/15 11:29	1
Bicarbonate Alkalinity as CaCO3	46.0		10.0	5.0	mg/L			08/11/15 21:01	1
Total Alkalinity as CaCO3	46.0		10.0	5.0	mg/L			08/11/15 21:01	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: Dup-01-080615

Date Collected: 08/06/15 12:00
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 20:28	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 20:28	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/18/15 20:28	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/18/15 20:28*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*08/18/15 20:28*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/18/15 20:28*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/18/15 20:28*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 19:53	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 19:53	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 19:53	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 19:53	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 19:53	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 19:53	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 19:53	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 19:53	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 19:53	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 19:53	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 19:53	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 19:53	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 19:53	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 19:53	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 19:53	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 19:53	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 19:53	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 19:53	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 19:53	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 19:53	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 19:53	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 19:53	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 19:53	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 19:53	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 19:53	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 19:53	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 19:53	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 19:53	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 19:53	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 19:53	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 19:53	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 19:53	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 19:53	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 19:53	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 19:53	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 19:53	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 19:53	1

Client Sample ID: Dup-01-080615

Date Collected: 08/06/15 12:00
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 19:53	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 19:53	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 19:53	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 19:53	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 19:53	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 19:53	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 19:53	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 19:53	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 19:53	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 19:53	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 19:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 19:53*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 19:53*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*08/18/15 19:53*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*08/18/15 19:53*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/18/15 19:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*08/18/15 19:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 15:28	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 15:28	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 15:28	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 11:18	08/17/15 15:28	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 11:18	08/17/15 15:28	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 11:18	08/17/15 15:28	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/13/15 11:18	08/17/15 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*69*		*29 - 120*	*08/13/15 11:18*	*08/17/15 15:28*	*1*
Nitrobenzene-d5	*62*		*27 - 120*	*08/13/15 11:18*	*08/17/15 15:28*	*1*
Terphenyl-d14	*85*		*13 - 120*	*08/13/15 11:18*	*08/17/15 15:28*	*1*
2,4,6-Tribromophenol	*78*		*10 - 120*	*08/13/15 11:18*	*08/17/15 15:28*	*1*
2-Fluorophenol	*46*		*10 - 120*	*08/13/15 11:18*	*08/17/15 15:28*	*1*
Phenol-d5	*32*		*10 - 120*	*08/13/15 11:18*	*08/17/15 15:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 20:36	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/12/15 17:47	08/13/15 20:36	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/12/15 17:47	08/13/15 20:36	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/12/15 17:47	08/13/15 20:36	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/12/15 17:47	08/13/15 20:36	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/12/15 17:47	08/13/15 20:36	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 20:36	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/12/15 17:47	08/13/15 20:36	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/12/15 17:47	08/13/15 20:36	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: Dup-01-080615
Date Collected: 08/06/15 12:00
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 20:36	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 20:36	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/12/15 17:47	08/13/15 20:36	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/12/15 17:47	08/13/15 20:36	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 20:36	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/12/15 17:47	08/13/15 20:36	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/12/15 17:47	08/13/15 20:36	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/12/15 17:47	08/13/15 20:36	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 20:36	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/12/15 17:47	08/13/15 20:36	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/12/15 17:47	08/13/15 20:36	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 20:36	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/12/15 17:47	08/13/15 20:36	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 20:36	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 20:36	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/12/15 17:47	08/13/15 20:36	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/12/15 17:47	08/13/15 20:36	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 20:36	1
Acetophenone	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 20:36	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/12/15 17:47	08/13/15 20:36	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/12/15 17:47	08/13/15 20:36	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/12/15 17:47	08/13/15 20:36	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 20:36	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 20:36	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 20:36	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 20:36	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/12/15 17:47	08/13/15 20:36	1
Carbazole	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 20:36	1
Caprolactam	2.4	U	10	2.4	ug/L		08/12/15 17:47	08/13/15 20:36	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/12/15 17:47	08/13/15 20:36	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/12/15 17:47	08/13/15 20:36	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 20:36	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/12/15 17:47	08/13/15 20:36	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 20:36	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 20:36	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 20:36	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 20:36	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/12/15 17:47	08/13/15 20:36	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/12/15 17:47	08/13/15 20:36	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/12/15 17:47	08/13/15 20:36	1
Isophorone	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 20:36	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 20:36	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 20:36	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/12/15 17:47	08/13/15 20:36	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/12/15 17:47	08/13/15 20:36	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/12/15 17:47	08/13/15 20:36	1
Phenol	1.5	U	10	1.5	ug/L		08/12/15 17:47	08/13/15 20:36	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 20:36	1
Diphenyl	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 20:36	1

Client Sample ID: Dup-01-080615
Date Collected: 08/06/15 12:00
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 20:36	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 20:36	1
Atrazine	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 20:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/12/15 17:47*	*08/13/15 20:36*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*73*		*10 - 120*	*08/12/15 17:47*	*08/13/15 20:36*	*1*
2-Fluorobiphenyl (Surr)	*68*		*29 - 120*	*08/12/15 17:47*	*08/13/15 20:36*	*1*
2-Fluorophenol (Surr)	*42*		*10 - 120*	*08/12/15 17:47*	*08/13/15 20:36*	*1*
Nitrobenzene-d5 (Surr)	*66*		*27 - 120*	*08/12/15 17:47*	*08/13/15 20:36*	*1*
Phenol-d5 (Surr)	*29*		*10 - 120*	*08/12/15 17:47*	*08/13/15 20:36*	*1*
Terphenyl-d14 (Surr)	*68*		*13 - 120*	*08/12/15 17:47*	*08/13/15 20:36*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.55	U	0.64	0.55	ug/L		08/12/15 06:54	08/13/15 20:31	1
PCB-1221	0.44	U	0.64	0.44	ug/L		08/12/15 06:54	08/13/15 20:31	1
PCB-1232	0.52	U	0.64	0.52	ug/L		08/12/15 06:54	08/13/15 20:31	1
PCB-1242	0.28	U	0.64	0.28	ug/L		08/12/15 06:54	08/13/15 20:31	1
PCB-1248	0.19	U	0.64	0.19	ug/L		08/12/15 06:54	08/13/15 20:31	1
PCB-1254	0.22	U	0.64	0.22	ug/L		08/12/15 06:54	08/13/15 20:31	1
PCB-1260	0.23	U	0.64	0.23	ug/L		08/12/15 06:54	08/13/15 20:31	1
Polychlorinated biphenyls, Total	0.64	U	0.64	0.64	ug/L		08/12/15 06:54	08/13/15 20:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*104*		*10 - 150*	*08/12/15 06:54*	*08/13/15 20:31*	*1*
Tetrachloro-m-xylene	*90*		*10 - 150*	*08/12/15 06:54*	*08/13/15 20:31*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.0**		1.00	0.70	mg/L			08/20/15 05:35	1
Sulfate	**9.73**		1.00	0.60	mg/L			08/20/15 05:35	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**2.2**		0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 14:46	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:46	1
Arsenic	**0.0013**	**J B**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:46	1
Barium	**0.017**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:46	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:46	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 14:46	1
Calcium	**11.8**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:46	1
Chromium	**0.0032**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:46	1
Cobalt	**0.0020**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:46	1
Copper	**0.015**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:03	1
Iron	**3.3**		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 14:46	1
Lead	**0.0017**	**J**	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 14:46	1
Magnesium	**5.6**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:46	1
Manganese	**0.15**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:03	1

Client Sample ID: Dup-01-080615

Date Collected: 08/06/15 12:00
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-3

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0051**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:03	1
Potassium	**1.5**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:46	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 14:46	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:46	1
Sodium	**15.5**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:46	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 14:46	1
Vanadium	**0.0050**	**B**	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 14:46	1
Zinc	**0.011**	**J**	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 14:46	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1.1**		0.020	0.0096	mg/L		08/12/15 09:56	08/13/15 00:52	1
Antimony	**0.00054**	**J**	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:52	1
Arsenic	**0.00098**	**J B**	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:52	1
Barium	**0.010**		0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:52	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:52	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/12/15 09:56	08/13/15 00:52	1
Calcium	**10.9**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:52	1
Chromium	**0.0012**	**J**	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:52	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:52	1
Copper	**0.0029**		0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 16:24	1
Iron	**0.88**		0.025	0.010	mg/L		08/12/15 09:56	08/13/15 00:52	1
Lead	**0.00034**	**J**	0.0020	0.00020	mg/L		08/12/15 09:56	08/13/15 00:52	1
Magnesium	**5.0**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:52	1
Manganese	**0.022**		0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 16:24	1
Nickel	**0.0012**	**J**	0.0020	0.00050	mg/L		08/12/15 09:56	08/14/15 17:23	1
Potassium	**1.2**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:52	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/12/15 09:56	08/13/15 00:52	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:52	1
Sodium	**3.9**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:52	1
Thallium	**0.00029**	**J**	0.0020	0.00020	mg/L		08/12/15 09:56	08/13/15 00:52	1
Vanadium	**0.0033**	**B**	0.0020	0.00010	mg/L		08/12/15 09:56	08/13/15 00:52	1
Zinc	0.010	U	0.025	0.010	mg/L		08/12/15 09:56	08/13/15 00:52	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:27	08/12/15 19:46	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 16:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/08/15 18:12	08/11/15 11:31	1
Bicarbonate Alkalinity as CaCO3	**43.1**		10.0	5.0	mg/L			08/11/15 21:06	1
Total Alkalinity as CaCO3	**43.1**		10.0	5.0	mg/L			08/11/15 21:06	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: OB-6-080615
Date Collected: 08/06/15 10:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 20:57	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 20:57	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/18/15 20:57	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 20:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/18/15 20:57*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/18/15 20:57*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/18/15 20:57*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/18/15 20:57*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 20:20	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 20:20	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 20:20	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 20:20	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 20:20	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 20:20	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 20:20	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 20:20	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 20:20	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 20:20	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 20:20	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 20:20	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 20:20	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 20:20	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 20:20	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 20:20	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 20:20	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 20:20	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 20:20	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 20:20	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 20:20	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 20:20	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 20:20	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 20:20	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 20:20	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 20:20	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 20:20	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 20:20	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 20:20	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 20:20	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 20:20	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 20:20	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 20:20	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 20:20	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 20:20	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 20:20	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 20:20	1

Client Sample ID: OB-6-080615

Date Collected: 08/06/15 10:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 20:20	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 20:20	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 20:20	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 20:20	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 20:20	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 20:20	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 20:20	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 20:20	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 20:20	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 20:20	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 20:20	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 20:20*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 20:20*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*08/18/15 20:20*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*08/18/15 20:20*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/18/15 20:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*08/18/15 20:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 16:11	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 16:11	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 16:11	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 11:18	08/17/15 16:11	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 11:18	08/17/15 16:11	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 11:18	08/17/15 16:11	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/13/15 11:18	08/17/15 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*80*		*29 - 120*	*08/13/15 11:18*	*08/17/15 16:11*	*1*
Nitrobenzene-d5	*71*		*27 - 120*	*08/13/15 11:18*	*08/17/15 16:11*	*1*
Terphenyl-d14	*107*		*13 - 120*	*08/13/15 11:18*	*08/17/15 16:11*	*1*
2,4,6-Tribromophenol	*99*		*10 - 120*	*08/13/15 11:18*	*08/17/15 16:11*	*1*
2-Fluorophenol	*52*		*10 - 120*	*08/13/15 11:18*	*08/17/15 16:11*	*1*
Phenol-d5	*37*		*10 - 120*	*08/13/15 11:18*	*08/17/15 16:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 20:59	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/12/15 17:47	08/13/15 20:59	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/12/15 17:47	08/13/15 20:59	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/12/15 17:47	08/13/15 20:59	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/12/15 17:47	08/13/15 20:59	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/12/15 17:47	08/13/15 20:59	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 20:59	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/12/15 17:47	08/13/15 20:59	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/12/15 17:47	08/13/15 20:59	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: OB-6-080615
Date Collected: 08/06/15 10:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 20:59	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 20:59	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/12/15 17:47	08/13/15 20:59	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/12/15 17:47	08/13/15 20:59	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 20:59	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/12/15 17:47	08/13/15 20:59	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/12/15 17:47	08/13/15 20:59	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/12/15 17:47	08/13/15 20:59	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 20:59	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/12/15 17:47	08/13/15 20:59	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/12/15 17:47	08/13/15 20:59	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 20:59	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/12/15 17:47	08/13/15 20:59	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 20:59	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 20:59	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/12/15 17:47	08/13/15 20:59	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/12/15 17:47	08/13/15 20:59	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 20:59	1
Acetophenone	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 20:59	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/12/15 17:47	08/13/15 20:59	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/12/15 17:47	08/13/15 20:59	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/12/15 17:47	08/13/15 20:59	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 20:59	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 20:59	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 20:59	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 20:59	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/12/15 17:47	08/13/15 20:59	1
Carbazole	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 20:59	1
Caprolactam	2.4	U	10	2.4	ug/L		08/12/15 17:47	08/13/15 20:59	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/12/15 17:47	08/13/15 20:59	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/12/15 17:47	08/13/15 20:59	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 20:59	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/12/15 17:47	08/13/15 20:59	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 20:59	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 20:59	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 20:59	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 20:59	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/12/15 17:47	08/13/15 20:59	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/12/15 17:47	08/13/15 20:59	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/12/15 17:47	08/13/15 20:59	1
Isophorone	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 20:59	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 20:59	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 20:59	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/12/15 17:47	08/13/15 20:59	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/12/15 17:47	08/13/15 20:59	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/12/15 17:47	08/13/15 20:59	1
Phenol	1.5	U	10	1.5	ug/L		08/12/15 17:47	08/13/15 20:59	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 20:59	1
Diphenyl	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 20:59	1

Client Sample ID: OB-6-080615

Date Collected: 08/06/15 10:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 20:59	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 20:59	1
Atrazine	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 20:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/12/15 17:47*	*08/13/15 20:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*69*		*10 - 120*	*08/12/15 17:47*	*08/13/15 20:59*	*1*
2-Fluorobiphenyl (Surr)	*50*		*29 - 120*	*08/12/15 17:47*	*08/13/15 20:59*	*1*
2-Fluorophenol (Surr)	*28*		*10 - 120*	*08/12/15 17:47*	*08/13/15 20:59*	*1*
Nitrobenzene-d5 (Surr)	*46*		*27 - 120*	*08/12/15 17:47*	*08/13/15 20:59*	*1*
Phenol-d5 (Surr)	*19*		*10 - 120*	*08/12/15 17:47*	*08/13/15 20:59*	*1*
Terphenyl-d14 (Surr)	*51*		*13 - 120*	*08/12/15 17:47*	*08/13/15 20:59*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.57	U	0.66	0.57	ug/L		08/12/15 06:54	08/13/15 20:46	1
PCB-1221	0.45	U	0.66	0.45	ug/L		08/12/15 06:54	08/13/15 20:46	1
PCB-1232	0.53	U	0.66	0.53	ug/L		08/12/15 06:54	08/13/15 20:46	1
PCB-1242	0.29	U	0.66	0.29	ug/L		08/12/15 06:54	08/13/15 20:46	1
PCB-1248	0.20	U	0.66	0.20	ug/L		08/12/15 06:54	08/13/15 20:46	1
PCB-1254	0.22	U	0.66	0.22	ug/L		08/12/15 06:54	08/13/15 20:46	1
PCB-1260	0.24	U	0.66	0.24	ug/L		08/12/15 06:54	08/13/15 20:46	1
Polychlorinated biphenyls, Total	0.66	U	0.66	0.66	ug/L		08/12/15 06:54	08/13/15 20:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*128*		*10 - 150*	*08/12/15 06:54*	*08/13/15 20:46*	*1*
Tetrachloro-m-xylene	*107*		*10 - 150*	*08/12/15 06:54*	*08/13/15 20:46*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14.7**		1.00	0.70	mg/L			08/20/15 05:55	1
Sulfate	**21.8**		1.00	0.60	mg/L			08/20/15 05:55	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 14:51	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:51	1
Arsenic	**0.00070**	**J B**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:51	1
Barium	**0.020**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:51	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:51	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 14:51	1
Calcium	**24.3**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:51	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:51	1
Cobalt	**0.0073**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:51	1
Copper	**0.0030**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:08	1
Iron	**3.8**		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 14:51	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 14:51	1
Magnesium	**5.9**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:51	1
Manganese	**0.76**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:08	1

Client Sample ID: OB-6-080615
Date Collected: 08/06/15 10:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-4
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0018**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:08	1
Potassium	**1.9**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:51	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 14:51	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:51	1
Sodium	**15.8**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:51	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 14:51	1
Vanadium	**0.0015**	**J B**	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 14:51	1
Zinc	0.010	U	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 14:51	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/12/15 09:56	08/13/15 00:57	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:57	1
Arsenic	**0.00076**	**J B**	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:57	1
Barium	**0.020**		0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:57	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:57	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/12/15 09:56	08/13/15 00:57	1
Calcium	**23.8**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:57	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:57	1
Cobalt	**0.0076**		0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:57	1
Copper	**0.0012**	**J**	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 16:30	1
Iron	**0.32**		0.025	0.010	mg/L		08/12/15 09:56	08/13/15 00:57	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/12/15 09:56	08/13/15 00:57	1
Magnesium	**5.9**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:57	1
Manganese	**0.73**		0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 16:30	1
Nickel	**0.0016**	**J**	0.0020	0.00050	mg/L		08/12/15 09:56	08/14/15 17:41	1
Potassium	**1.8**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:57	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/12/15 09:56	08/13/15 00:57	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:57	1
Sodium	**15.7**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:57	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/12/15 09:56	08/13/15 00:57	1
Vanadium	**0.0012**	**J B**	0.0020	0.00010	mg/L		08/12/15 09:56	08/13/15 00:57	1
Zinc	0.010	U	0.025	0.010	mg/L		08/12/15 09:56	08/13/15 00:57	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:27	08/12/15 19:48	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 16:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/08/15 18:12	08/11/15 11:34	1
Bicarbonate Alkalinity as CaCO3	**82.5**		10.0	5.0	mg/L			08/11/15 21:11	1
Total Alkalinity as CaCO3	**82.5**		10.0	5.0	mg/L			08/11/15 21:11	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: OB-11R-080615
Date Collected: 08/06/15 12:00
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 21:26	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 21:26	1
1,4-Dioxane	**4.3**	**J**	10	0.27	ug/L			08/18/15 21:26	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*08/18/15 21:26*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*08/18/15 21:26*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*08/18/15 21:26*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/18/15 21:26*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 20:48	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 20:48	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 20:48	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 20:48	1
1,1-Dichloroethane	**0.32**	**J**	1.0	0.24	ug/L			08/18/15 20:48	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 20:48	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 20:48	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 20:48	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 20:48	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 20:48	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 20:48	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 20:48	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 20:48	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 20:48	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 20:48	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 20:48	1
Benzene	**2.9**		1.0	0.20	ug/L			08/18/15 20:48	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 20:48	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 20:48	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 20:48	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 20:48	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 20:48	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 20:48	1
Chloroethane	**23**		1.0	0.36	ug/L			08/18/15 20:48	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 20:48	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 20:48	1
cis-1,2-Dichloroethene	**0.37**	**J**	1.0	0.21	ug/L			08/18/15 20:48	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 20:48	1
Cyclohexane	**1.9**	**J**	5.0	0.13	ug/L			08/18/15 20:48	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 20:48	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 20:48	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 20:48	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 20:48	1
Isopropylbenzene	**0.36**	**J**	1.0	0.33	ug/L			08/18/15 20:48	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 20:48	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 20:48	1
Methylcyclohexane	**0.50**	**J**	5.0	0.090	ug/L			08/18/15 20:48	1

Client Sample ID: OB-11R-080615

Date Collected: 08/06/15 12:00
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	**0.23**	**J**	5.0	0.22	ug/L			08/18/15 20:48	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 20:48	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 20:48	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 20:48	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 20:48	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 20:48	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 20:48	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 20:48	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 20:48	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 20:48	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 20:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexane	*0.36*	*J*	*ug/L*		*4.72*	*110-54-3*		*08/18/15 20:48*	*1*
Cyclopentane, methyl-	*4.0*	*J N*	*ug/L*		*5.46*	*96-37-7*		*08/18/15 20:48*	*1*
Indan, 1-methyl-	*2.7*	*J N*	*ug/L*		*16.60*	*767-58-8*		*08/18/15 20:48*	*1*
3-Phenylbut-1-ene	*4.7*	*J N*	*ug/L*		*17.58*	*934-10-1*		*08/18/15 20:48*	*1*
1H-Indene, 2,3-dihydro-4,7-dimethyl-	*4.8*	*J N*	*ug/L*		*18.17*	*6682-71-9*		*08/18/15 20:48*	*1*
Total Alkanes TIC	*0.36*	*J*	*ug/L*					*08/18/15 20:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*		*08/18/15 20:48*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*08/18/15 20:48*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/18/15 20:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*08/18/15 20:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 16:38	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 16:38	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 16:38	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 11:18	08/17/15 16:38	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 11:18	08/17/15 16:38	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 11:18	08/17/15 16:38	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/13/15 11:18	08/17/15 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*64*		*29 - 120*	*08/13/15 11:18*	*08/17/15 16:38*	*1*
Nitrobenzene-d5	*55*		*27 - 120*	*08/13/15 11:18*	*08/17/15 16:38*	*1*
Terphenyl-d14	*79*		*13 - 120*	*08/13/15 11:18*	*08/17/15 16:38*	*1*
2,4,6-Tribromophenol	*78*		*10 - 120*	*08/13/15 11:18*	*08/17/15 16:38*	*1*
2-Fluorophenol	*43*		*10 - 120*	*08/13/15 11:18*	*08/17/15 16:38*	*1*
Phenol-d5	*30*		*10 - 120*	*08/13/15 11:18*	*08/17/15 16:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 21:22	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/12/15 17:47	08/13/15 21:22	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/12/15 17:47	08/13/15 21:22	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/12/15 17:47	08/13/15 21:22	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/12/15 17:47	08/13/15 21:22	1

Client Sample ID: OB-11R-080615
Date Collected: 08/06/15 12:00
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/12/15 17:47	08/13/15 21:22	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 21:22	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/12/15 17:47	08/13/15 21:22	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/12/15 17:47	08/13/15 21:22	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 21:22	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 21:22	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/12/15 17:47	08/13/15 21:22	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/12/15 17:47	08/13/15 21:22	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 21:22	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/12/15 17:47	08/13/15 21:22	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/12/15 17:47	08/13/15 21:22	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/12/15 17:47	08/13/15 21:22	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 21:22	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/12/15 17:47	08/13/15 21:22	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/12/15 17:47	08/13/15 21:22	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 21:22	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/12/15 17:47	08/13/15 21:22	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 21:22	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 21:22	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/12/15 17:47	08/13/15 21:22	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/12/15 17:47	08/13/15 21:22	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 21:22	1
Acetophenone	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 21:22	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/12/15 17:47	08/13/15 21:22	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/12/15 17:47	08/13/15 21:22	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/12/15 17:47	08/13/15 21:22	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 21:22	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 21:22	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 21:22	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 21:22	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/12/15 17:47	08/13/15 21:22	1
Carbazole	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 21:22	1
Caprolactam	2.4	U	10	2.4	ug/L		08/12/15 17:47	08/13/15 21:22	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/12/15 17:47	08/13/15 21:22	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/12/15 17:47	08/13/15 21:22	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 21:22	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/12/15 17:47	08/13/15 21:22	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 21:22	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 21:22	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 21:22	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 21:22	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/12/15 17:47	08/13/15 21:22	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/12/15 17:47	08/13/15 21:22	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/12/15 17:47	08/13/15 21:22	1
Isophorone	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 21:22	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 21:22	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 21:22	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/12/15 17:47	08/13/15 21:22	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/12/15 17:47	08/13/15 21:22	1

Client Sample ID: OB-11R-080615
Date Collected: 08/06/15 12:00
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/12/15 17:47	08/13/15 21:22	1
Phenol	1.5	U	10	1.5	ug/L		08/12/15 17:47	08/13/15 21:22	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 21:22	1
Diphenyl	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 21:22	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 21:22	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 21:22	1
Atrazine	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 21:22	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane	*1.5*	*J*	*ug/L*		*2.30*	*123-91-1*	*08/12/15 17:47*	*08/13/15 21:22*	*1*
Phenol, p-tert-butyl-	*3.4*	*J N*	*ug/L*		*5.61*	*98-54-4*	*08/12/15 17:47*	*08/13/15 21:22*	*1*
(-)-10-Camphorsulfonyl chloride	*7.6*	*J N*	*ug/L*		*6.05*	*39262-22-1*	*08/12/15 17:47*	*08/13/15 21:22*	*1*
Benzenesulfonamide, N-cyclohexyl-4-methy	*5.9*	*J N*	*ug/L*		*8.79*	*80-30-8*	*08/12/15 17:47*	*08/13/15 21:22*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*73*		*10 - 120*	*08/12/15 17:47*	*08/13/15 21:22*	*1*
2-Fluorobiphenyl (Surr)	*60*		*29 - 120*	*08/12/15 17:47*	*08/13/15 21:22*	*1*
2-Fluorophenol (Surr)	*36*		*10 - 120*	*08/12/15 17:47*	*08/13/15 21:22*	*1*
Nitrobenzene-d5 (Surr)	*57*		*27 - 120*	*08/12/15 17:47*	*08/13/15 21:22*	*1*
Phenol-d5 (Surr)	*24*		*10 - 120*	*08/12/15 17:47*	*08/13/15 21:22*	*1*
Terphenyl-d14 (Surr)	*63*		*13 - 120*	*08/12/15 17:47*	*08/13/15 21:22*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.57	U	0.66	0.57	ug/L		08/12/15 06:54	08/13/15 21:02	1
PCB-1221	0.45	U	0.66	0.45	ug/L		08/12/15 06:54	08/13/15 21:02	1
PCB-1232	0.53	U	0.66	0.53	ug/L		08/12/15 06:54	08/13/15 21:02	1
PCB-1242	0.29	U	0.66	0.29	ug/L		08/12/15 06:54	08/13/15 21:02	1
PCB-1248	0.20	U	0.66	0.20	ug/L		08/12/15 06:54	08/13/15 21:02	1
PCB-1254	0.22	U	0.66	0.22	ug/L		08/12/15 06:54	08/13/15 21:02	1
PCB-1260	0.24	U	0.66	0.24	ug/L		08/12/15 06:54	08/13/15 21:02	1
Polychlorinated biphenyls, Total	0.66	U	0.66	0.66	ug/L		08/12/15 06:54	08/13/15 21:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*111*		*10 - 150*	*08/12/15 06:54*	*08/13/15 21:02*	*1*
Tetrachloro-m-xylene	*88*		*10 - 150*	*08/12/15 06:54*	*08/13/15 21:02*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.37**		1.00	0.70	mg/L			08/20/15 06:15	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/20/15 06:15	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.072**		0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 14:56	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:56	1
Arsenic	**0.025**	**B**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:56	1
Barium	**0.098**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:56	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:56	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 14:56	1

Client Sample ID: OB-11R-080615

Date Collected: 08/06/15 12:00
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-5

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**60.2**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:56	1
Chromium	**0.00056**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:56	1
Cobalt	**0.0022**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:56	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:24	1
Iron	**70.4**		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 14:56	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 14:56	1
Magnesium	**7.4**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:56	1
Manganese	**11.9**		0.20	0.050	mg/L		08/10/15 10:44	08/20/15 17:33	100
Nickel	**0.00086**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:24	1
Potassium	**2.8**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:56	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 14:56	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 14:56	1
Sodium	**3.7**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 14:56	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 14:56	1
Vanadium	**0.0017**	**J B**	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 14:56	1
Zinc	0.010	U	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 14:56	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/12/15 09:56	08/13/15 01:13	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 01:13	1
Arsenic	**0.00089**	**J B**	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 01:13	1
Barium	**0.044**		0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 01:13	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 01:13	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/12/15 09:56	08/13/15 01:13	1
Calcium	**55.8**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 01:13	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 01:13	1
Cobalt	**0.0017**	**J**	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 01:13	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 16:48	1
Iron	**5.4**		0.025	0.010	mg/L		08/12/15 09:56	08/13/15 01:13	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/12/15 09:56	08/13/15 01:13	1
Magnesium	**7.4**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 01:13	1
Manganese	**11.9**		0.20	0.050	mg/L		08/12/15 09:56	08/20/15 17:33	100
Nickel	**0.90**		0.20	0.050	mg/L		08/12/15 09:56	08/14/15 17:46	100
Potassium	**2.6**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 01:13	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/12/15 09:56	08/13/15 01:13	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 01:13	1
Sodium	**3.5**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 01:13	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/12/15 09:56	08/13/15 01:13	1
Vanadium	**0.0012**	**J B**	0.0020	0.00010	mg/L		08/12/15 09:56	08/13/15 01:13	1
Zinc	0.010	U	0.025	0.010	mg/L		08/12/15 09:56	08/13/15 01:13	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:27	08/12/15 19:50	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 16:09	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: OB-11R-080615
Date Collected: 08/06/15 12:00
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-5
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/08/15 18:12	08/11/15 11:36	1
Bicarbonate Alkalinity as CaCO3	**241**		10.0	5.0	mg/L			08/11/15 21:29	1
Total Alkalinity as CaCO3	**241**		10.0	5.0	mg/L			08/11/15 21:29	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: OB-27-080615
Date Collected: 08/06/15 15:20
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 21:55	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 21:55	1
1,4-Dioxane	**6.2**	**J**	10	0.27	ug/L			08/18/15 21:55	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/18/15 21:55*	*1*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*		*08/18/15 21:55*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*08/18/15 21:55*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/18/15 21:55*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 21:16	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 21:16	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 21:16	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 21:16	1
1,1-Dichloroethane	**0.38**	**J**	1.0	0.24	ug/L			08/18/15 21:16	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 21:16	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 21:16	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 21:16	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 21:16	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 21:16	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 21:16	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 21:16	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 21:16	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 21:16	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 21:16	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 21:16	1
Benzene	**3.0**		1.0	0.20	ug/L			08/18/15 21:16	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 21:16	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 21:16	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 21:16	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 21:16	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 21:16	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 21:16	1
Chloroethane	**83**		1.0	0.36	ug/L			08/18/15 21:16	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 21:16	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 21:16	1
cis-1,2-Dichloroethene	**0.39**	**J**	1.0	0.21	ug/L			08/18/15 21:16	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 21:16	1
Cyclohexane	**1.6**	**J**	5.0	0.13	ug/L			08/18/15 21:16	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 21:16	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 21:16	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 21:16	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 21:16	1
Isopropylbenzene	**2.3**		1.0	0.33	ug/L			08/18/15 21:16	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 21:16	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 21:16	1
Methylcyclohexane	**0.98**	**J**	5.0	0.090	ug/L			08/18/15 21:16	1

Client Sample ID: OB-27-080615

Date Collected: 08/06/15 15:20
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	**0.33**	**J**	5.0	0.22	ug/L			08/18/15 21:16	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 21:16	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 21:16	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 21:16	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 21:16	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 21:16	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 21:16	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 21:16	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 21:16	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 21:16	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 21:16	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1,2,3-Trimethylbenzene	*3.4*		*ug/L*		*15.53*	*526-73-8*		*08/18/15 21:16*	*1*
Benzene, 1,3-diethyl-	*10*	*J N*	*ug/L*		*15.80*	*141-93-5*		*08/18/15 21:16*	*1*
Benzene, 1-ethyl-2,4-dimethyl-	*7.3*	*J N*	*ug/L*		*16.46*	*874-41-9*		*08/18/15 21:16*	*1*
Indan, 1-methyl-	*6.0*	*J N*	*ug/L*		*16.60*	*767-58-8*		*08/18/15 21:16*	*1*
Benzene, 1,2,4,5-tetramethyl-	*8.4*	*J N*	*ug/L*		*16.98*	*95-93-2*		*08/18/15 21:16*	*1*
Benzene, (1-methyl-1-propenyl)-, (E)-	*3.8*	*J N*	*ug/L*		*17.38*	*768-00-3*		*08/18/15 21:16*	*1*
Benzene, 1,2,3,4-tetramethyl-	*19*	*J N*	*ug/L*		*17.57*	*488-23-3*		*08/18/15 21:16*	*1*
Benzene, (3-methyl-2-butenyl)-	*3.4*	*J N*	*ug/L*		*17.98*	*4489-84-3*		*08/18/15 21:16*	*1*
1H-Indene, 2,3-dihydro-4,7-dimethyl-	*5.2*	*J N*	*ug/L*		*18.05*	*6682-71-9*		*08/18/15 21:16*	*1*
1H-Indene, 2,3-dihydro-1,6-dimethyl-	*11*	*J N*	*ug/L*		*18.16*	*17059-48-2*		*08/18/15 21:16*	*1*
Naphthalene	*5.9*		*ug/L*		*18.36*	*91-20-3*		*08/18/15 21:16*	*1*
1H-Indene, 2,3-dihydro-1,2-dimethyl-	*5.4*	*J N*	*ug/L*		*19.01*	*17057-82-8*		*08/18/15 21:16*	*1*
Unknown	*4.6*	*J*	*ug/L*		*19.25*			*08/18/15 21:16*	*1*
Unknown	*3.3*	*J*	*ug/L*		*19.41*			*08/18/15 21:16*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 21:16*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/18/15 21:16*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*08/18/15 21:16*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/18/15 21:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*08/18/15 21:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.0064	U	0.013	0.0064	ug/L		08/12/15 07:44	08/12/15 19:42	1
Benzo[a]pyrene	0.0064	U	0.013	0.0064	ug/L		08/12/15 07:44	08/12/15 19:42	1
Benzo[b]fluoranthene	0.0064	U	0.013	0.0064	ug/L		08/12/15 07:44	08/12/15 19:42	1
Hexachlorobenzene	0.0036	U	0.0052	0.0036	ug/L		08/12/15 07:44	08/12/15 19:42	1
Hexachlorobutadiene	0.052	U	0.10	0.052	ug/L		08/12/15 07:44	08/12/15 19:42	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 11:18	08/17/15 17:04	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/13/15 11:18	08/17/15 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*29 - 120*	*08/12/15 07:44*	*08/12/15 19:42*	*1*
Nitrobenzene-d5	*55*		*27 - 120*	*08/12/15 07:44*	*08/12/15 19:42*	*1*
Terphenyl-d14	*68*		*13 - 120*	*08/12/15 07:44*	*08/12/15 19:42*	*1*
2,4,6-Tribromophenol	*84*		*10 - 120*	*08/13/15 11:18*	*08/17/15 17:04*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: OB-27-080615
Date Collected: 08/06/15 15:20
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-6
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	*48*		*10 - 120*	*08/13/15 11:18*	*08/17/15 17:04*	*1*
Phenol-d5	*35*		*10 - 120*	*08/13/15 11:18*	*08/17/15 17:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 21:46	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/12/15 17:47	08/13/15 21:46	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/12/15 17:47	08/13/15 21:46	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/12/15 17:47	08/13/15 21:46	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/12/15 17:47	08/13/15 21:46	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/12/15 17:47	08/13/15 21:46	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 21:46	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/12/15 17:47	08/13/15 21:46	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/12/15 17:47	08/13/15 21:46	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 21:46	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 21:46	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/12/15 17:47	08/13/15 21:46	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/12/15 17:47	08/13/15 21:46	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 21:46	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/12/15 17:47	08/13/15 21:46	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/12/15 17:47	08/13/15 21:46	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/12/15 17:47	08/13/15 21:46	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 21:46	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/12/15 17:47	08/13/15 21:46	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/12/15 17:47	08/13/15 21:46	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 21:46	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/12/15 17:47	08/13/15 21:46	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 21:46	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 21:46	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/12/15 17:47	08/13/15 21:46	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/12/15 17:47	08/13/15 21:46	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 21:46	1
Acetophenone	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 21:46	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/12/15 17:47	08/13/15 21:46	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/12/15 17:47	08/13/15 21:46	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/12/15 17:47	08/13/15 21:46	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 21:46	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 21:46	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 21:46	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 21:46	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/12/15 17:47	08/13/15 21:46	1
Carbazole	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 21:46	1
Caprolactam	2.4	U	10	2.4	ug/L		08/12/15 17:47	08/13/15 21:46	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/12/15 17:47	08/13/15 21:46	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/12/15 17:47	08/13/15 21:46	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 21:46	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/12/15 17:47	08/13/15 21:46	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 21:46	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 21:46	1

Client Sample ID: OB-27-080615
Date Collected: 08/06/15 15:20
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 21:46	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 21:46	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/12/15 17:47	08/13/15 21:46	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/12/15 17:47	08/13/15 21:46	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/12/15 17:47	08/13/15 21:46	1
Isophorone	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 21:46	1
Naphthalene	**2.5**		2.0	0.37	ug/L		08/12/15 17:47	08/13/15 21:46	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 21:46	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/12/15 17:47	08/13/15 21:46	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/12/15 17:47	08/13/15 21:46	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/12/15 17:47	08/13/15 21:46	1
Phenol	1.5	U	10	1.5	ug/L		08/12/15 17:47	08/13/15 21:46	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 21:46	1
Diphenyl	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 21:46	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 21:46	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 21:46	1
Atrazine	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 21:46	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane	*2.2*	*J*	*ug/L*		*2.29*	*123-91-1*	*08/12/15 17:47*	*08/13/15 21:46*	*1*
Indane	*4.9*	*J N*	*ug/L*		*4.57*	*496-11-7*	*08/12/15 17:47*	*08/13/15 21:46*	*1*
Benzene, 1,2,4,5-tetramethyl-	*3.6*	*J N*	*ug/L*		*4.92*	*95-93-2*	*08/12/15 17:47*	*08/13/15 21:46*	*1*
1-Phenyl-1-butene	*5.2*	*J N*	*ug/L*		*5.08*	*824-90-8*	*08/12/15 17:47*	*08/13/15 21:46*	*1*
1H-Indene, 2,3-dihydro-4,7-dimethyl-	*9.0*	*J N*	*ug/L*		*5.55*	*6682-71-9*	*08/12/15 17:47*	*08/13/15 21:46*	*1*
1-Methylnaphthalene	*2.4*		*ug/L*		*5.79*	*90-12-0*	*08/12/15 17:47*	*08/13/15 21:46*	*1*
Benzene, 1,4-bis(1-methylethenyl)-	*3.4*	*J N*	*ug/L*		*6.04*	*1605-18-1*	*08/12/15 17:47*	*08/13/15 21:46*	*1*
Naphthalene, 1-ethyl-	*4.5*	*J N*	*ug/L*		*6.12*	*1127-76-0*	*08/12/15 17:47*	*08/13/15 21:46*	*1*
Naphthalene, 2,7-dimethyl-	*4.0*	*J N*	*ug/L*		*6.22*	*582-16-1*	*08/12/15 17:47*	*08/13/15 21:46*	*1*
Phenol, 4,4'-(1-methylethylidene)bis-	*6.2*	*J N*	*ug/L*		*8.83*	*80-05-7*	*08/12/15 17:47*	*08/13/15 21:46*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*75*		*10 - 120*	*08/12/15 17:47*	*08/13/15 21:46*	*1*
2-Fluorobiphenyl (Surr)	*65*		*29 - 120*	*08/12/15 17:47*	*08/13/15 21:46*	*1*
2-Fluorophenol (Surr)	*40*		*10 - 120*	*08/12/15 17:47*	*08/13/15 21:46*	*1*
Nitrobenzene-d5 (Surr)	*62*		*27 - 120*	*08/12/15 17:47*	*08/13/15 21:46*	*1*
Phenol-d5 (Surr)	*26*		*10 - 120*	*08/12/15 17:47*	*08/13/15 21:46*	*1*
Terphenyl-d14 (Surr)	*73*		*13 - 120*	*08/12/15 17:47*	*08/13/15 21:46*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.56	U	0.65	0.56	ug/L		08/12/15 06:54	08/13/15 21:17	1
PCB-1221	0.44	U	0.65	0.44	ug/L		08/12/15 06:54	08/13/15 21:17	1
PCB-1232	0.52	U	0.65	0.52	ug/L		08/12/15 06:54	08/13/15 21:17	1
PCB-1242	0.29	U	0.65	0.29	ug/L		08/12/15 06:54	08/13/15 21:17	1
PCB-1248	0.20	U	0.65	0.20	ug/L		08/12/15 06:54	08/13/15 21:17	1
PCB-1254	0.22	U	0.65	0.22	ug/L		08/12/15 06:54	08/13/15 21:17	1
PCB-1260	0.23	U	0.65	0.23	ug/L		08/12/15 06:54	08/13/15 21:17	1
Polychlorinated biphenyls, Total	0.65	U	0.65	0.65	ug/L		08/12/15 06:54	08/13/15 21:17	1

Client Sample ID: OB-27-080615

Date Collected: 08/06/15 15:20
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-6

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	128		10 - 150	08/12/15 06:54	08/13/15 21:17	1
Tetrachloro-m-xylene	95		10 - 150	08/12/15 06:54	08/13/15 21:17	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.98**		1.00	0.70	mg/L			08/20/15 06:35	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/20/15 06:35	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.064**		0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 15:01	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:01	1
Arsenic	**0.026**	**B**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:01	1
Barium	**0.070**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:01	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:01	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 15:01	1
Calcium	**38.1**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:01	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:01	1
Cobalt	**0.0041**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:01	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:29	1
Iron	**52.0**		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 15:01	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 15:01	1
Magnesium	**5.0**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:01	1
Manganese	**8.0**		0.020	0.0050	mg/L		08/10/15 10:44	08/14/15 21:24	10
Nickel	**0.0024**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:29	1
Potassium	**1.6**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:01	1
Selenium	**0.00077**	**J**	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 15:01	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:01	1
Sodium	**3.1**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:01	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 15:01	1
Vanadium	**0.0016**	**J B**	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 15:01	1
Zinc	0.010	U	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 15:01	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/12/15 09:56	08/13/15 01:18	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 01:18	1
Arsenic	**0.00092**	**J B**	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 01:18	1
Barium	**0.043**		0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 01:18	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 01:18	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/12/15 09:56	08/13/15 01:18	1
Calcium	**36.3**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 01:18	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 01:18	1
Cobalt	**0.0037**		0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 01:18	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 16:53	1
Iron	**5.1**		0.025	0.010	mg/L		08/12/15 09:56	08/13/15 01:18	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/12/15 09:56	08/13/15 01:18	1
Magnesium	**5.0**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 01:18	1
Manganese	**8.2**		0.010	0.0025	mg/L		08/12/15 09:56	08/14/15 17:52	5
Nickel	**0.0027**	**J**	0.010	0.0025	mg/L		08/12/15 09:56	08/14/15 17:52	5
Potassium	**1.5**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 01:18	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: OB-27-080615
Date Collected: 08/06/15 15:20
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-6
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/12/15 09:56	08/13/15 01:18	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 01:18	1
Sodium	**3.0**		1.0	0.13	mg/L		08/12/15 09:56	08/13/15 01:18	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/12/15 09:56	08/13/15 01:18	1
Vanadium	**0.0012**	**J B**	0.0020	0.00010	mg/L		08/12/15 09:56	08/13/15 01:18	1
Zinc	0.010	U	0.025	0.010	mg/L		08/12/15 09:56	08/13/15 01:18	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:27	08/12/15 19:53	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 16:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/08/15 18:12	08/11/15 11:50	1
Bicarbonate Alkalinity as CaCO3	**174**		10.0	5.0	mg/L			08/11/15 21:33	1
Total Alkalinity as CaCO3	**174**		10.0	5.0	mg/L			08/11/15 21:33	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: OB-30C-080615
Date Collected: 08/06/15 15:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 22:24	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 22:24	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/18/15 22:24	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/18/15 22:24*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/18/15 22:24*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/18/15 22:24*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/18/15 22:24*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 21:44	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 21:44	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 21:44	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 21:44	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 21:44	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 21:44	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 21:44	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 21:44	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 21:44	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 21:44	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 21:44	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 21:44	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 21:44	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 21:44	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 21:44	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 21:44	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 21:44	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 21:44	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 21:44	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 21:44	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 21:44	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 21:44	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 21:44	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 21:44	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 21:44	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 21:44	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 21:44	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 21:44	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 21:44	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 21:44	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 21:44	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 21:44	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 21:44	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 21:44	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 21:44	1
Methyl tert-butyl ether	**0.28**	**J**	1.0	0.17	ug/L			08/18/15 21:44	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 21:44	1

Client Sample ID: OB-30C-080615

Date Collected: 08/06/15 15:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 21:44	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 21:44	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 21:44	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 21:44	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 21:44	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 21:44	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 21:44	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 21:44	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 21:44	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 21:44	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 21:44	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 21:44*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 21:44*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/18/15 21:44*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/18/15 21:44*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/18/15 21:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*08/18/15 21:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 17:31	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 17:31	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 17:31	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 11:18	08/17/15 17:31	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 11:18	08/17/15 17:31	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 11:18	08/17/15 17:31	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/13/15 11:18	08/17/15 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*50*		*29 - 120*	*08/13/15 11:18*	*08/17/15 17:31*	*1*
Nitrobenzene-d5	*43*		*27 - 120*	*08/13/15 11:18*	*08/17/15 17:31*	*1*
Terphenyl-d14	*75*		*13 - 120*	*08/13/15 11:18*	*08/17/15 17:31*	*1*
2,4,6-Tribromophenol	*62*		*10 - 120*	*08/13/15 11:18*	*08/17/15 17:31*	*1*
2-Fluorophenol	*33*		*10 - 120*	*08/13/15 11:18*	*08/17/15 17:31*	*1*
Phenol-d5	*25*		*10 - 120*	*08/13/15 11:18*	*08/17/15 17:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 22:09	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/12/15 17:47	08/13/15 22:09	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/12/15 17:47	08/13/15 22:09	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/12/15 17:47	08/13/15 22:09	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/12/15 17:47	08/13/15 22:09	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/12/15 17:47	08/13/15 22:09	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 22:09	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/12/15 17:47	08/13/15 22:09	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/12/15 17:47	08/13/15 22:09	1

Client Sample ID: OB-30C-080615
Date Collected: 08/06/15 15:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 22:09	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 22:09	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/12/15 17:47	08/13/15 22:09	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/12/15 17:47	08/13/15 22:09	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 22:09	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/12/15 17:47	08/13/15 22:09	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/12/15 17:47	08/13/15 22:09	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/12/15 17:47	08/13/15 22:09	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 22:09	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/12/15 17:47	08/13/15 22:09	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/12/15 17:47	08/13/15 22:09	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 22:09	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/12/15 17:47	08/13/15 22:09	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 22:09	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 22:09	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/12/15 17:47	08/13/15 22:09	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/12/15 17:47	08/13/15 22:09	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 22:09	1
Acetophenone	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 22:09	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/12/15 17:47	08/13/15 22:09	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/12/15 17:47	08/13/15 22:09	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/12/15 17:47	08/13/15 22:09	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 22:09	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 22:09	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 22:09	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 22:09	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/12/15 17:47	08/13/15 22:09	1
Carbazole	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 22:09	1
Caprolactam	2.4	U	10	2.4	ug/L		08/12/15 17:47	08/13/15 22:09	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/12/15 17:47	08/13/15 22:09	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/12/15 17:47	08/13/15 22:09	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 22:09	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/12/15 17:47	08/13/15 22:09	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 22:09	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 22:09	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 22:09	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 22:09	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/12/15 17:47	08/13/15 22:09	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/12/15 17:47	08/13/15 22:09	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/12/15 17:47	08/13/15 22:09	1
Isophorone	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 22:09	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 22:09	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 22:09	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/12/15 17:47	08/13/15 22:09	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/12/15 17:47	08/13/15 22:09	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/12/15 17:47	08/13/15 22:09	1
Phenol	1.5	U	10	1.5	ug/L		08/12/15 17:47	08/13/15 22:09	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 22:09	1
Diphenyl	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 22:09	1

Client Sample ID: OB-30C-080615
Date Collected: 08/06/15 15:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 22:09	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 22:09	1
Atrazine	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 22:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/12/15 17:47*	*08/13/15 22:09*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*74*		*10 - 120*	*08/12/15 17:47*	*08/13/15 22:09*	*1*
2-Fluorobiphenyl (Surr)	*63*		*29 - 120*	*08/12/15 17:47*	*08/13/15 22:09*	*1*
2-Fluorophenol (Surr)	*41*		*10 - 120*	*08/12/15 17:47*	*08/13/15 22:09*	*1*
Nitrobenzene-d5 (Surr)	*63*		*27 - 120*	*08/12/15 17:47*	*08/13/15 22:09*	*1*
Phenol-d5 (Surr)	*28*		*10 - 120*	*08/12/15 17:47*	*08/13/15 22:09*	*1*
Terphenyl-d14 (Surr)	*69*		*13 - 120*	*08/12/15 17:47*	*08/13/15 22:09*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.57	U	0.66	0.57	ug/L		08/12/15 06:54	08/13/15 21:33	1
PCB-1221	0.45	U	0.66	0.45	ug/L		08/12/15 06:54	08/13/15 21:33	1
PCB-1232	0.53	U	0.66	0.53	ug/L		08/12/15 06:54	08/13/15 21:33	1
PCB-1242	0.29	U	0.66	0.29	ug/L		08/12/15 06:54	08/13/15 21:33	1
PCB-1248	0.20	U	0.66	0.20	ug/L		08/12/15 06:54	08/13/15 21:33	1
PCB-1254	0.22	U	0.66	0.22	ug/L		08/12/15 06:54	08/13/15 21:33	1
PCB-1260	0.24	U	0.66	0.24	ug/L		08/12/15 06:54	08/13/15 21:33	1
Polychlorinated biphenyls, Total	0.66	U	0.66	0.66	ug/L		08/12/15 06:54	08/13/15 21:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*101*		*10 - 150*	*08/12/15 06:54*	*08/13/15 21:33*	*1*
Tetrachloro-m-xylene	*85*		*10 - 150*	*08/12/15 06:54*	*08/13/15 21:33*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**34.0**		1.00	0.70	mg/L			08/20/15 06:55	1
Sulfate	**24.5**		1.00	0.60	mg/L			08/20/15 06:55	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1.8**		0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 15:07	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:07	1
Arsenic	**0.0023**	**B**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:07	1
Barium	**0.025**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:07	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:07	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 15:07	1
Calcium	**38.2**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:07	1
Chromium	**0.0029**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:07	1
Cobalt	**0.0014**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:07	1
Copper	**0.0037**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:34	1
Iron	**3.0**		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 15:07	1
Lead	**0.0013**	**J**	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 15:07	1
Magnesium	**16.7**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:07	1
Manganese	**0.16**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:34	1

Client Sample ID: OB-30C-080615

Date Collected: 08/06/15 15:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-7

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0038**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:34	1
Potassium	**5.2**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:07	1
Selenium	**0.0024**		0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 15:07	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:07	1
Sodium	**8.7**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:07	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 15:07	1
Vanadium	**0.0084**	**B**	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 15:07	1
Zinc	0.010	U	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 15:07	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.11**		0.020	0.0096	mg/L		08/11/15 10:38	08/11/15 23:40	1
Antimony	**0.00050**	**J**	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:40	1
Arsenic	**0.0012**	**J**	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:40	1
Barium	**0.015**		0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:40	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:40	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/11/15 10:38	08/11/15 23:40	1
Calcium	**37.3**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:21	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:40	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:40	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:40	1
Iron	**0.099**		0.025	0.010	mg/L		08/11/15 10:38	08/11/15 23:40	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/11/15 23:40	1
Magnesium	**16.5**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:21	1
Manganese	**0.066**		0.0020	0.00050	mg/L		08/11/15 10:38	08/13/15 19:25	1
Nickel	**0.0014**	**J**	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:40	1
Potassium	**5.0**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:21	1
Selenium	**0.0020**		0.0020	0.00060	mg/L		08/11/15 10:38	08/12/15 18:21	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:21	1
Sodium	**8.6**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:21	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/11/15 23:40	1
Vanadium	**0.0059**	**B**	0.0020	0.00010	mg/L		08/11/15 10:38	08/11/15 23:40	1
Zinc	0.010	U	0.025	0.010	mg/L		08/11/15 10:38	08/11/15 23:40	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:27	08/12/15 19:55	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 16:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/08/15 18:12	08/11/15 11:52	1
Bicarbonate Alkalinity as CaCO3	**111**		10.0	5.0	mg/L			08/11/15 21:39	1
Total Alkalinity as CaCO3	**111**		10.0	5.0	mg/L			08/11/15 21:39	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: OB-30B-080615
Date Collected: 08/06/15 15:10
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-8
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/20/15 18:58	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/20/15 18:58	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/20/15 18:58	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/20/15 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/20/15 18:58*	*1*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*		*08/20/15 18:58*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/20/15 18:58*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/20/15 18:58*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 09:19	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 09:19	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 09:19	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 09:19	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 09:19	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 09:19	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 09:19	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 09:19	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 09:19	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 09:19	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 09:19	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 09:19	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 09:19	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 09:19	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 09:19	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 09:19	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 09:19	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 09:19	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 09:19	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 09:19	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 09:19	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 09:19	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 09:19	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 09:19	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 09:19	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 09:19	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 09:19	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 09:19	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 09:19	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 09:19	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 09:19	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 09:19	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 09:19	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 09:19	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 09:19	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 09:19	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 09:19	1

Client Sample ID: OB-30B-080615

Date Collected: 08/06/15 15:10
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 09:19	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 09:19	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 09:19	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 09:19	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 09:19	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 09:19	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 09:19	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 09:19	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 09:19	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 09:19	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 09:19	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 09:19*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 09:19*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/18/15 09:19*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*08/18/15 09:19*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/18/15 09:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*08/18/15 09:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 17:58	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 17:58	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 17:58	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 11:18	08/17/15 17:58	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 11:18	08/17/15 17:58	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 11:18	08/17/15 17:58	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/13/15 11:18	08/17/15 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*29 - 120*	*08/13/15 11:18*	*08/17/15 17:58*	*1*
Nitrobenzene-d5	*53*		*27 - 120*	*08/13/15 11:18*	*08/17/15 17:58*	*1*
Terphenyl-d14	*88*		*13 - 120*	*08/13/15 11:18*	*08/17/15 17:58*	*1*
2,4,6-Tribromophenol	*82*		*10 - 120*	*08/13/15 11:18*	*08/17/15 17:58*	*1*
2-Fluorophenol	*38*		*10 - 120*	*08/13/15 11:18*	*08/17/15 17:58*	*1*
Phenol-d5	*27*		*10 - 120*	*08/13/15 11:18*	*08/17/15 17:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 22:33	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/12/15 17:47	08/13/15 22:33	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/12/15 17:47	08/13/15 22:33	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/12/15 17:47	08/13/15 22:33	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/12/15 17:47	08/13/15 22:33	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/12/15 17:47	08/13/15 22:33	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 22:33	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/12/15 17:47	08/13/15 22:33	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/12/15 17:47	08/13/15 22:33	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: OB-30B-080615
Date Collected: 08/06/15 15:10
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 22:33	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 22:33	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/12/15 17:47	08/13/15 22:33	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/12/15 17:47	08/13/15 22:33	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 22:33	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/12/15 17:47	08/13/15 22:33	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/12/15 17:47	08/13/15 22:33	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/12/15 17:47	08/13/15 22:33	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 22:33	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/12/15 17:47	08/13/15 22:33	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/12/15 17:47	08/13/15 22:33	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 22:33	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/12/15 17:47	08/13/15 22:33	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 22:33	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 22:33	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/12/15 17:47	08/13/15 22:33	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/12/15 17:47	08/13/15 22:33	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 22:33	1
Acetophenone	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 22:33	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/12/15 17:47	08/13/15 22:33	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/12/15 17:47	08/13/15 22:33	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/12/15 17:47	08/13/15 22:33	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 22:33	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 22:33	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 22:33	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 22:33	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/12/15 17:47	08/13/15 22:33	1
Carbazole	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 22:33	1
Caprolactam	2.4	U	10	2.4	ug/L		08/12/15 17:47	08/13/15 22:33	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/12/15 17:47	08/13/15 22:33	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/12/15 17:47	08/13/15 22:33	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 22:33	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/12/15 17:47	08/13/15 22:33	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 22:33	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 22:33	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 22:33	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 22:33	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/12/15 17:47	08/13/15 22:33	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/12/15 17:47	08/13/15 22:33	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/12/15 17:47	08/13/15 22:33	1
Isophorone	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 22:33	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 22:33	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 22:33	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/12/15 17:47	08/13/15 22:33	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/12/15 17:47	08/13/15 22:33	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/12/15 17:47	08/13/15 22:33	1
Phenol	1.5	U	10	1.5	ug/L		08/12/15 17:47	08/13/15 22:33	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 22:33	1
Diphenyl	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 22:33	1

Client Sample ID: OB-30B-080615
Date Collected: 08/06/15 15:10
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 22:33	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 22:33	1
Atrazine	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 22:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/12/15 17:47*	*08/13/15 22:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*72*		*10 - 120*	*08/12/15 17:47*	*08/13/15 22:33*	*1*
2-Fluorobiphenyl (Surr)	*58*		*29 - 120*	*08/12/15 17:47*	*08/13/15 22:33*	*1*
2-Fluorophenol (Surr)	*37*		*10 - 120*	*08/12/15 17:47*	*08/13/15 22:33*	*1*
Nitrobenzene-d5 (Surr)	*58*		*27 - 120*	*08/12/15 17:47*	*08/13/15 22:33*	*1*
Phenol-d5 (Surr)	*24*		*10 - 120*	*08/12/15 17:47*	*08/13/15 22:33*	*1*
Terphenyl-d14 (Surr)	*60*		*13 - 120*	*08/12/15 17:47*	*08/13/15 22:33*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.54	U	0.63	0.54	ug/L		08/12/15 06:54	08/13/15 21:49	1
PCB-1221	0.43	U	0.63	0.43	ug/L		08/12/15 06:54	08/13/15 21:49	1
PCB-1232	0.50	U	0.63	0.50	ug/L		08/12/15 06:54	08/13/15 21:49	1
PCB-1242	0.28	U	0.63	0.28	ug/L		08/12/15 06:54	08/13/15 21:49	1
PCB-1248	0.19	U	0.63	0.19	ug/L		08/12/15 06:54	08/13/15 21:49	1
PCB-1254	0.21	U	0.63	0.21	ug/L		08/12/15 06:54	08/13/15 21:49	1
PCB-1260	0.23	U	0.63	0.23	ug/L		08/12/15 06:54	08/13/15 21:49	1
Polychlorinated biphenyls, Total	0.63	U	0.63	0.63	ug/L		08/12/15 06:54	08/13/15 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*110*		*10 - 150*	*08/12/15 06:54*	*08/13/15 21:49*	*1*
Tetrachloro-m-xylene	*92*		*10 - 150*	*08/12/15 06:54*	*08/13/15 21:49*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**33.5**		1.00	0.70	mg/L			08/20/15 12:11	1
Sulfate	**18.6**		1.00	0.60	mg/L			08/20/15 12:11	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.082**		0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 15:12	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:12	1
Arsenic	**0.00089**	**J B**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:12	1
Barium	**0.029**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:12	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:12	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 15:12	1
Calcium	**24.5**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:12	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:12	1
Cobalt	**0.0022**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:12	1
Copper	**0.0012**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:39	1
Iron	**0.13**		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 15:12	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 15:12	1
Magnesium	**5.5**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:12	1
Manganese	**1.6**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:39	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: OB-30B-080615
Date Collected: 08/06/15 15:10
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-8
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.0023		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:39	1
Potassium	2.5		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:12	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 15:12	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:12	1
Sodium	23.8		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:12	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 15:12	1
Vanadium	0.0015	J B	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 15:12	1
Zinc	0.010	U	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 15:12	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.011	J	0.020	0.0096	mg/L		08/11/15 10:38	08/11/15 23:46	1
Antimony	0.00061	J	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:46	1
Arsenic	0.00058	J	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:46	1
Barium	0.028		0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:46	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:46	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/11/15 10:38	08/11/15 23:46	1
Calcium	24.9		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:26	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:46	1
Cobalt	0.0022		0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:46	1
Copper	0.0015	J B	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:46	1
Iron	0.019	J	0.025	0.010	mg/L		08/11/15 10:38	08/11/15 23:46	1
Lead	0.00033	J	0.0020	0.00020	mg/L		08/11/15 10:38	08/11/15 23:46	1
Magnesium	5.7		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:26	1
Manganese	1.6		0.0020	0.00050	mg/L		08/11/15 10:38	08/13/15 19:31	1
Nickel	0.0031		0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:46	1
Potassium	2.5		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:26	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/11/15 10:38	08/12/15 18:26	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:26	1
Sodium	24.0		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:26	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/11/15 23:46	1
Vanadium	0.0017	J B	0.0020	0.00010	mg/L		08/11/15 10:38	08/11/15 23:46	1
Zinc	0.010	U	0.025	0.010	mg/L		08/11/15 10:38	08/11/15 23:46	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:27	08/12/15 19:58	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 16:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/08/15 18:12	08/11/15 11:54	1
Bicarbonate Alkalinity as CaCO3	67.3		10.0	5.0	mg/L			08/11/15 21:44	1
Total Alkalinity as CaCO3	67.3		10.0	5.0	mg/L			08/11/15 21:44	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: RW-3 (77-87)-080615
Date Collected: 08/06/15 14:35
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-9
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/20/15 19:26	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/20/15 19:26	1
1,4-Dioxane	**22**		10	0.27	ug/L			08/20/15 19:26	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/20/15 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/20/15 19:26*	*1*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*08/20/15 19:26*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/20/15 19:26*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/20/15 19:26*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 01:49	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 01:49	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 01:49	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 01:49	1
1,1-Dichloroethane	**0.26**	**J**	1.0	0.24	ug/L			08/18/15 01:49	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 01:49	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 01:49	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 01:49	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 01:49	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 01:49	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 01:49	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 01:49	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 01:49	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 01:49	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 01:49	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 01:49	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 01:49	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 01:49	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 01:49	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 01:49	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 01:49	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 01:49	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 01:49	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 01:49	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 01:49	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 01:49	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 01:49	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 01:49	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 01:49	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 01:49	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 01:49	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 01:49	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 01:49	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 01:49	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 01:49	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 01:49	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 01:49	1

Client Sample ID: RW-3 (77-87)-080615

Date Collected: 08/06/15 14:35
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 01:49	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 01:49	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 01:49	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 01:49	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 01:49	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 01:49	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 01:49	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 01:49	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 01:49	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 01:49	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 01:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 01:49*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 01:49*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/18/15 01:49*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*08/18/15 01:49*	*1*
Toluene-d8 (Surr)	*111*		*70 - 130*		*08/18/15 01:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/18/15 01:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 18:25	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 18:25	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 18:25	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 11:18	08/17/15 18:25	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 11:18	08/17/15 18:25	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 11:18	08/17/15 18:25	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/13/15 11:18	08/17/15 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*53*		*29 - 120*	*08/13/15 11:18*	*08/17/15 18:25*	*1*
Nitrobenzene-d5	*48*		*27 - 120*	*08/13/15 11:18*	*08/17/15 18:25*	*1*
Terphenyl-d14	*74*		*13 - 120*	*08/13/15 11:18*	*08/17/15 18:25*	*1*
2,4,6-Tribromophenol	*70*		*10 - 120*	*08/13/15 11:18*	*08/17/15 18:25*	*1*
2-Fluorophenol	*35*		*10 - 120*	*08/13/15 11:18*	*08/17/15 18:25*	*1*
Phenol-d5	*26*		*10 - 120*	*08/13/15 11:18*	*08/17/15 18:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 22:56	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/12/15 17:47	08/13/15 22:56	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/12/15 17:47	08/13/15 22:56	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/12/15 17:47	08/13/15 22:56	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/12/15 17:47	08/13/15 22:56	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/12/15 17:47	08/13/15 22:56	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 22:56	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/12/15 17:47	08/13/15 22:56	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/12/15 17:47	08/13/15 22:56	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: RW-3 (77-87)-080615
Date Collected: 08/06/15 14:35
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 22:56	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 22:56	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/12/15 17:47	08/13/15 22:56	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/12/15 17:47	08/13/15 22:56	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 22:56	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/12/15 17:47	08/13/15 22:56	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/12/15 17:47	08/13/15 22:56	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/12/15 17:47	08/13/15 22:56	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 22:56	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/12/15 17:47	08/13/15 22:56	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/12/15 17:47	08/13/15 22:56	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 22:56	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/12/15 17:47	08/13/15 22:56	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 22:56	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 22:56	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/12/15 17:47	08/13/15 22:56	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/12/15 17:47	08/13/15 22:56	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 22:56	1
Acetophenone	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 22:56	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/12/15 17:47	08/13/15 22:56	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/12/15 17:47	08/13/15 22:56	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/12/15 17:47	08/13/15 22:56	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 22:56	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 22:56	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 22:56	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 22:56	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/12/15 17:47	08/13/15 22:56	1
Carbazole	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 22:56	1
Caprolactam	2.4	U	10	2.4	ug/L		08/12/15 17:47	08/13/15 22:56	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/12/15 17:47	08/13/15 22:56	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/12/15 17:47	08/13/15 22:56	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 22:56	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/12/15 17:47	08/13/15 22:56	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 22:56	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 22:56	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 22:56	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 22:56	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/12/15 17:47	08/13/15 22:56	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/12/15 17:47	08/13/15 22:56	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/12/15 17:47	08/13/15 22:56	1
Isophorone	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 22:56	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 22:56	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 22:56	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/12/15 17:47	08/13/15 22:56	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/12/15 17:47	08/13/15 22:56	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/12/15 17:47	08/13/15 22:56	1
Phenol	1.5	U	10	1.5	ug/L		08/12/15 17:47	08/13/15 22:56	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 22:56	1
Diphenyl	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 22:56	1

Client Sample ID: RW-3 (77-87)-080615

Date Collected: 08/06/15 14:35
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 22:56	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 22:56	1
Atrazine	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 22:56	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane	*9.0*	*J*	*ug/L*		*2.29*	*123-91-1*	*08/12/15 17:47*	*08/13/15 22:56*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*77*		*10 - 120*	*08/12/15 17:47*	*08/13/15 22:56*	*1*
2-Fluorobiphenyl (Surr)	*61*		*29 - 120*	*08/12/15 17:47*	*08/13/15 22:56*	*1*
2-Fluorophenol (Surr)	*39*		*10 - 120*	*08/12/15 17:47*	*08/13/15 22:56*	*1*
Nitrobenzene-d5 (Surr)	*62*		*27 - 120*	*08/12/15 17:47*	*08/13/15 22:56*	*1*
Phenol-d5 (Surr)	*26*		*10 - 120*	*08/12/15 17:47*	*08/13/15 22:56*	*1*
Terphenyl-d14 (Surr)	*72*		*13 - 120*	*08/12/15 17:47*	*08/13/15 22:56*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.57	U	0.66	0.57	ug/L		08/12/15 06:54	08/13/15 22:04	1
PCB-1221	0.45	U	0.66	0.45	ug/L		08/12/15 06:54	08/13/15 22:04	1
PCB-1232	0.53	U	0.66	0.53	ug/L		08/12/15 06:54	08/13/15 22:04	1
PCB-1242	0.29	U	0.66	0.29	ug/L		08/12/15 06:54	08/13/15 22:04	1
PCB-1248	0.20	U	0.66	0.20	ug/L		08/12/15 06:54	08/13/15 22:04	1
PCB-1254	0.22	U	0.66	0.22	ug/L		08/12/15 06:54	08/13/15 22:04	1
PCB-1260	0.24	U	0.66	0.24	ug/L		08/12/15 06:54	08/13/15 22:04	1
Polychlorinated biphenyls, Total	0.66	U	0.66	0.66	ug/L		08/12/15 06:54	08/13/15 22:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*105*		*10 - 150*	*08/12/15 06:54*	*08/13/15 22:04*	*1*
Tetrachloro-m-xylene	*80*		*10 - 150*	*08/12/15 06:54*	*08/13/15 22:04*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2190**		5.00	3.50	mg/L			08/20/15 08:36	5
Sulfate	**139**		1.00	0.60	mg/L			08/20/15 08:16	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.013**	**J**	0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 15:17	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:17	1
Arsenic	**0.00088**	**J B**	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:17	1
Barium	**0.050**		0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:17	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:17	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 15:17	1
Calcium	**58.8**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:17	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:17	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:17	1
Copper	**0.00090**	**J**	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:44	1
Iron	**0.082**		0.025	0.010	mg/L		08/10/15 10:44	08/12/15 15:17	1
Lead	**0.00026**	**J**	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 15:17	1
Magnesium	**15.6**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:17	1
Manganese	**0.096**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:44	1

Client Sample ID: RW-3 (77-87)-080615

Date Collected: 08/06/15 14:35
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-9

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0094**		0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 15:44	1
Potassium	**2.3**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:17	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 15:17	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 15:17	1
Sodium	**7.7**		1.0	0.13	mg/L		08/10/15 10:44	08/12/15 15:17	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 15:17	1
Vanadium	**0.0020**	**B**	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 15:17	1
Zinc	**0.016**	**J**	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 15:17	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/11/15 10:38	08/11/15 23:52	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:52	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:52	1
Barium	**0.045**		0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:52	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:52	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/11/15 10:38	08/11/15 23:52	1
Calcium	**57.4**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:32	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:52	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:52	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:52	1
Iron	**0.012**	**J**	0.025	0.010	mg/L		08/11/15 10:38	08/11/15 23:52	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/11/15 23:52	1
Magnesium	**15.7**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:32	1
Manganese	**0.093**		0.0020	0.00050	mg/L		08/11/15 10:38	08/13/15 19:37	1
Nickel	**0.0069**		0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 23:52	1
Potassium	**2.2**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:32	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/11/15 10:38	08/12/15 18:32	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 18:32	1
Sodium	**7.5**		1.0	0.13	mg/L		08/11/15 10:38	08/12/15 18:32	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/11/15 23:52	1
Vanadium	**0.0020**	**B**	0.0020	0.00010	mg/L		08/11/15 10:38	08/11/15 23:52	1
Zinc	0.010	U	0.025	0.010	mg/L		08/11/15 10:38	08/11/15 23:52	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:27	08/12/15 20:00	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 16:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U F1	0.010	0.0070	mg/L		08/08/15 18:12	08/11/15 11:43	1
Bicarbonate Alkalinity as CaCO3	**202**		10.0	5.0	mg/L			08/11/15 21:50	1
Total Alkalinity as CaCO3	**202**		10.0	5.0	mg/L			08/11/15 21:50	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: TB-03-080715
Date Collected: 08/07/15 01:00
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 19:02	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 19:02	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/18/15 19:02	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/18/15 19:02*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/18/15 19:02*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/18/15 19:02*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/18/15 19:02*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 00:05	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 00:05	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 00:05	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 00:05	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 00:05	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 00:05	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 00:05	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 00:05	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 00:05	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 00:05	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 00:05	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 00:05	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 00:05	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 00:05	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 00:05	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 00:05	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 00:05	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 00:05	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 00:05	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 00:05	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 00:05	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 00:05	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 00:05	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 00:05	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 00:05	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 00:05	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 00:05	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 00:05	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 00:05	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 00:05	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 00:05	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 00:05	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 00:05	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 00:05	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 00:05	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 00:05	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 00:05	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Client Sample ID: TB-03-080715
Date Collected: 08/07/15 01:00
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 00:05	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 00:05	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 00:05	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 00:05	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 00:05	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 00:05	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 00:05	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 00:05	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 00:05	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 00:05	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 00:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 00:05*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 00:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/18/15 00:05*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*08/18/15 00:05*	*1*
Toluene-d8 (Surr)	*111*		*70 - 130*		*08/18/15 00:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/18/15 00:05*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-273831/6
Matrix: Water
Analysis Batch: 273831

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 01:01	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 01:01	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 01:01	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 01:01	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 01:01	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 01:01	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 01:01	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 01:01	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 01:01	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 01:01	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 01:01	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 01:01	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 01:01	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 01:01	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 01:01	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 01:01	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 01:01	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 01:01	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 01:01	1
Carbon disulfide	0.258	J	1.0	0.22	ug/L			08/18/15 01:01	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 01:01	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 01:01	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 01:01	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 01:01	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 01:01	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 01:01	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 01:01	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 01:01	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 01:01	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 01:01	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 01:01	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 01:01	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 01:01	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 01:01	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 01:01	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 01:01	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 01:01	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 01:01	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 01:01	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 01:01	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 01:01	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 01:01	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 01:01	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 01:01	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 01:01	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 01:01	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 01:01	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 01:01	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/18/15 01:01	1
Total Alkanes TIC	None		ug/L					08/18/15 01:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130		08/18/15 01:01	1
Dibromofluoromethane (Surr)	109		70 - 130		08/18/15 01:01	1
Toluene-d8 (Surr)	97		70 - 130		08/18/15 01:01	1
1,2-Dichloroethane-d4 (Surr)	108		70 - 130		08/18/15 01:01	1

Lab Sample ID: LCS 490-273831/3
Matrix: Water
Analysis Batch: 273831

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	47.0		ug/L		94	78 - 135
Freon-113	50.0	50.7		ug/L		101	77 - 129
1,1,2,2-Tetrachloroethane	50.0	52.3		ug/L		105	69 - 131
1,1,2-Trichloroethane	50.0	50.5		ug/L		101	80 - 124
1,1-Dichloroethane	50.0	48.9		ug/L		98	78 - 125
1,1-Dichloroethene	50.0	48.8		ug/L		98	79 - 124
1,2,4-Trichlorobenzene	50.0	51.3		ug/L		103	63 - 133
1,2-Dibromo-3-Chloropropane	50.0	51.8		ug/L		104	54 - 125
1,2-Dichlorobenzene	50.0	52.0		ug/L		104	80 - 121
1,2-Dichloropropane	50.0	50.2		ug/L		100	75 - 120
1,3-Dichlorobenzene	50.0	50.0		ug/L		100	80 - 122
1,4-Dichlorobenzene	50.0	49.4		ug/L		99	80 - 120
2-Butanone (MEK)	250	271		ug/L		109	62 - 133
2-Hexanone	250	256		ug/L		102	60 - 142
4-Methyl-2-pentanone (MIBK)	250	287		ug/L		115	60 - 137
Acetone	250	280		ug/L		112	54 - 145
Benzene	50.0	49.0		ug/L		98	80 - 121
Bromoform	50.0	51.5		ug/L		103	46 - 145
Bromomethane	50.0	45.9		ug/L		92	41 - 150
Carbon disulfide	50.0	52.7		ug/L		105	77 - 126
Carbon tetrachloride	50.0	49.6		ug/L		99	64 - 147
Chlorobenzene	50.0	48.2		ug/L		96	80 - 120
Chlorodibromomethane	50.0	53.1		ug/L		106	69 - 133
Chloroethane	50.0	46.7		ug/L		93	72 - 120
Chloroform	50.0	54.5		ug/L		109	73 - 129
Chloromethane	50.0	48.3		ug/L		97	12 - 150
cis-1,2-Dichloroethene	50.0	50.2		ug/L		100	76 - 125
cis-1,3-Dichloropropene	50.0	51.5		ug/L		103	74 - 140
Cyclohexane	50.0	50.3		ug/L		101	73 - 122
Dichlorobromomethane	50.0	49.9		ug/L		100	75 - 129
Dichlorodifluoromethane	50.0	49.4		ug/L		99	37 - 127
Ethylbenzene	50.0	49.1		ug/L		98	80 - 130
1,2-Dibromoethane	50.0	51.7		ug/L		103	80 - 129
Isopropylbenzene	50.0	51.0		ug/L		102	80 - 141
Methyl acetate	250	289		ug/L		115	64 - 150
Methyl tert-butyl ether	50.0	50.2		ug/L		100	72 - 133
Methylcyclohexane	50.0	46.1		ug/L		92	71 - 129
Methylene Chloride	50.0	51.5		ug/L		103	79 - 123
Styrene	50.0	48.3		ug/L		97	80 - 127

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

Lab Sample ID: LCS 490-273831/3
Matrix: Water
Analysis Batch: 273831

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	50.0	46.1		ug/L		92	80 - 126
Toluene	50.0	47.7		ug/L		95	80 - 126
trans-1,2-Dichloroethene	50.0	49.8		ug/L		100	79 - 126
trans-1,3-Dichloropropene	50.0	52.7		ug/L		105	63 - 134
Trichloroethene	50.0	48.8		ug/L		98	80 - 123
Trichlorofluoromethane	50.0	45.1		ug/L		90	65 - 124
Vinyl chloride	50.0	47.2		ug/L		94	68 - 120
1,2-Dichloroethane	50.0	48.2		ug/L		96	77 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*

Lab Sample ID: 490-85052-A-7 MS
Matrix: Water
Analysis Batch: 273831

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.26	J	50.0	55.3		ug/L		110	76 - 149
Freon-113	0.15	U	50.0	62.6		ug/L		125	72 - 148
1,1,2,2-Tetrachloroethane	0.19	U	50.0	53.7		ug/L		107	56 - 143
1,1,2-Trichloroethane	0.19	U	50.0	53.3		ug/L		107	74 - 134
1,1-Dichloroethane	2.1		50.0	57.4		ug/L		110	71 - 139
1,1-Dichloroethene	2.6		50.0	61.1		ug/L		117	70 - 142
1,2,4-Trichlorobenzene	0.20	U	50.0	48.8		ug/L		98	60 - 136
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	50.0		ug/L		100	52 - 126
1,2-Dichlorobenzene	0.19	U	50.0	53.4		ug/L		107	79 - 128
1,2-Dichloropropane	0.25	U	50.0	55.9		ug/L		112	67 - 131
1,3-Dichlorobenzene	0.18	U	50.0	52.4		ug/L		105	77 - 131
1,4-Dichlorobenzene	0.17	U	50.0	51.7		ug/L		103	78 - 126
2-Butanone (MEK)	2.6	U	250	273		ug/L		109	50 - 138
2-Hexanone	1.3	U	250	263		ug/L		105	50 - 150
4-Methyl-2-pentanone (MIBK)	0.81	U	250	297		ug/L		119	50 - 147
Acetone	2.7	U	250	281		ug/L		112	45 - 141
Benzene	0.20	U	50.0	54.7		ug/L		109	75 - 133
Bromoform	0.29	U	50.0	55.3		ug/L		111	42 - 147
Bromomethane	0.35	U	50.0	41.9		ug/L		84	16 - 163
Carbon disulfide	0.22	U	50.0	63.4		ug/L		127	48 - 152
Carbon tetrachloride	0.18	U	50.0	59.3		ug/L		119	62 - 164
Chlorobenzene	0.18	U	50.0	53.4		ug/L		107	80 - 129
Chlorodibromomethane	0.25	U	50.0	57.4		ug/L		115	66 - 140
Chloroethane	0.36	U	50.0	53.9		ug/L		108	58 - 137
Chloroform	1.1		50.0	62.0		ug/L		122	66 - 138
Chloromethane	0.36	U	50.0	51.5		ug/L		103	10 - 169
cis-1,2-Dichloroethene	0.21	U	50.0	56.6		ug/L		113	68 - 138
cis-1,3-Dichloropropene	0.17	U	50.0	52.8		ug/L		106	71 - 141

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

Lab Sample ID: 490-85052-A-7 MS
Matrix: Water
Analysis Batch: 273831

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	0.13	U	50.0	60.5		ug/L		121	58 - 144
Dichlorobromomethane	0.17	U	50.0	54.9		ug/L		110	70 - 140
Dichlorodifluoromethane	0.17	U	50.0	57.1		ug/L		114	40 - 127
Ethylbenzene	0.19	U	50.0	55.3		ug/L		111	79 - 139
1,2-Dibromoethane	0.21	U	50.0	54.7		ug/L		109	75 - 137
Isopropylbenzene	0.33	U	50.0	57.4		ug/L		115	80 - 153
Methyl acetate	0.58	U	250	266		ug/L		106	30 - 165
Methyl tert-butyl ether	0.35	J	50.0	54.1		ug/L		107	66 - 141
Methylcyclohexane	0.090	U	50.0	53.2		ug/L		106	59 - 151
Methylene Chloride	0.22	U	50.0	57.3		ug/L		115	64 - 139
Styrene	0.28	U	50.0	52.0		ug/L		104	61 - 148
Tetrachloroethene	1.1	J	50.0	53.5		ug/L		105	72 - 145
Toluene	0.17	U	50.0	53.0		ug/L		106	75 - 136
trans-1,2-Dichloroethene	0.23	U	50.0	57.9		ug/L		116	66 - 143
trans-1,3-Dichloropropene	0.17	U	50.0	54.6		ug/L		109	59 - 135
Trichloroethene	0.20	U	50.0	53.9		ug/L		108	73 - 144
Trichlorofluoromethane	0.21	U	50.0	57.3		ug/L		115	58 - 139
Vinyl chloride	0.18	U	50.0	55.7		ug/L		111	56 - 129
1,2-Dichloroethane	0.20	U	50.0	51.6		ug/L		103	64 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*

Lab Sample ID: 490-85052-A-7 MSD
Matrix: Water
Analysis Batch: 273831

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.26	J	50.0	55.8		ug/L		111	76 - 149	1	17
Freon-113	0.15	U	50.0	62.1		ug/L		124	72 - 148	1	18
1,1,2,2-Tetrachloroethane	0.19	U	50.0	56.5		ug/L		113	56 - 143	5	20
1,1,2-Trichloroethane	0.19	U	50.0	54.4		ug/L		109	74 - 134	2	15
1,1-Dichloroethane	2.1		50.0	56.2		ug/L		108	71 - 139	2	17
1,1-Dichloroethene	2.6		50.0	61.0		ug/L		117	70 - 142	0	17
1,2,4-Trichlorobenzene	0.20	U	50.0	53.5		ug/L		107	60 - 136	9	19
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	55.4		ug/L		111	52 - 126	10	24
1,2-Dichlorobenzene	0.19	U	50.0	55.2		ug/L		110	79 - 128	3	15
1,2-Dichloropropane	0.25	U	50.0	55.4		ug/L		111	67 - 131	1	17
1,3-Dichlorobenzene	0.18	U	50.0	54.2		ug/L		108	77 - 131	3	15
1,4-Dichlorobenzene	0.17	U	50.0	53.4		ug/L		107	78 - 126	3	15
2-Butanone (MEK)	2.6	U	250	288		ug/L		115	50 - 138	6	19
2-Hexanone	1.3	U	250	279		ug/L		111	50 - 150	6	15
4-Methyl-2-pentanone (MIBK)	0.81	U	250	312		ug/L		125	50 - 147	5	17
Acetone	2.7	U	250	294		ug/L		117	45 - 141	4	21
Benzene	0.20	U	50.0	55.2		ug/L		110	75 - 133	1	17

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

Lab Sample ID: 490-85052-A-7 MSD
Matrix: Water
Analysis Batch: 273831

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	0.29	U	50.0	57.2		ug/L		114	42 - 147	4	16
Bromomethane	0.35	U	50.0	44.2		ug/L		88	16 - 163	5	50
Carbon disulfide	0.22	U	50.0	62.5		ug/L		125	48 - 152	1	21
Carbon tetrachloride	0.18	U	50.0	59.7		ug/L		119	62 - 164	1	19
Chlorobenzene	0.18	U	50.0	53.4		ug/L		107	80 - 129	0	14
Chlorodibromomethane	0.25	U	50.0	57.6		ug/L		115	66 - 140	0	15
Chloroethane	0.36	U	50.0	53.3		ug/L		107	58 - 137	1	20
Chloroform	1.1		50.0	61.8		ug/L		121	66 - 138	0	18
Chloromethane	0.36	U	50.0	53.3		ug/L		107	10 - 169	4	31
cis-1,2-Dichloroethene	0.21	U	50.0	56.8		ug/L		114	68 - 138	0	17
cis-1,3-Dichloropropene	0.17	U	50.0	53.2		ug/L		106	71 - 141	1	15
Cyclohexane	0.13	U	50.0	62.0		ug/L		124	58 - 144	3	16
Dichlorobromomethane	0.17	U	50.0	55.3		ug/L		111	70 - 140	1	18
Dichlorodifluoromethane	0.17	U	50.0	57.6		ug/L		115	40 - 127	1	18
Ethylbenzene	0.19	U	50.0	55.9		ug/L		112	79 - 139	1	15
1,2-Dibromoethane	0.21	U	50.0	55.4		ug/L		111	75 - 137	1	15
Isopropylbenzene	0.33	U	50.0	58.6		ug/L		117	80 - 153	2	16
Methyl acetate	0.58	U	250	269		ug/L		108	30 - 165	1	31
Methyl tert-butyl ether	0.35	J	50.0	54.7		ug/L		109	66 - 141	1	16
Methylcyclohexane	0.090	U	50.0	55.5		ug/L		111	59 - 151	4	19
Methylene Chloride	0.22	U	50.0	56.3		ug/L		113	64 - 139	2	17
Styrene	0.28	U	50.0	52.6		ug/L		105	61 - 148	1	24
Tetrachloroethene	1.1	J	50.0	54.7		ug/L		107	72 - 145	2	16
Toluene	0.17	U	50.0	53.1		ug/L		106	75 - 136	0	15
trans-1,2-Dichloroethene	0.23	U	50.0	57.2		ug/L		114	66 - 143	1	16
trans-1,3-Dichloropropene	0.17	U	50.0	56.2		ug/L		112	59 - 135	3	14
Trichloroethene	0.20	U	50.0	55.4		ug/L		111	73 - 144	3	17
Trichlorofluoromethane	0.21	U	50.0	56.4		ug/L		113	58 - 139	2	18
Vinyl chloride	0.18	U	50.0	56.6		ug/L		113	56 - 129	2	17
1,2-Dichloroethane	0.20	U	50.0	53.1		ug/L		106	64 - 136	3	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 490-273863/6
Matrix: Water
Analysis Batch: 273863

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/17/15 23:12	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/17/15 23:12	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/17/15 23:12	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/17/15 23:12	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/17/15 23:12	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/17/15 23:12	1

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

Lab Sample ID: MB 490-273863/6
Matrix: Water
Analysis Batch: 273863

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/17/15 23:12	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/17/15 23:12	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/17/15 23:12	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/17/15 23:12	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/17/15 23:12	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/17/15 23:12	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/17/15 23:12	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/17/15 23:12	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/17/15 23:12	1
Acetone	2.7	U	25	2.7	ug/L			08/17/15 23:12	1
Benzene	0.20	U	1.0	0.20	ug/L			08/17/15 23:12	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/17/15 23:12	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/17/15 23:12	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/17/15 23:12	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/17/15 23:12	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/17/15 23:12	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/17/15 23:12	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/17/15 23:12	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/17/15 23:12	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/17/15 23:12	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/17/15 23:12	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/17/15 23:12	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/17/15 23:12	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/17/15 23:12	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/17/15 23:12	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/17/15 23:12	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/17/15 23:12	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/17/15 23:12	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/17/15 23:12	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/17/15 23:12	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/17/15 23:12	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/17/15 23:12	1
Styrene	0.28	U	1.0	0.28	ug/L			08/17/15 23:12	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/17/15 23:12	1
Toluene	0.17	U	1.0	0.17	ug/L			08/17/15 23:12	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/17/15 23:12	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/17/15 23:12	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/17/15 23:12	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/17/15 23:12	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/17/15 23:12	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/17/15 23:12	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/17/15 23:12	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/17/15 23:12*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/17/15 23:12*	*1*

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

Lab Sample ID: MB 490-273863/6
Matrix: Water
Analysis Batch: 273863

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130		08/17/15 23:12	1
Dibromofluoromethane (Surr)	96		70 - 130		08/17/15 23:12	1
Toluene-d8 (Surr)	109		70 - 130		08/17/15 23:12	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130		08/17/15 23:12	1

Lab Sample ID: LCS 490-273863/3
Matrix: Water
Analysis Batch: 273863

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	51.8		ug/L		104	78 - 135
Freon-113	50.0	52.6		ug/L		105	77 - 129
1,1,2,2-Tetrachloroethane	50.0	50.3		ug/L		101	69 - 131
1,1,2-Trichloroethane	50.0	54.6		ug/L		109	80 - 124
1,1-Dichloroethane	50.0	51.5		ug/L		103	78 - 125
1,1-Dichloroethene	50.0	54.0		ug/L		108	79 - 124
1,2,4-Trichlorobenzene	50.0	52.2		ug/L		104	63 - 133
1,2-Dibromo-3-Chloropropane	50.0	50.0		ug/L		100	54 - 125
1,2-Dichlorobenzene	50.0	53.5		ug/L		107	80 - 121
1,2-Dichloropropane	50.0	52.7		ug/L		105	75 - 120
1,3-Dichlorobenzene	50.0	54.2		ug/L		108	80 - 122
1,4-Dichlorobenzene	50.0	49.3		ug/L		99	80 - 120
2-Butanone (MEK)	250	264		ug/L		105	62 - 133
2-Hexanone	250	285		ug/L		114	60 - 142
4-Methyl-2-pentanone (MIBK)	250	266		ug/L		107	60 - 137
Acetone	250	249		ug/L		100	54 - 145
Benzene	50.0	52.6		ug/L		105	80 - 121
Bromoform	50.0	55.7		ug/L		111	46 - 145
Bromomethane	50.0	47.4		ug/L		95	41 - 150
Carbon disulfide	50.0	52.9		ug/L		106	77 - 126
Carbon tetrachloride	50.0	51.9		ug/L		104	64 - 147
Chlorobenzene	50.0	53.5		ug/L		107	80 - 120
Chlorodibromomethane	50.0	54.6		ug/L		109	69 - 133
Chloroethane	50.0	52.5		ug/L		105	72 - 120
Chloroform	50.0	53.3		ug/L		107	73 - 129
Chloromethane	50.0	45.6		ug/L		91	12 - 150
cis-1,2-Dichloroethene	50.0	51.6		ug/L		103	76 - 125
cis-1,3-Dichloropropene	50.0	54.5		ug/L		109	74 - 140
Cyclohexane	50.0	50.8		ug/L		102	73 - 122
Dichlorobromomethane	50.0	52.8		ug/L		106	75 - 129
Dichlorodifluoromethane	50.0	45.7		ug/L		91	37 - 127
Ethylbenzene	50.0	55.9		ug/L		112	80 - 130
1,2-Dibromoethane	50.0	55.3		ug/L		111	80 - 129
Isopropylbenzene	50.0	61.6		ug/L		123	80 - 141
Methyl acetate	250	264		ug/L		105	64 - 150
Methyl tert-butyl ether	50.0	51.5		ug/L		103	72 - 133
Methylcyclohexane	50.0	50.5		ug/L		101	71 - 129
Methylene Chloride	50.0	55.2		ug/L		110	79 - 123

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

Lab Sample ID: LCS 490-273863/3
Matrix: Water
Analysis Batch: 273863

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	50.0	54.8		ug/L		110	80 - 127
Tetrachloroethene	50.0	51.5		ug/L		103	80 - 126
Toluene	50.0	54.5		ug/L		109	80 - 126
trans-1,2-Dichloroethene	50.0	51.3		ug/L		103	79 - 126
trans-1,3-Dichloropropene	50.0	54.6		ug/L		109	63 - 134
Trichloroethene	50.0	55.7		ug/L		111	80 - 123
Trichlorofluoromethane	50.0	49.4		ug/L		99	65 - 124
Vinyl chloride	50.0	49.6		ug/L		99	68 - 120
1,2-Dichloroethane	50.0	52.5		ug/L		105	77 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*

Lab Sample ID: 490-84672-1 MS
Matrix: Water
Analysis Batch: 273863

Client Sample ID: RW-7-080615
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.19	U	50.0	53.2		ug/L		106	76 - 149
Freon-113	0.15	U	50.0	57.2		ug/L		114	72 - 148
1,1,2,2-Tetrachloroethane	0.19	U	50.0	52.4		ug/L		105	56 - 143
1,1,2-Trichloroethane	0.19	U	50.0	52.4		ug/L		105	74 - 134
1,1-Dichloroethane	0.24	U	50.0	53.2		ug/L		106	71 - 139
1,1-Dichloroethene	0.25	U	50.0	56.2		ug/L		112	70 - 142
1,2,4-Trichlorobenzene	0.20	U	50.0	51.1		ug/L		102	60 - 136
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	47.3		ug/L		95	52 - 126
1,2-Dichlorobenzene	0.19	U	50.0	53.6		ug/L		107	79 - 128
1,2-Dichloropropane	0.25	U	50.0	53.5		ug/L		107	67 - 131
1,3-Dichlorobenzene	0.18	U	50.0	54.4		ug/L		109	77 - 131
1,4-Dichlorobenzene	0.17	U	50.0	50.7		ug/L		101	78 - 126
2-Butanone (MEK)	2.6	U	250	268		ug/L		107	50 - 138
2-Hexanone	1.3	U	250	278		ug/L		111	50 - 150
4-Methyl-2-pentanone (MIBK)	0.81	U	250	258		ug/L		103	50 - 147
Acetone	2.7	U	250	251		ug/L		100	45 - 141
Benzene	0.20	U	50.0	53.3		ug/L		107	75 - 133
Bromoform	0.29	U	50.0	53.7		ug/L		107	42 - 147
Bromomethane	0.35	U	50.0	50.1		ug/L		100	16 - 163
Carbon disulfide	0.22	U	50.0	54.8		ug/L		110	48 - 152
Carbon tetrachloride	0.18	U	50.0	53.1		ug/L		106	62 - 164
Chlorobenzene	0.18	U	50.0	52.4		ug/L		105	80 - 129
Chlorodibromomethane	0.25	U	50.0	55.0		ug/L		110	66 - 140
Chloroethane	0.36	U	50.0	55.1		ug/L		110	58 - 137
Chloroform	0.23	U	50.0	52.4		ug/L		105	66 - 138
Chloromethane	0.36	U	50.0	44.8		ug/L		90	10 - 169
cis-1,2-Dichloroethene	0.21	U	50.0	54.1		ug/L		108	68 - 138

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

Lab Sample ID: 490-84672-1 MS
Matrix: Water
Analysis Batch: 273863

Client Sample ID: RW-7-080615
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	0.17	U	50.0	54.1		ug/L		108	71 - 141
Cyclohexane	0.13	U	50.0	58.3		ug/L		117	58 - 144
Dichlorobromomethane	0.17	U	50.0	52.4		ug/L		105	70 - 140
Dichlorodifluoromethane	0.17	U	50.0	45.5		ug/L		91	40 - 127
Ethylbenzene	0.19	U	50.0	55.7		ug/L		111	79 - 139
1,2-Dibromoethane	0.21	U	50.0	53.0		ug/L		106	75 - 137
Isopropylbenzene	0.33	U	50.0	60.1		ug/L		120	80 - 153
Methyl acetate	0.58	U	250	261		ug/L		104	30 - 165
Methyl tert-butyl ether	0.17	U	50.0	50.6		ug/L		101	66 - 141
Methylcyclohexane	0.090	U	50.0	56.8		ug/L		114	59 - 151
Methylene Chloride	0.22	U	50.0	54.1		ug/L		108	64 - 139
Styrene	0.28	U	50.0	52.3		ug/L		105	61 - 148
Tetrachloroethene	0.14	U	50.0	58.7		ug/L		117	72 - 145
Toluene	0.17	U	50.0	53.2		ug/L		106	75 - 136
trans-1,2-Dichloroethene	0.23	U	50.0	54.1		ug/L		108	66 - 143
trans-1,3-Dichloropropene	0.17	U	50.0	52.7		ug/L		105	59 - 135
Trichloroethene	0.20	U	50.0	52.0		ug/L		104	73 - 144
Trichlorofluoromethane	0.21	U	50.0	54.0		ug/L		108	58 - 139
Vinyl chloride	0.18	U	50.0	51.9		ug/L		104	56 - 129
1,2-Dichloroethane	0.20	U	50.0	50.6		ug/L		101	64 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*

Lab Sample ID: 490-84672-1 MSD
Matrix: Water
Analysis Batch: 273863

Client Sample ID: RW-7-080615
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.19	U	50.0	58.1		ug/L		116	76 - 149	9	17
Freon-113	0.15	U	50.0	59.5		ug/L		119	72 - 148	4	18
1,1,2,2-Tetrachloroethane	0.19	U	50.0	54.3		ug/L		109	56 - 143	4	20
1,1,2-Trichloroethane	0.19	U	50.0	52.2		ug/L		104	74 - 134	0	15
1,1-Dichloroethane	0.24	U	50.0	56.0		ug/L		112	71 - 139	5	17
1,1-Dichloroethene	0.25	U	50.0	57.2		ug/L		114	70 - 142	2	17
1,2,4-Trichlorobenzene	0.20	U	50.0	58.7		ug/L		117	60 - 136	14	19
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	51.3		ug/L		103	52 - 126	8	24
1,2-Dichlorobenzene	0.19	U	50.0	58.4		ug/L		117	79 - 128	9	15
1,2-Dichloropropane	0.25	U	50.0	56.4		ug/L		113	67 - 131	5	17
1,3-Dichlorobenzene	0.18	U	50.0	55.4		ug/L		111	77 - 131	2	15
1,4-Dichlorobenzene	0.17	U	50.0	51.8		ug/L		104	78 - 126	2	15
2-Butanone (MEK)	2.6	U	250	275		ug/L		110	50 - 138	2	19
2-Hexanone	1.3	U	250	283		ug/L		113	50 - 150	2	15
4-Methyl-2-pentanone (MIBK)	0.81	U	250	265		ug/L		106	50 - 147	3	17
Acetone	2.7	U	250	266		ug/L		106	45 - 141	6	21

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

Lab Sample ID: 490-84672-1 MSD
Matrix: Water
Analysis Batch: 273863

Client Sample ID: RW-7-080615
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.20	U	50.0	56.0		ug/L		112	75 - 133	5	17
Bromoform	0.29	U	50.0	58.7		ug/L		117	42 - 147	9	16
Bromomethane	0.35	U	50.0	50.7		ug/L		101	16 - 163	1	50
Carbon disulfide	0.22	U	50.0	56.6		ug/L		113	48 - 152	3	21
Carbon tetrachloride	0.18	U	50.0	58.9		ug/L		118	62 - 164	10	19
Chlorobenzene	0.18	U	50.0	54.2		ug/L		108	80 - 129	3	14
Chlorodibromomethane	0.25	U	50.0	56.5		ug/L		113	66 - 140	3	15
Chloroethane	0.36	U	50.0	56.5		ug/L		113	58 - 137	3	20
Chloroform	0.23	U	50.0	56.3		ug/L		113	66 - 138	7	18
Chloromethane	0.36	U	50.0	46.2		ug/L		92	10 - 169	3	31
cis-1,2-Dichloroethene	0.21	U	50.0	56.2		ug/L		112	68 - 138	4	17
cis-1,3-Dichloropropene	0.17	U	50.0	54.7		ug/L		109	71 - 141	1	15
Cyclohexane	0.13	U	50.0	62.2		ug/L		124	58 - 144	6	16
Dichlorobromomethane	0.17	U	50.0	55.8		ug/L		112	70 - 140	6	18
Dichlorodifluoromethane	0.17	U	50.0	45.9		ug/L		92	40 - 127	1	18
Ethylbenzene	0.19	U	50.0	57.7		ug/L		115	79 - 139	4	15
1,2-Dibromoethane	0.21	U	50.0	55.1		ug/L		110	75 - 137	4	15
Isopropylbenzene	0.33	U	50.0	63.8		ug/L		128	80 - 153	6	16
Methyl acetate	0.58	U	250	269		ug/L		108	30 - 165	3	31
Methyl tert-butyl ether	0.17	U	50.0	52.7		ug/L		105	66 - 141	4	16
Methylcyclohexane	0.090	U	50.0	60.2		ug/L		120	59 - 151	6	19
Methylene Chloride	0.22	U	50.0	56.2		ug/L		112	64 - 139	4	17
Styrene	0.28	U	50.0	54.7		ug/L		109	61 - 148	4	24
Tetrachloroethene	0.14	U	50.0	60.1		ug/L		120	72 - 145	2	16
Toluene	0.17	U	50.0	54.3		ug/L		109	75 - 136	2	15
trans-1,2-Dichloroethene	0.23	U	50.0	56.5		ug/L		113	66 - 143	4	16
trans-1,3-Dichloropropene	0.17	U	50.0	54.0		ug/L		108	59 - 135	2	14
Trichloroethene	0.20	U	50.0	57.2		ug/L		114	73 - 144	9	17
Trichlorofluoromethane	0.21	U	50.0	55.8		ug/L		112	58 - 139	3	18
Vinyl chloride	0.18	U	50.0	53.2		ug/L		106	56 - 129	2	17
1,2-Dichloroethane	0.20	U	50.0	54.4		ug/L		109	64 - 136	7	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*

Lab Sample ID: MB 490-273958/7
Matrix: Water
Analysis Batch: 273958

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 13:55	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 13:55	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 13:55	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 13:55	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 13:55	1

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

Lab Sample ID: MB 490-273958/7
Matrix: Water
Analysis Batch: 273958

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 13:55	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 13:55	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 13:55	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 13:55	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 13:55	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 13:55	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 13:55	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 13:55	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 13:55	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 13:55	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 13:55	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 13:55	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 13:55	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 13:55	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 13:55	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 13:55	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 13:55	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 13:55	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 13:55	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 13:55	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 13:55	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 13:55	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 13:55	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 13:55	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 13:55	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 13:55	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 13:55	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 13:55	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 13:55	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 13:55	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 13:55	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 13:55	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 13:55	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 13:55	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 13:55	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 13:55	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 13:55*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 13:55*	*1*

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

Lab Sample ID: MB 490-273958/7
Matrix: Water
Analysis Batch: 273958

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/18/15 13:55*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*08/18/15 13:55*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/18/15 13:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*08/18/15 13:55*	*1*

Lab Sample ID: LCS 490-273958/3
Matrix: Water
Analysis Batch: 273958

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	50.2		ug/L		100	78 - 135
Freon-113	50.0	55.4		ug/L		111	77 - 129
1,1,2,2-Tetrachloroethane	50.0	54.8		ug/L		110	69 - 131
1,1,2-Trichloroethane	50.0	52.3		ug/L		105	80 - 124
1,1-Dichloroethane	50.0	50.0		ug/L		100	78 - 125
1,1-Dichloroethene	50.0	52.6		ug/L		105	79 - 124
1,2,4-Trichlorobenzene	50.0	51.6		ug/L		103	63 - 133
1,2-Dibromo-3-Chloropropane	50.0	54.0		ug/L		108	54 - 125
1,2-Dichlorobenzene	50.0	54.7		ug/L		109	80 - 121
1,2-Dichloropropane	50.0	51.4		ug/L		103	75 - 120
1,3-Dichlorobenzene	50.0	53.4		ug/L		107	80 - 122
1,4-Dichlorobenzene	50.0	53.1		ug/L		106	80 - 120
2-Butanone (MEK)	250	286		ug/L		114	62 - 133
2-Hexanone	250	271		ug/L		108	60 - 142
4-Methyl-2-pentanone (MIBK)	250	300		ug/L		120	60 - 137
Acetone	250	284		ug/L		114	54 - 145
Benzene	50.0	50.8		ug/L		102	80 - 121
Bromoform	50.0	54.3		ug/L		109	46 - 145
Bromomethane	50.0	43.1		ug/L		86	41 - 150
Carbon disulfide	50.0	54.4		ug/L		109	77 - 126
Carbon tetrachloride	50.0	52.6		ug/L		105	64 - 147
Chlorobenzene	50.0	50.2		ug/L		100	80 - 120
Chlorodibromomethane	50.0	55.2		ug/L		110	69 - 133
Chloroethane	50.0	49.1		ug/L		98	72 - 120
Chloroform	50.0	56.5		ug/L		113	73 - 129
Chloromethane	50.0	49.9		ug/L		100	12 - 150
cis-1,2-Dichloroethene	50.0	54.6		ug/L		109	76 - 125
cis-1,3-Dichloropropene	50.0	53.6		ug/L		107	74 - 140
Cyclohexane	50.0	54.4		ug/L		109	73 - 122
Dichlorobromomethane	50.0	52.4		ug/L		105	75 - 129
Dichlorodifluoromethane	50.0	57.0		ug/L		114	37 - 127
Ethylbenzene	50.0	51.7		ug/L		103	80 - 130
1,2-Dibromoethane	50.0	54.4		ug/L		109	80 - 129
Isopropylbenzene	50.0	53.0		ug/L		106	80 - 141
Methyl acetate	250	295		ug/L		118	64 - 150
Methyl tert-butyl ether	50.0	52.6		ug/L		105	72 - 133
Methylcyclohexane	50.0	50.1		ug/L		100	71 - 129
Methylene Chloride	50.0	53.1		ug/L		106	79 - 123

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

Lab Sample ID: LCS 490-273958/3
Matrix: Water
Analysis Batch: 273958

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	50.0	50.9		ug/L		102	80 - 127
Tetrachloroethene	50.0	48.4		ug/L		97	80 - 126
Toluene	50.0	49.0		ug/L		98	80 - 126
trans-1,2-Dichloroethene	50.0	51.8		ug/L		104	79 - 126
trans-1,3-Dichloropropene	50.0	55.1		ug/L		110	63 - 134
Trichloroethene	50.0	49.8		ug/L		100	80 - 123
Trichlorofluoromethane	50.0	50.4		ug/L		101	65 - 124
Vinyl chloride	50.0	51.7		ug/L		103	68 - 120
1,2-Dichloroethane	50.0	50.0		ug/L		100	77 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 490-273958/4
Matrix: Water
Analysis Batch: 273958

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	50.0	48.2		ug/L		96	78 - 135	4	17
Freon-113	50.0	53.3		ug/L		107	77 - 129	4	18
1,1,2,2-Tetrachloroethane	50.0	54.9		ug/L		110	69 - 131	0	20
1,1,2-Trichloroethane	50.0	52.6		ug/L		105	80 - 124	1	15
1,1-Dichloroethane	50.0	48.4		ug/L		97	78 - 125	3	17
1,1-Dichloroethene	50.0	50.5		ug/L		101	79 - 124	4	17
1,2,4-Trichlorobenzene	50.0	51.7		ug/L		103	63 - 133	0	19
1,2-Dibromo-3-Chloropropane	50.0	55.2		ug/L		110	54 - 125	2	24
1,2-Dichlorobenzene	50.0	53.6		ug/L		107	80 - 121	2	15
1,2-Dichloropropane	50.0	50.9		ug/L		102	75 - 120	1	17
1,3-Dichlorobenzene	50.0	52.2		ug/L		104	80 - 122	2	15
1,4-Dichlorobenzene	50.0	51.4		ug/L		103	80 - 120	3	15
2-Butanone (MEK)	250	263		ug/L		105	62 - 133	8	19
2-Hexanone	250	279		ug/L		112	60 - 142	3	15
4-Methyl-2-pentanone (MIBK)	250	308		ug/L		123	60 - 137	3	17
Acetone	250	288		ug/L		115	54 - 145	1	21
Benzene	50.0	49.4		ug/L		99	80 - 121	3	17
Bromoform	50.0	55.2		ug/L		110	46 - 145	2	16
Bromomethane	50.0	42.7		ug/L		85	41 - 150	1	50
Carbon disulfide	50.0	52.9		ug/L		106	77 - 126	3	21
Carbon tetrachloride	50.0	51.6		ug/L		103	64 - 147	2	19
Chlorobenzene	50.0	49.4		ug/L		99	80 - 120	2	14
Chlorodibromomethane	50.0	55.4		ug/L		111	69 - 133	0	15
Chloroethane	50.0	48.0		ug/L		96	72 - 120	2	20
Chloroform	50.0	54.9		ug/L		110	73 - 129	3	18
Chloromethane	50.0	49.0		ug/L		98	12 - 150	2	31
cis-1,2-Dichloroethene	50.0	49.2		ug/L		98	76 - 125	10	17

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

Lab Sample ID: LCSD 490-273958/4
Matrix: Water
Analysis Batch: 273958

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene			50.0	54.3		ug/L		109	74 - 140	1	15
Cyclohexane			50.0	53.1		ug/L		106	73 - 122	2	16
Dichlorobromomethane			50.0	51.6		ug/L		103	75 - 129	1	18
Dichlorodifluoromethane			50.0	55.0		ug/L		110	37 - 127	4	18
Ethylbenzene			50.0	50.5		ug/L		101	80 - 130	2	15
1,2-Dibromoethane			50.0	54.0		ug/L		108	80 - 129	1	15
Isopropylbenzene			50.0	51.9		ug/L		104	80 - 141	2	16
Methyl acetate			250	296		ug/L		119	64 - 150	1	31
Methyl tert-butyl ether			50.0	52.1		ug/L		104	72 - 133	1	16
Methylcyclohexane			50.0	48.1		ug/L		96	71 - 129	4	19
Methylene Chloride			50.0	51.6		ug/L		103	79 - 123	3	17
Styrene			50.0	50.2		ug/L		100	80 - 127	1	24
Tetrachloroethene			50.0	47.2		ug/L		94	80 - 126	2	16
Toluene			50.0	48.5		ug/L		97	80 - 126	1	15
trans-1,2-Dichloroethene			50.0	49.8		ug/L		100	79 - 126	4	16
trans-1,3-Dichloropropene			50.0	56.4		ug/L		113	63 - 134	2	14
Trichloroethene			50.0	49.9		ug/L		100	80 - 123	0	17
Trichlorofluoromethane			50.0	49.5		ug/L		99	65 - 124	2	18
Vinyl chloride			50.0	49.8		ug/L		100	68 - 120	4	17
1,2-Dichloroethane			50.0	49.8		ug/L		100	77 - 121	0	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 490-273991/7
Matrix: Water
Analysis Batch: 273991

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/18/15 13:47	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/18/15 13:47	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/18/15 13:47	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/18/15 13:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/18/15 13:47*	*1*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*08/18/15 13:47*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/18/15 13:47*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/18/15 13:47*	*1*

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

Lab Sample ID: LCS 490-273991/3
Matrix: Water
Analysis Batch: 273991

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.500	0.480		ug/L		96	70 - 131
1,2-Dibromo-3-Chloropropane	0.500	0.454		ug/L		91	40 - 160
1,4-Dioxane	10.0	9.87	J	ug/L		99	40 - 160
Ethylene Dibromide	0.500	0.470		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 490-273991/4
Matrix: Water
Analysis Batch: 273991

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.500	0.480		ug/L		96	70 - 131	0	19
1,2-Dibromo-3-Chloropropane	0.500	0.456		ug/L		91	40 - 160	0	20
1,4-Dioxane	10.0	9.92	J	ug/L		99	40 - 160	0	20
Ethylene Dibromide	0.500	0.466		ug/L		93	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: 490-84672-1 MS
Matrix: Water
Analysis Batch: 273991

Client Sample ID: RW-7-080615
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.010	U	0.500	0.464		ug/L		93	53 - 144
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.421		ug/L		84	40 - 160
1,4-Dioxane	0.27	U	10.0	9.08	J	ug/L		91	40 - 160
Ethylene Dibromide	0.010	U	0.500	0.437		ug/L		87	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

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

Lab Sample ID: 490-84672-1 MSD
Matrix: Water
Analysis Batch: 273991

Client Sample ID: RW-7-080615
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.010	U	0.500	0.478		ug/L		96	53 - 144	3	19
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.404		ug/L		81	40 - 160	4	20
1,4-Dioxane	0.27	U	10.0	8.96	J	ug/L		90	40 - 160	1	20
Ethylene Dibromide	0.010	U	0.500	0.451		ug/L		90	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

Lab Sample ID: MB 490-274966/9
Matrix: Water
Analysis Batch: 274966

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/20/15 18:01	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/20/15 18:01	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/20/15 18:01	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/20/15 18:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/20/15 18:01*	*1*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*08/20/15 18:01*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/20/15 18:01*	*1*
Toluene-d8 (Surr)	*111*		*70 - 130*		*08/20/15 18:01*	*1*

Lab Sample ID: LCS 490-274966/6
Matrix: Water
Analysis Batch: 274966

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.500	0.457		ug/L		91	70 - 131
1,2-Dibromo-3-Chloropropane	0.500	0.451		ug/L		90	40 - 160
1,4-Dioxane	10.0	9.98	J	ug/L		100	40 - 160
Ethylene Dibromide	0.500	0.430		ug/L		86	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*110*		*70 - 130*

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

Lab Sample ID: LCSD 490-274966/10
Matrix: Water
Analysis Batch: 274966

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.500	0.462		ug/L		92	70 - 131	1	19
1,2-Dibromo-3-Chloropropane			0.500	0.457		ug/L		91	40 - 160	1	20
1,4-Dioxane			10.0	12.1		ug/L		121	40 - 160	19	20
Ethylene Dibromide			0.500	0.426		ug/L		85	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*110*		*70 - 130*

Lab Sample ID: 490-84924-D-5 MS
Matrix: Water
Analysis Batch: 274966

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.010	U	0.500	0.408		ug/L		82	53 - 144
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.408		ug/L		82	40 - 160
1,4-Dioxane	5.7	J F1	10.0	7.27	J F1	ug/L		15	40 - 160
Ethylene Dibromide	0.010	U	0.500	0.404		ug/L		81	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: 490-84924-D-5 MSD
Matrix: Water
Analysis Batch: 274966

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.010	U	0.500	0.388		ug/L		78	53 - 144	5	19
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.392		ug/L		78	40 - 160	4	20
1,4-Dioxane	5.7	J F1	10.0	8.46	J F1	ug/L		27	40 - 160	15	20
Ethylene Dibromide	0.010	U	0.500	0.375		ug/L		75	70 - 130	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 490-272786/1-A
Matrix: Water
Analysis Batch: 273026

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272786

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 18:14	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/12/15 17:47	08/13/15 18:14	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/12/15 17:47	08/13/15 18:14	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/12/15 17:47	08/13/15 18:14	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/12/15 17:47	08/13/15 18:14	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/12/15 17:47	08/13/15 18:14	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 18:14	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/12/15 17:47	08/13/15 18:14	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/12/15 17:47	08/13/15 18:14	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 18:14	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 18:14	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/12/15 17:47	08/13/15 18:14	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/12/15 17:47	08/13/15 18:14	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 18:14	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/12/15 17:47	08/13/15 18:14	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/12/15 17:47	08/13/15 18:14	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/12/15 17:47	08/13/15 18:14	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 18:14	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/12/15 17:47	08/13/15 18:14	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/12/15 17:47	08/13/15 18:14	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 18:14	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/12/15 17:47	08/13/15 18:14	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/12/15 17:47	08/13/15 18:14	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 18:14	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/12/15 17:47	08/13/15 18:14	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/12/15 17:47	08/13/15 18:14	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 18:14	1
Acetophenone	2.3	U	10	2.3	ug/L		08/12/15 17:47	08/13/15 18:14	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/12/15 17:47	08/13/15 18:14	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/12/15 17:47	08/13/15 18:14	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/12/15 17:47	08/13/15 18:14	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 18:14	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 18:14	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 18:14	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 18:14	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/12/15 17:47	08/13/15 18:14	1
Carbazole	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 18:14	1
Caprolactam	2.4	U	10	2.4	ug/L		08/12/15 17:47	08/13/15 18:14	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/12/15 17:47	08/13/15 18:14	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/12/15 17:47	08/13/15 18:14	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 18:14	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/12/15 17:47	08/13/15 18:14	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 18:14	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 18:14	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 18:14	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/12/15 17:47	08/13/15 18:14	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/12/15 17:47	08/13/15 18:14	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/12/15 17:47	08/13/15 18:14	1

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

Lab Sample ID: MB 490-272786/1-A
Matrix: Water
Analysis Batch: 273026

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272786

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/12/15 17:47	08/13/15 18:14	1
Isophorone	3.1	U	10	3.1	ug/L		08/12/15 17:47	08/13/15 18:14	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/12/15 17:47	08/13/15 18:14	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/12/15 17:47	08/13/15 18:14	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/12/15 17:47	08/13/15 18:14	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/12/15 17:47	08/13/15 18:14	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/12/15 17:47	08/13/15 18:14	1
Phenol	1.5	U	10	1.5	ug/L		08/12/15 17:47	08/13/15 18:14	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/12/15 17:47	08/13/15 18:14	1
Diphenyl	2.2	U	10	2.2	ug/L		08/12/15 17:47	08/13/15 18:14	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/12/15 17:47	08/13/15 18:14	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/12/15 17:47	08/13/15 18:14	1
Atrazine	2.9	U	10	2.9	ug/L		08/12/15 17:47	08/13/15 18:14	1

Tentatively Identified Compound	*Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/12/15 17:47*	*08/13/15 18:14*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*67*		*10 - 120*	*08/12/15 17:47*	*08/13/15 18:14*	*1*
2-Fluorobiphenyl (Surr)	*62*		*29 - 120*	*08/12/15 17:47*	*08/13/15 18:14*	*1*
2-Fluorophenol (Surr)	*37*		*10 - 120*	*08/12/15 17:47*	*08/13/15 18:14*	*1*
Nitrobenzene-d5 (Surr)	*60*		*27 - 120*	*08/12/15 17:47*	*08/13/15 18:14*	*1*
Phenol-d5 (Surr)	*24*		*10 - 120*	*08/12/15 17:47*	*08/13/15 18:14*	*1*
Terphenyl-d14 (Surr)	*69*		*13 - 120*	*08/12/15 17:47*	*08/13/15 18:14*	*1*

Lab Sample ID: LCS 490-272786/2-A
Matrix: Water
Analysis Batch: 273026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272786

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	40.0	35.4		ug/L		89	46 - 120
1,2,4,5-Tetrachlorobenzene	40.0	32.8		ug/L		82	25 - 120
2,3,4,6-Tetrachlorophenol	40.0	41.9		ug/L		105	31 - 148
2,4,5-Trichlorophenol	40.0	37.8		ug/L		94	40 - 129
2,4,6-Trichlorophenol	40.0	36.5		ug/L		91	39 - 135
2,4-Dichlorophenol	40.0	33.2		ug/L		83	38 - 120
2,4-Dimethylphenol	40.0	30.6		ug/L		76	21 - 126
2,4-Dinitrophenol	80.0	64.4		ug/L		81	20 - 150
2,4-Dinitrotoluene	40.0	43.2		ug/L		108	46 - 132
2,6-Dinitrotoluene	40.0	40.5		ug/L		101	54 - 128
2-Chloronaphthalene	40.0	33.8		ug/L		85	39 - 120
2-Chlorophenol	40.0	30.5		ug/L		76	40 - 120
2-Methylnaphthalene	40.0	31.6		ug/L		79	31 - 120
2-Methylphenol	40.0	29.3		ug/L		73	38 - 120
2-Nitroaniline	40.0	40.1		ug/L		100	46 - 131
2-Nitrophenol	40.0	34.3		ug/L		86	32 - 120
3,3'-Dichlorobenzidine	40.0	43.3		ug/L		108	46 - 129

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

Lab Sample ID: LCS 490-272786/2-A
Matrix: Water
Analysis Batch: 273026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272786

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3 & 4 Methylphenol	40.0	25.8		ug/L		64	33 - 120
3-Nitroaniline	40.0	31.2		ug/L		78	54 - 121
4,6-Dinitro-2-methylphenol	80.0	82.2		ug/L		103	19 - 150
4-Bromophenyl phenyl ether	40.0	37.0		ug/L		93	47 - 127
4-Chloro-3-methylphenol	40.0	35.0		ug/L		88	44 - 120
4-Chloroaniline	40.0	19.4		ug/L		48	44 - 120
4-Chlorophenyl phenyl ether	40.0	36.3		ug/L		91	50 - 120
4-Nitroaniline	40.0	40.9		ug/L		102	55 - 123
4-Nitrophenol	80.0	34.3		ug/L		43	10 - 120
Acenaphthylene	40.0	34.7		ug/L		87	48 - 120
Acetophenone	40.0	33.4		ug/L		83	52 - 133
Anthracene	40.0	39.9		ug/L		100	58 - 130
Benzaldehyde	40.0	55.9	*	ug/L		140	34 - 120
Benzo[g,h,i]perylene	40.0	38.7		ug/L		97	51 - 123
Benzo[k]fluoranthene	40.0	35.0		ug/L		88	51 - 120
Bis(2-chloroethoxy)methane	40.0	32.0		ug/L		80	44 - 120
Bis(2-chloroethyl)ether	40.0	34.9		ug/L		87	47 - 120
Butyl benzyl phthalate	40.0	40.4		ug/L		101	51 - 146
Bis(2-ethylhexyl) phthalate	40.0	41.4		ug/L		103	47 - 138
Carbazole	40.0	41.6		ug/L		104	54 - 123
Caprolactam	40.0	10.5		ug/L		26	10 - 120
Chrysene	40.0	37.5		ug/L		94	55 - 120
Dibenz(a,h)anthracene	40.0	39.1		ug/L		98	50 - 125
Dibenzofuran	40.0	35.9		ug/L		90	50 - 120
Diethyl phthalate	40.0	41.3		ug/L		103	54 - 128
Dimethyl phthalate	40.0	39.1		ug/L		98	53 - 127
Di-n-butyl phthalate	40.0	41.5		ug/L		104	54 - 140
Fluoranthene	40.0	42.2		ug/L		106	56 - 120
Fluorene	40.0	38.0		ug/L		95	52 - 120
Hexachlorocyclopentadiene	40.0	20.2		ug/L		50	17 - 120
Hexachloroethane	40.0	29.3		ug/L		73	30 - 120
Indeno[1,2,3-cd]pyrene	40.0	38.1		ug/L		95	54 - 125
Isophorone	40.0	28.1		ug/L		70	47 - 120
Naphthalene	40.0	32.0		ug/L		80	37 - 120
Nitrobenzene	40.0	32.7		ug/L		82	36 - 120
N-Nitrosodi-n-propylamine	40.0	34.0		ug/L		85	51 - 120
N-Nitrosodiphenylamine	80.0	76.9		ug/L		96	58 - 149
Phenanthrene	40.0	38.1		ug/L		95	56 - 120
Phenol	40.0	13.7		ug/L		34	14 - 120
Pyrene	40.0	37.1		ug/L		93	53 - 129
Diphenyl	40.0	34.0		ug/L		85	10 - 146
Di-n-octyl phthalate	40.0	41.9		ug/L		105	50 - 142
2,2'-oxybis[1-chloropropane]	40.0	30.7		ug/L		77	44 - 120
Atrazine	40.0	18.1		ug/L		45	24 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*48*		*10 - 120*
2-Fluorobiphenyl (Surr)	*40*		*29 - 120*

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

Lab Sample ID: LCS 490-272786/2-A
Matrix: Water
Analysis Batch: 273026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272786

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol (Surr)	*24*		*10 - 120*
Nitrobenzene-d5 (Surr)	*37*		*27 - 120*
Phenol-d5 (Surr)	*16*		*10 - 120*
Terphenyl-d14 (Surr)	*45*		*13 - 120*

Lab Sample ID: 490-84672-1 MS
Matrix: Water
Analysis Batch: 273026

Client Sample ID: RW-7-080615
Prep Type: Total/NA
Prep Batch: 272786

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.32	U F1	40.0	53.5	F1	ug/L		134	46 - 120
1,2,4,5-Tetrachlorobenzene	2.1	U	40.0	47.7		ug/L		119	10 - 200
2,3,4,6-Tetrachlorophenol	6.9	U	40.0	63.4		ug/L		159	10 - 200
2,4,5-Trichlorophenol	7.1	U F1	40.0	56.3	F1	ug/L		141	40 - 129
2,4,6-Trichlorophenol	6.8	U	40.0	53.9		ug/L		135	39 - 135
2,4-Dichlorophenol	5.6	U	40.0	47.8		ug/L		120	38 - 120
2,4-Dimethylphenol	4.2	U	40.0	44.6		ug/L		112	11 - 130
2,4-Dinitrophenol	5.9	U	80.0	113		ug/L		141	10 - 176
2,4-Dinitrotoluene	3.2	U F1	40.0	65.5	F1	ug/L		164	46 - 134
2,6-Dinitrotoluene	2.3	U F1	40.0	62.0	F1	ug/L		155	54 - 128
2-Chloronaphthalene	2.8	U F1	40.0	49.3	F1	ug/L		123	39 - 120
2-Chlorophenol	4.8	U	40.0	43.9		ug/L		110	40 - 120
2-Methylnaphthalene	0.40	U	40.0	46.2		ug/L		115	31 - 120
2-Methylphenol	2.3	U	40.0	40.9		ug/L		102	36 - 120
2-Nitroaniline	3.7	U F1	40.0	61.7	F1	ug/L		154	46 - 131
2-Nitrophenol	5.3	U F1	40.0	49.7	F1	ug/L		124	32 - 120
3,3'-Dichlorobenzidine	3.3	U	40.0	49.4		ug/L		123	10 - 130
3 & 4 Methylphenol	2.2	U	40.0	36.0		ug/L		90	32 - 120
3-Nitroaniline	2.7	U	40.0	48.4		ug/L		121	38 - 121
4,6-Dinitro-2-methylphenol	9.3	U	80.0	123		ug/L		154	10 - 157
4-Bromophenyl phenyl ether	2.7	U F1	40.0	55.5	F1	ug/L		139	47 - 127
4-Chloro-3-methylphenol	4.5	U F1	40.0	50.9	F1	ug/L		127	38 - 120
4-Chloroaniline	4.2	U	40.0	28.5		ug/L		71	35 - 120
4-Chlorophenyl phenyl ether	2.8	U F1	40.0	54.2	F1	ug/L		135	50 - 120
4-Nitroaniline	3.1	U F1	40.0	62.0	F1	ug/L		155	47 - 124
4-Nitrophenol	5.4	U	80.0	49.6		ug/L		62	10 - 120
Acenaphthylene	0.35	U F1	40.0	51.3	F1	ug/L		128	48 - 120
Acetophenone	2.3	U	40.0	49.5		ug/L		124	10 - 200
Anthracene	0.38	U F1	40.0	55.8	F1	ug/L		139	56 - 130
Benzaldehyde	5.7	U F1 *	40.0	83.9	E F1	ug/L		210	10 - 200
Benzo[g,h,i]perylene	0.62	U	40.0	48.5		ug/L		121	48 - 137
Benzo[k]fluoranthene	0.37	U	40.0	47.0		ug/L		117	44 - 134
Bis(2-chloroethoxy)methane	3.1	U	40.0	47.1		ug/L		118	41 - 120
Bis(2-chloroethyl)ether	2.8	U	40.0	46.4		ug/L		116	42 - 120
Butyl benzyl phthalate	2.5	U	40.0	56.9		ug/L		142	51 - 146
Bis(2-ethylhexyl) phthalate	6.0	U	40.0	53.2		ug/L		133	44 - 138
Carbazole	2.8	U F1	40.0	61.5	F1	ug/L		154	53 - 123
Caprolactam	2.4	U F2	40.0	7.16	J	ug/L		18	10 - 200

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

Lab Sample ID: 490-84672-1 MS
Matrix: Water
Analysis Batch: 273026

Client Sample ID: RW-7-080615
Prep Type: Total/NA
Prep Batch: 272786

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chrysene	0.33	U F1	40.0	49.5	F1	ug/L		124	54 - 123
Dibenz(a,h)anthracene	0.45	U	40.0	49.5		ug/L		124	50 - 136
Dibenzofuran	2.9	U F1	40.0	52.9	F1	ug/L		132	50 - 120
Diethyl phthalate	3.0	U F1	40.0	61.5	F1	ug/L		154	53 - 128
Dimethyl phthalate	3.1	U F1	40.0	59.6	F1	ug/L		149	53 - 127
Di-n-butyl phthalate	2.5	U F1	40.0	60.0	F1	ug/L		150	54 - 140
Fluoranthene	0.32	U F1	40.0	60.3	F1	ug/L		151	56 - 120
Fluorene	0.32	U F1	40.0	57.0	F1	ug/L		143	52 - 120
Hexachlorocyclopentadiene	1.8	U	40.0	31.0		ug/L		78	10 - 120
Hexachloroethane	1.9	U	40.0	43.2		ug/L		108	26 - 120
Indeno[1,2,3-cd]pyrene	0.41	U	40.0	47.9		ug/L		120	50 - 136
Isophorone	3.1	U	40.0	41.1		ug/L		103	42 - 120
Naphthalene	0.37	U	40.0	46.6		ug/L		116	32 - 120
Nitrobenzene	2.7	U	40.0	47.5		ug/L		119	36 - 120
N-Nitrosodi-n-propylamine	3.4	U F1	40.0	50.6	F1	ug/L		127	50 - 121
N-Nitrosodiphenylamine	3.6	U	80.0	113		ug/L		142	45 - 149
Phenanthrene	0.42	U F1	40.0	56.8	F1	ug/L		142	53 - 120
Phenol	1.5	U	40.0	17.5		ug/L		44	10 - 120
Pyrene	0.35	U F1	40.0	53.1	F1	ug/L		133	50 - 129
Diphenyl	2.2	U	40.0	49.5		ug/L		124	10 - 200
Di-n-octyl phthalate	2.5	U	40.0	51.2		ug/L		128	50 - 142
2,2'-oxybis[1-chloropropane]	2.8	U	40.0	46.8		ug/L		117	44 - 120
Atrazine	2.9	U	40.0	23.7		ug/L		59	10 - 200

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*78*		*10 - 120*
2-Fluorobiphenyl (Surr)	*61*		*29 - 120*
2-Fluorophenol (Surr)	*33*		*10 - 120*
Nitrobenzene-d5 (Surr)	*61*		*27 - 120*
Phenol-d5 (Surr)	*22*		*10 - 120*
Terphenyl-d14 (Surr)	*54*		*13 - 120*

Lab Sample ID: 490-84672-1 MSD
Matrix: Water
Analysis Batch: 273026

Client Sample ID: RW-7-080615
Prep Type: Total/NA
Prep Batch: 272786

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	0.32	U F1	40.0	46.3		ug/L		116	46 - 120	15	31
1,2,4,5-Tetrachlorobenzene	2.1	U	40.0	41.2		ug/L		103	10 - 200	15	50
2,3,4,6-Tetrachlorophenol	6.9	U	40.0	57.2		ug/L		143	10 - 200	10	50
2,4,5-Trichlorophenol	7.1	U F1	40.0	50.3		ug/L		126	40 - 129	11	34
2,4,6-Trichlorophenol	6.8	U	40.0	47.2		ug/L		118	39 - 135	13	40
2,4-Dichlorophenol	5.6	U	40.0	41.9		ug/L		105	38 - 120	13	30
2,4-Dimethylphenol	4.2	U	40.0	39.7		ug/L		99	11 - 130	12	48
2,4-Dinitrophenol	5.9	U	80.0	100		ug/L		125	10 - 176	12	31
2,4-Dinitrotoluene	3.2	U F1	40.0	58.7	F1	ug/L		147	46 - 134	11	26
2,6-Dinitrotoluene	2.3	U F1	40.0	54.6	F1	ug/L		137	54 - 128	13	29
2-Chloronaphthalene	2.8	U F1	40.0	42.3		ug/L		106	39 - 120	15	36

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

Lab Sample ID: 490-84672-1 MSD | **Client Sample ID: RW-7-080615**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 273026 | **Prep Batch: 272786**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chlorophenol	4.8	U	40.0	37.3		ug/L		93	40 - 120	16	46
2-Methylnaphthalene	0.40	U	40.0	39.2		ug/L		98	31 - 120	16	35
2-Methylphenol	2.3	U	40.0	37.1		ug/L		93	36 - 120	10	32
2-Nitroaniline	3.7	U F1	40.0	55.0	F1	ug/L		137	46 - 131	11	24
2-Nitrophenol	5.3	U F1	40.0	43.1		ug/L		108	32 - 120	14	31
3,3'-Dichlorobenzidine	3.3	U	40.0	43.7		ug/L		109	10 - 130	12	30
3 & 4 Methylphenol	2.2	U	40.0	33.1		ug/L		83	32 - 120	8	34
3-Nitroaniline	2.7	U	40.0	43.2		ug/L		108	38 - 121	11	26
4,6-Dinitro-2-methylphenol	9.3	U	80.0	113		ug/L		141	10 - 157	8	34
4-Bromophenyl phenyl ether	2.7	U F1	40.0	50.0		ug/L		125	47 - 127	10	29
4-Chloro-3-methylphenol	4.5	U F1	40.0	46.2		ug/L		116	38 - 120	10	22
4-Chloroaniline	4.2	U	40.0	25.0		ug/L		62	35 - 120	13	26
4-Chlorophenyl phenyl ether	2.8	U F1	40.0	48.1		ug/L		120	50 - 120	12	29
4-Nitroaniline	3.1	U F1	40.0	55.0	F1	ug/L		138	47 - 124	12	26
4-Nitrophenol	5.4	U	80.0	50.0		ug/L		62	10 - 120	1	38
Acenaphthylene	0.35	U F1	40.0	44.1		ug/L		110	48 - 120	15	31
Acetophenone	2.3	U	40.0	41.7		ug/L		104	10 - 200	17	50
Anthracene	0.38	U F1	40.0	49.6		ug/L		124	56 - 130	12	28
Benzaldehyde	5.7	U F1 *	40.0	69.2		ug/L		173	10 - 200	19	50
Benzo[g,h,i]perylene	0.62	U	40.0	47.2		ug/L		118	48 - 137	3	27
Benzo[k]fluoranthene	0.37	U	40.0	44.9		ug/L		112	44 - 134	4	32
Bis(2-chloroethoxy)methane	3.1	U	40.0	40.5		ug/L		101	41 - 120	15	31
Bis(2-chloroethyl)ether	2.8	U	40.0	39.0		ug/L		97	42 - 120	17	38
Butyl benzyl phthalate	2.5	U	40.0	52.9		ug/L		132	51 - 146	7	31
Bis(2-ethylhexyl) phthalate	6.0	U	40.0	51.5		ug/L		129	44 - 138	3	28
Carbazole	2.8	U F1	40.0	54.5	F1	ug/L		136	53 - 123	12	29
Caprolactam	2.4	U F2	40.0	14.1	F2	ug/L		35	10 - 200	65	50
Chrysene	0.33	U F1	40.0	45.6		ug/L		114	54 - 123	8	27
Dibenz(a,h)anthracene	0.45	U	40.0	48.3		ug/L		121	50 - 136	2	28
Dibenzofuran	2.9	U F1	40.0	45.7		ug/L		114	50 - 120	14	29
Diethyl phthalate	3.0	U F1	40.0	55.3	F1	ug/L		138	53 - 128	10	28
Dimethyl phthalate	3.1	U F1	40.0	52.3	F1	ug/L		131	53 - 127	13	27
Di-n-butyl phthalate	2.5	U F1	40.0	54.8		ug/L		137	54 - 140	9	27
Fluoranthene	0.32	U F1	40.0	56.0	F1	ug/L		140	56 - 120	7	28
Fluorene	0.32	U F1	40.0	49.6	F1	ug/L		124	52 - 120	14	28
Hexachlorocyclopentadiene	1.8	U	40.0	28.3		ug/L		71	10 - 120	9	43
Hexachloroethane	1.9	U	40.0	36.3		ug/L		91	26 - 120	17	45
Indeno[1,2,3-cd]pyrene	0.41	U	40.0	47.0		ug/L		118	50 - 136	2	27
Isophorone	3.1	U	40.0	35.6		ug/L		89	42 - 120	15	31
Naphthalene	0.37	U	40.0	39.5		ug/L		99	32 - 120	16	37
Nitrobenzene	2.7	U	40.0	40.4		ug/L		101	36 - 120	16	28
N-Nitrosodi-n-propylamine	3.4	U F1	40.0	43.0		ug/L		107	50 - 121	16	37
N-Nitrosodiphenylamine	3.6	U	80.0	100		ug/L		125	45 - 149	12	26
Phenanthrene	0.42	U F1	40.0	50.9	F1	ug/L		127	53 - 120	11	26
Phenol	1.5	U	40.0	16.4		ug/L		41	10 - 120	7	42
Pyrene	0.35	U F1	40.0	49.3		ug/L		123	50 - 129	7	29
Diphenyl	2.2	U	40.0	42.7		ug/L		107	10 - 200	15	50
Di-n-octyl phthalate	2.5	U	40.0	49.3		ug/L		123	50 - 142	4	28

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

Lab Sample ID: 490-84672-1 MSD
Matrix: Water
Analysis Batch: 273026

Client Sample ID: RW-7-080615
Prep Type: Total/NA
Prep Batch: 272786

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,2'-oxybis[1-chloropropane]	2.8	U	40.0	38.9		ug/L		97	44 - 120	18	36
Atrazine	2.9	U	40.0	20.9		ug/L		52	10 - 200	13	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*67*		*10 - 120*
2-Fluorobiphenyl (Surr)	*50*		*29 - 120*
2-Fluorophenol (Surr)	*29*		*10 - 120*
Nitrobenzene-d5 (Surr)	*50*		*27 - 120*
Phenol-d5 (Surr)	*20*		*10 - 120*
Terphenyl-d14 (Surr)	*50*		*13 - 120*

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

Lab Sample ID: MB 490-272534/1-A
Matrix: Water
Analysis Batch: 272619

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272534

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.0063	U	0.013	0.0063	ug/L		08/12/15 07:44	08/12/15 15:39	1
Benzo[a]pyrene	0.0063	U	0.013	0.0063	ug/L		08/12/15 07:44	08/12/15 15:39	1
Benzo[b]fluoranthene	0.0063	U	0.013	0.0063	ug/L		08/12/15 07:44	08/12/15 15:39	1
Hexachlorobenzene	0.0035	U	0.0050	0.0035	ug/L		08/12/15 07:44	08/12/15 15:39	1
Hexachlorobutadiene	0.050	U	0.10	0.050	ug/L		08/12/15 07:44	08/12/15 15:39	1

Lab Sample ID: LCS 490-272534/2-A
Matrix: Water
Analysis Batch: 272619

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272534

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	1.00	0.959		ug/L		96	57 - 120
Benzo[a]pyrene	1.00	0.841		ug/L		84	57 - 124
Benzo[b]fluoranthene	1.00	0.873		ug/L		87	51 - 125
Hexachlorobenzene	1.00	0.758		ug/L		76	48 - 131
Hexachlorobutadiene	1.00	0.776		ug/L		78	28 - 120

Lab Sample ID: MB 490-272922/1-A
Matrix: Water
Analysis Batch: 273767

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272922

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 12:47	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 12:47	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 11:18	08/17/15 12:47	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 11:18	08/17/15 12:47	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 11:18	08/17/15 12:47	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 11:18	08/17/15 12:47	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/13/15 11:18	08/17/15 12:47	1

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

Lab Sample ID: MB 490-272922/1-A
Matrix: Water
Analysis Batch: 273767

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272922

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	63		29 - 120	08/13/15 11:18	08/17/15 12:47	1
Nitrobenzene-d5	55		27 - 120	08/13/15 11:18	08/17/15 12:47	1
Terphenyl-d14	78		13 - 120	08/13/15 11:18	08/17/15 12:47	1
2,4,6-Tribromophenol	78		10 - 120	08/13/15 11:18	08/17/15 12:47	1
2-Fluorophenol	47		10 - 120	08/13/15 11:18	08/17/15 12:47	1
Phenol-d5	33		10 - 120	08/13/15 11:18	08/17/15 12:47	1

Lab Sample ID: LCS 490-272922/2-A
Matrix: Water
Analysis Batch: 273767

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272922

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.670		ug/L		84	57 - 120
Benzo[a]pyrene	0.800	0.605		ug/L		76	57 - 124
Benzo[b]fluoranthene	0.800	0.627		ug/L		78	51 - 125
Hexachlorobenzene	0.800	0.568		ug/L		71	48 - 131
Hexachlorobutadiene	0.800	0.521		ug/L		65	28 - 120
N-Nitrosodimethylamine	0.800	0.354	J	ug/L		44	20 - 120
Pentachlorophenol	1.60	0.910		ug/L		57	21 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	69		29 - 120
Nitrobenzene-d5	66		27 - 120
Terphenyl-d14	84		13 - 120
2,4,6-Tribromophenol	81		10 - 120
2-Fluorophenol	46		10 - 120
Phenol-d5	32		10 - 120

Lab Sample ID: 490-84672-1 MS
Matrix: Water
Analysis Batch: 273767

Client Sample ID: RW-7-080615
Prep Type: Total/NA
Prep Batch: 272922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.025	U	0.800	0.706		ug/L		88	57 - 122
Benzo[a]pyrene	0.025	U	0.800	0.614		ug/L		77	46 - 138
Benzo[b]fluoranthene	0.025	U	0.800	0.668		ug/L		84	45 - 138
Hexachlorobenzene	0.014	U	0.800	0.571		ug/L		71	48 - 131
Hexachlorobutadiene	0.20	U	0.800	0.518		ug/L		65	28 - 120
N-Nitrosodimethylamine	0.20	U	0.800	0.348	J	ug/L		43	10 - 200
Pentachlorophenol	0.10	U F2	1.60	1.21		ug/L		76	21 - 159

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl (Surr)	66		29 - 120
Nitrobenzene-d5	64		27 - 120
Terphenyl-d14	88		13 - 120
2,4,6-Tribromophenol	83		10 - 120
2-Fluorophenol	37		10 - 120

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

Lab Sample ID: 490-84672-1 MS
Matrix: Water
Analysis Batch: 273767

Client Sample ID: RW-7-080615
Prep Type: Total/NA
Prep Batch: 272922

Surrogate	MS %Recovery	MS Qualifier	Limits
Phenol-d5	*27*		*10 - 120*

Lab Sample ID: 490-84672-1 MSD
Matrix: Water
Analysis Batch: 273767

Client Sample ID: RW-7-080615
Prep Type: Total/NA
Prep Batch: 272922

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.025	U	0.800	0.708		ug/L		88	57 - 122	0	27
Benzo[a]pyrene	0.025	U	0.800	0.643		ug/L		80	46 - 138	5	27
Benzo[b]fluoranthene	0.025	U	0.800	0.676		ug/L		85	45 - 138	1	39
Hexachlorobenzene	0.014	U	0.800	0.603		ug/L		75	48 - 131	5	28
Hexachlorobutadiene	0.20	U	0.800	0.535		ug/L		67	28 - 120	3	30
N-Nitrosodimethylamine	0.20	U	0.800	0.374	J	ug/L		47	10 - 200	7	32
Pentachlorophenol	0.10	U F2	1.60	0.868	F2	ug/L		54	21 - 159	33	31

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl (Surr)	*65*		*29 - 120*
Nitrobenzene-d5	*62*		*27 - 120*
Terphenyl-d14	*83*		*13 - 120*
2,4,6-Tribromophenol	*74*		*10 - 120*
2-Fluorophenol	*39*		*10 - 120*
Phenol-d5	*29*		*10 - 120*

Lab Sample ID: MB 490-274147/1-A
Matrix: Water
Analysis Batch: 274426

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/18/15 13:46	08/19/15 19:47	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/18/15 13:46	08/19/15 19:47	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/18/15 13:46	08/19/15 19:47	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/18/15 13:46	08/19/15 19:47	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/18/15 13:46	08/19/15 19:47	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/18/15 13:46	08/19/15 19:47	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/18/15 13:46	08/19/15 19:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	*83*		*29 - 120*	*08/18/15 13:46*	*08/19/15 19:47*	*1*
Nitrobenzene-d5	*76*		*27 - 120*	*08/18/15 13:46*	*08/19/15 19:47*	*1*
Terphenyl-d14	*99*		*13 - 120*	*08/18/15 13:46*	*08/19/15 19:47*	*1*
2,4,6-Tribromophenol	*66*		*10 - 120*	*08/18/15 13:46*	*08/19/15 19:47*	*1*
2-Fluorophenol	*59*		*10 - 120*	*08/18/15 13:46*	*08/19/15 19:47*	*1*
Phenol-d5	*41*		*10 - 120*	*08/18/15 13:46*	*08/19/15 19:47*	*1*

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

Lab Sample ID: LCS 490-274147/2-A
Matrix: Water
Analysis Batch: 274426

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.701		ug/L		88	57 - 120
Benzo[a]pyrene	0.800	0.643		ug/L		80	57 - 124
Benzo[b]fluoranthene	0.800	0.660		ug/L		82	51 - 125
Hexachlorobenzene	0.800	0.639		ug/L		80	48 - 131
Hexachlorobutadiene	0.800	0.631		ug/L		79	28 - 120
N-Nitrosodimethylamine	0.800	0.403	J	ug/L		50	20 - 120
Pentachlorophenol	1.60	0.111	J *	ug/L		7	21 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*
Nitrobenzene-d5	*80*		*27 - 120*
Terphenyl-d14	*95*		*13 - 120*
2,4,6-Tribromophenol	*58*		*10 - 120*
2-Fluorophenol	*52*		*10 - 120*
Phenol-d5	*36*		*10 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-272525/1-A
Matrix: Water
Analysis Batch: 272901

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272525

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.54	U	0.63	0.54	ug/L		08/12/15 06:54	08/13/15 18:57	1
PCB-1221	0.43	U	0.63	0.43	ug/L		08/12/15 06:54	08/13/15 18:57	1
PCB-1232	0.50	U	0.63	0.50	ug/L		08/12/15 06:54	08/13/15 18:57	1
PCB-1242	0.28	U	0.63	0.28	ug/L		08/12/15 06:54	08/13/15 18:57	1
PCB-1248	0.19	U	0.63	0.19	ug/L		08/12/15 06:54	08/13/15 18:57	1
PCB-1254	0.21	U	0.63	0.21	ug/L		08/12/15 06:54	08/13/15 18:57	1
PCB-1260	0.23	U	0.63	0.23	ug/L		08/12/15 06:54	08/13/15 18:57	1
Polychlorinated biphenyls, Total	0.63	U	0.63	0.63	ug/L		08/12/15 06:54	08/13/15 18:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*99*		*10 - 150*	*08/12/15 06:54*	*08/13/15 18:57*	*1*
Tetrachloro-m-xylene	*84*		*10 - 150*	*08/12/15 06:54*	*08/13/15 18:57*	*1*

Lab Sample ID: LCS 490-272525/2-A
Matrix: Water
Analysis Batch: 272901

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272525

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	5.00	3.78		ug/L		76	23 - 139
PCB-1260	5.00	3.59		ug/L		72	36 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*88*		*10 - 150*
Tetrachloro-m-xylene	*86*		*10 - 150*

Lab Sample ID: 490-84672-1 MS
Matrix: Water
Analysis Batch: 272901

Client Sample ID: RW-7-080615
Prep Type: Total/NA
Prep Batch: 272525

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.57	U	5.15	4.51		ug/L		88	23 - 139
PCB-1260	0.24	U	5.15	4.59		ug/L		89	36 - 144

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*118*		*10 - 150*
Tetrachloro-m-xylene	*94*		*10 - 150*

Lab Sample ID: 490-84672-1 MSD
Matrix: Water
Analysis Batch: 272901

Client Sample ID: RW-7-080615
Prep Type: Total/NA
Prep Batch: 272525

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.57	U	5.21	4.07		ug/L		78	23 - 139	10	50
PCB-1260	0.24	U	5.21	4.02		ug/L		77	36 - 144	13	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*108*		*10 - 150*
Tetrachloro-m-xylene	*89*		*10 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 490-274681/3
Matrix: Water
Analysis Batch: 274681

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			08/20/15 02:14	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/20/15 02:14	1

Lab Sample ID: LCS 490-274681/4
Matrix: Water
Analysis Batch: 274681

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	99.76		mg/L		100	80 - 120
Sulfate	100	101.1		mg/L		101	80 - 120

Lab Sample ID: LCSD 490-274681/5
Matrix: Water
Analysis Batch: 274681

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	99.93		mg/L		100	80 - 120	0	20
Sulfate	100	101.8		mg/L		102	80 - 120	1	20

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 490-84672-1 MS
Matrix: Water
Analysis Batch: 274681

Client Sample ID: RW-7-080615
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.03		100	103.0		mg/L		101	80 - 120
Sulfate	9.96		100	110.7		mg/L		101	80 - 120

Lab Sample ID: 490-84672-1 MSD
Matrix: Water
Analysis Batch: 274681

Client Sample ID: RW-7-080615
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2.03		100	97.67		mg/L		96	80 - 120	5	20
Sulfate	9.96		100	105.3		mg/L		95	80 - 120	5	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 490-272053/1-A
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272053

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/10/15 10:44	08/12/15 13:53	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Arsenic	0.000582	J	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/10/15 10:44	08/12/15 13:53	1
Calcium	0.13	U	1.0	0.13	mg/L		08/10/15 10:44	08/12/15 13:53	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Iron	0.010	U	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 13:53	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 13:53	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/10/15 10:44	08/12/15 13:53	1
Potassium	0.13	U ^	1.0	0.13	mg/L		08/10/15 10:44	08/12/15 13:53	1
Selenium	0.00060	U ^	0.0020	0.00060	mg/L		08/10/15 10:44	08/12/15 13:53	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/12/15 13:53	1
Sodium	0.13	U	1.0	0.13	mg/L		08/10/15 10:44	08/12/15 13:53	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/10/15 10:44	08/12/15 13:53	1
Vanadium	0.00122	J	0.0020	0.00010	mg/L		08/10/15 10:44	08/12/15 13:53	1
Zinc	0.010	U	0.025	0.010	mg/L		08/10/15 10:44	08/12/15 13:53	1

Lab Sample ID: MB 490-272053/1-A
Matrix: Water
Analysis Batch: 273153

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272053

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 14:16	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 14:16	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/10/15 10:44	08/13/15 14:16	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-272053/2-A
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.02		mg/L		102	80 - 120
Antimony	0.100	0.111		mg/L		111	80 - 120
Arsenic	0.100	0.102		mg/L		102	80 - 120
Barium	0.100	0.106		mg/L		106	80 - 120
Beryllium	0.100	0.107		mg/L		107	80 - 120
Cadmium	0.100	0.105		mg/L		105	80 - 120
Calcium	10.0	10.27		mg/L		103	80 - 120
Chromium	0.100	0.104		mg/L		104	80 - 120
Cobalt	0.100	0.102		mg/L		102	80 - 120
Iron	1.00	1.03		mg/L		103	80 - 120
Lead	0.100	0.106		mg/L		106	80 - 120
Magnesium	10.0	10.08		mg/L		101	80 - 120
Potassium	10.0	10.19		mg/L		102	80 - 120
Selenium	0.100	0.103		mg/L		103	80 - 120
Silver	0.100	0.105		mg/L		105	80 - 120
Sodium	10.0	10.12		mg/L		101	80 - 120
Thallium	0.100	0.105		mg/L		105	80 - 120
Vanadium	0.100	0.107		mg/L		107	80 - 120
Zinc	0.100	0.0971		mg/L		97	80 - 120

Lab Sample ID: LCS 490-272053/2-A
Matrix: Water
Analysis Batch: 273153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.100	0.0997		mg/L		100	80 - 120
Manganese	0.100	0.105		mg/L		105	80 - 120
Nickel	0.100	0.104		mg/L		104	80 - 120

Lab Sample ID: 490-84672-1 MS
Matrix: Water
Analysis Batch: 272841

Client Sample ID: RW-7-080615
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.38		1.00	1.47		mg/L		109	75 - 125
Antimony	0.00050	U	0.100	0.109		mg/L		109	75 - 125
Arsenic	0.00074	J B	0.100	0.102		mg/L		101	75 - 125
Barium	0.0021		0.100	0.111		mg/L		109	75 - 125
Beryllium	0.00050	U	0.100	0.112		mg/L		112	75 - 125
Cadmium	0.00040	U	0.100	0.109		mg/L		109	75 - 125
Calcium	12.1		10.0	21.81		mg/L		97	75 - 125
Chromium	0.00050	U	0.100	0.102		mg/L		102	75 - 125
Cobalt	0.00050	U	0.100	0.100		mg/L		100	75 - 125
Iron	0.26		1.00	1.30		mg/L		105	75 - 125
Lead	0.00048	J	0.100	0.108		mg/L		107	75 - 125
Magnesium	4.2		10.0	14.11		mg/L		99	75 - 125
Potassium	0.90	J	10.0	10.95		mg/L		100	75 - 125
Selenium	0.00060	U	0.100	0.104		mg/L		104	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-84672-1 MS
Matrix: Water
Analysis Batch: 272841

Client Sample ID: RW-7-080615
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.00050	U	0.100	0.109		mg/L		109	75 - 125
Sodium	4.2		10.0	14.40		mg/L		102	75 - 125
Thallium	0.00037	J	0.100	0.107		mg/L		106	75 - 125
Vanadium	0.0019	J B	0.100	0.107		mg/L		105	75 - 125
Zinc	0.010	U F2 F1	0.100	0.0999		mg/L		100	75 - 125

Lab Sample ID: 490-84672-1 MS
Matrix: Water
Analysis Batch: 273153

Client Sample ID: RW-7-080615
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.0012	J	0.100	0.107		mg/L		106	75 - 125
Manganese	0.0042	F2 F1	0.100	0.119		mg/L		115	75 - 125
Nickel	0.00051	J	0.100	0.110		mg/L		109	75 - 125

Lab Sample ID: 490-84672-1 MSD
Matrix: Water
Analysis Batch: 272841

Client Sample ID: RW-7-080615
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.38		1.00	1.53		mg/L		115	75 - 125	4	20
Antimony	0.00050	U	0.100	0.108		mg/L		108	75 - 125	1	20
Arsenic	0.00074	J B	0.100	0.101		mg/L		100	75 - 125	1	20
Barium	0.0021		0.100	0.120		mg/L		118	75 - 125	8	20
Beryllium	0.00050	U	0.100	0.112		mg/L		112	75 - 125	0	20
Cadmium	0.00040	U	0.100	0.109		mg/L		109	75 - 125	0	20
Calcium	12.1		10.0	24.42		mg/L		123	75 - 125	11	20
Chromium	0.00050	U	0.100	0.101		mg/L		101	75 - 125	2	20
Cobalt	0.00050	U	0.100	0.0994		mg/L		99	75 - 125	1	20
Iron	0.26		1.00	1.42		mg/L		116	75 - 125	9	20
Lead	0.00048	J	0.100	0.105		mg/L		105	75 - 125	2	20
Magnesium	4.2		10.0	14.11		mg/L		99	75 - 125	0	20
Potassium	0.90	J	10.0	10.99		mg/L		101	75 - 125	0	20
Selenium	0.00060	U	0.100	0.102		mg/L		102	75 - 125	2	20
Silver	0.00050	U	0.100	0.108		mg/L		108	75 - 125	0	20
Sodium	4.2		10.0	13.92		mg/L		98	75 - 125	3	20
Thallium	0.00037	J	0.100	0.105		mg/L		105	75 - 125	2	20
Vanadium	0.0019	J B	0.100	0.105		mg/L		103	75 - 125	2	20
Zinc	0.010	U F2 F1	0.100	0.126	F1 F2	mg/L		126	75 - 125	23	20

Lab Sample ID: 490-84672-1 MSD
Matrix: Water
Analysis Batch: 273153

Client Sample ID: RW-7-080615
Prep Type: Total/NA
Prep Batch: 272053

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	0.0012	J	0.100	0.104		mg/L		103	75 - 125	3	20
Manganese	0.0042	F2 F1	0.100	0.164	F1 F2	mg/L		160	75 - 125	32	20
Nickel	0.00051	J	0.100	0.105		mg/L		104	75 - 125	5	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 490-272304/1-A
Matrix: Water
Analysis Batch: 272623

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/11/15 10:38	08/11/15 21:56	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 21:56	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 21:56	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 21:56	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 21:56	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/11/15 10:38	08/11/15 21:56	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 21:56	1
Copper	0.000555	J	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 21:56	1
Iron	0.010	U	0.025	0.010	mg/L		08/11/15 10:38	08/11/15 21:56	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/11/15 21:56	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/11/15 21:56	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/11/15 10:38	08/11/15 21:56	1
Vanadium	0.00112	J	0.0020	0.00010	mg/L		08/11/15 10:38	08/11/15 21:56	1
Zinc	0.010	U	0.025	0.010	mg/L		08/11/15 10:38	08/11/15 21:56	1

Lab Sample ID: MB 490-272304/1-A
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.13	U	1.0	0.13	mg/L		08/11/15 10:38	08/12/15 16:46	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/11/15 10:38	08/12/15 16:46	1
Potassium	0.13	U ^	1.0	0.13	mg/L		08/11/15 10:38	08/12/15 16:46	1
Selenium	0.00060	U ^	0.0020	0.00060	mg/L		08/11/15 10:38	08/12/15 16:46	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/12/15 16:46	1
Sodium	0.13	U	1.0	0.13	mg/L		08/11/15 10:38	08/12/15 16:46	1

Lab Sample ID: MB 490-272304/1-A
Matrix: Water
Analysis Batch: 273149

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/11/15 10:38	08/13/15 18:45	1

Lab Sample ID: LCS 490-272304/2-A
Matrix: Water
Analysis Batch: 272623

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	0.944		mg/L		94	80 - 120
Antimony	0.100	0.107		mg/L		107	80 - 120
Arsenic	0.100	0.101		mg/L		101	80 - 120
Barium	0.100	0.103		mg/L		103	80 - 120
Beryllium	0.100	0.0976		mg/L		98	80 - 120
Cadmium	0.100	0.110		mg/L		110	80 - 120
Chromium	0.100	0.108		mg/L		108	80 - 120
Copper	0.100	0.113		mg/L		113	80 - 120
Iron	1.00	0.968		mg/L		97	80 - 120
Lead	0.100	0.109		mg/L		109	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-272304/2-A
Matrix: Water
Analysis Batch: 272623

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	0.100	0.109		mg/L		109	80 - 120
Thallium	0.100	0.104		mg/L		104	80 - 120
Vanadium	0.100	0.110		mg/L		110	80 - 120
Zinc	0.100	0.102		mg/L		102	80 - 120

Lab Sample ID: LCS 490-272304/2-A
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	10.0	10.67		mg/L		107	80 - 120
Magnesium	10.0	10.52		mg/L		105	80 - 120
Potassium	10.0	10.65		mg/L		107	80 - 120
Selenium	0.100	0.110		mg/L		110	80 - 120
Silver	0.100	0.108		mg/L		108	80 - 120
Sodium	10.0	10.45		mg/L		105	80 - 120

Lab Sample ID: LCS 490-272304/2-A
Matrix: Water
Analysis Batch: 273149

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 272304

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.100	0.107		mg/L		107	80 - 120

Lab Sample ID: 490-84554-O-1-B MS
Matrix: Water
Analysis Batch: 272623

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0096	U	1.00	0.947		mg/L		95	75 - 125
Antimony	0.00050	U	0.100	0.105		mg/L		105	75 - 125
Arsenic	0.00050	U	0.100	0.101		mg/L		101	75 - 125
Barium	0.012		0.100	0.111		mg/L		99	75 - 125
Beryllium	0.00050	U	0.100	0.0970		mg/L		97	75 - 125
Cadmium	0.00040	U	0.100	0.107		mg/L		107	75 - 125
Chromium	0.00050	U	0.100	0.104		mg/L		104	75 - 125
Copper	0.00050	U	0.100	0.106		mg/L		106	75 - 125
Iron	0.19		1.00	1.17		mg/L		98	75 - 125
Lead	0.00020	U	0.100	0.102		mg/L		102	75 - 125
Nickel	0.00050	U	0.100	0.104		mg/L		104	75 - 125
Thallium	0.00026	J	0.100	0.0981		mg/L		98	75 - 125
Vanadium	0.0013	J B	0.100	0.109		mg/L		108	75 - 125
Zinc	0.010	U	0.100	0.102		mg/L		102	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-84554-O-1-B MS
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	81.4		10.0	88.94	4	mg/L		75	75 - 125
Magnesium	22.0		10.0	30.94		mg/L		90	75 - 125
Potassium	4.3		10.0	13.74		mg/L		94	75 - 125
Selenium	0.00060	U	0.100	0.100		mg/L		100	75 - 125
Silver	0.00050	U	0.100	0.103		mg/L		103	75 - 125
Sodium	72.6		10.0	80.72	4	mg/L		81	75 - 125

Lab Sample ID: 490-84554-O-1-B MS
Matrix: Water
Analysis Batch: 273149

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.16		0.100	0.248		mg/L		89	75 - 125

Lab Sample ID: 490-84554-O-1-C MSD
Matrix: Water
Analysis Batch: 272623

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0096	U	1.00	0.892		mg/L		89	75 - 125	6	20
Antimony	0.00050	U	0.100	0.107		mg/L		107	75 - 125	2	20
Arsenic	0.00050	U	0.100	0.101		mg/L		101	75 - 125	0	20
Barium	0.012		0.100	0.115		mg/L		103	75 - 125	3	20
Beryllium	0.00050	U	0.100	0.0966		mg/L		97	75 - 125	0	20
Cadmium	0.00040	U	0.100	0.107		mg/L		107	75 - 125	1	20
Chromium	0.00050	U	0.100	0.0977		mg/L		98	75 - 125	6	20
Copper	0.00050	U	0.100	0.0981		mg/L		98	75 - 125	8	20
Iron	0.19		1.00	1.19		mg/L		101	75 - 125	2	20
Lead	0.00020	U	0.100	0.103		mg/L		103	75 - 125	1	20
Nickel	0.00050	U	0.100	0.0972		mg/L		97	75 - 125	7	20
Thallium	0.00026	J	0.100	0.0981		mg/L		98	75 - 125	0	20
Vanadium	0.0013	J B	0.100	0.102		mg/L		101	75 - 125	7	20
Zinc	0.010	U	0.100	0.105		mg/L		105	75 - 125	2	20

Lab Sample ID: 490-84554-O-1-C MSD
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	81.4		10.0	92.71	4	mg/L		113	75 - 125	4	20
Magnesium	22.0		10.0	31.75		mg/L		98	75 - 125	3	20
Potassium	4.3		10.0	13.97		mg/L		97	75 - 125	2	20
Selenium	0.00060	U	0.100	0.102		mg/L		102	75 - 125	2	20
Silver	0.00050	U	0.100	0.104		mg/L		104	75 - 125	1	20
Sodium	72.6		10.0	83.36	4	mg/L		108	75 - 125	3	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-84554-O-1-C MSD
Matrix: Water
Analysis Batch: 273149

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 272304

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	0.16		0.100	0.248		mg/L		89	75 - 125	0	20

Lab Sample ID: MB 490-272584/1-B
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 272585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/12/15 09:56	08/13/15 00:09	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:09	1
Arsenic	0.000546	J	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:09	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:09	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:09	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/12/15 09:56	08/13/15 00:09	1
Calcium	0.13	U	1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:09	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:09	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:09	1
Iron	0.010	U	0.025	0.010	mg/L		08/12/15 09:56	08/13/15 00:09	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/12/15 09:56	08/13/15 00:09	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:09	1
Potassium	0.13	U	1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:09	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/12/15 09:56	08/13/15 00:09	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/13/15 00:09	1
Sodium	0.13	U	1.0	0.13	mg/L		08/12/15 09:56	08/13/15 00:09	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/12/15 09:56	08/13/15 00:09	1
Vanadium	0.00111	J	0.0020	0.00010	mg/L		08/12/15 09:56	08/13/15 00:09	1
Zinc	0.010	U	0.025	0.010	mg/L		08/12/15 09:56	08/13/15 00:09	1

Lab Sample ID: MB 490-272584/1-B
Matrix: Water
Analysis Batch: 278731

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 272585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/14/15 16:37	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/14/15 16:37	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/12/15 09:56	08/14/15 16:37	1

Lab Sample ID: LCS 490-272584/2-B
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 272585

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	0.996		mg/L		100	80 - 120
Antimony	0.100	0.108		mg/L		108	80 - 120
Arsenic	0.100	0.102		mg/L		102	80 - 120
Barium	0.100	0.109		mg/L		109	80 - 120
Beryllium	0.100	0.0963		mg/L		96	80 - 120
Cadmium	0.100	0.107		mg/L		107	80 - 120
Calcium	10.0	9.67		mg/L		97	80 - 120
Chromium	0.100	0.102		mg/L		102	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-272584/2-B
Matrix: Water
Analysis Batch: 272841

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 272585

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.100	0.101		mg/L		101	80 - 120
Iron	1.00	1.03		mg/L		103	80 - 120
Lead	0.100	0.102		mg/L		102	80 - 120
Magnesium	10.0	9.98		mg/L		100	80 - 120
Potassium	10.0	9.58		mg/L		96	80 - 120
Selenium	0.100	0.106		mg/L		106	80 - 120
Silver	0.100	0.102		mg/L		102	80 - 120
Sodium	10.0	9.84		mg/L		98	80 - 120
Thallium	0.100	0.0990		mg/L		99	80 - 120
Vanadium	0.100	0.106		mg/L		106	80 - 120
Zinc	0.100	0.100		mg/L		100	80 - 120

Lab Sample ID: LCS 490-272584/2-B
Matrix: Water
Analysis Batch: 278731

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 272585

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.100	0.101		mg/L		101	80 - 120
Manganese	0.100	0.105		mg/L		105	80 - 120
Nickel	0.100	0.104		mg/L		104	80 - 120

Lab Sample ID: 490-84672-1 MS
Matrix: Water
Analysis Batch: 272841

Client Sample ID: RW-7-080615
Prep Type: Dissolved
Prep Batch: 272585

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.42		1.00	1.42		mg/L		100	75 - 125
Antimony	0.0014	J	0.100	0.113		mg/L		111	75 - 125
Arsenic	0.00072	J B	0.100	0.101		mg/L		100	75 - 125
Barium	0.0014	J	0.100	0.114		mg/L		113	75 - 125
Beryllium	0.00050	U	0.100	0.101		mg/L		101	75 - 125
Cadmium	0.00040	U	0.100	0.109		mg/L		109	75 - 125
Calcium	11.6		10.0	21.25		mg/L		96	75 - 125
Chromium	0.00050	U	0.100	0.101		mg/L		101	75 - 125
Cobalt	0.00050	U	0.100	0.101		mg/L		101	75 - 125
Iron	0.14		1.00	1.17		mg/L		103	75 - 125
Lead	0.00020	U	0.100	0.104		mg/L		104	75 - 125
Magnesium	4.1		10.0	13.68		mg/L		95	75 - 125
Potassium	0.86	J	10.0	10.29		mg/L		94	75 - 125
Selenium	0.00060	U	0.100	0.103		mg/L		103	75 - 125
Silver	0.00050	U	0.100	0.105		mg/L		105	75 - 125
Sodium	3.9		10.0	13.34		mg/L		94	75 - 125
Thallium	0.00064	J	0.100	0.102		mg/L		101	75 - 125
Vanadium	0.0018	J B	0.100	0.106		mg/L		104	75 - 125
Zinc	0.010	U	0.100	0.0997		mg/L		100	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-84672-1 MS
Matrix: Water
Analysis Batch: 278731

Client Sample ID: RW-7-080615
Prep Type: Dissolved
Prep Batch: 272585

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.00050	U	0.100	0.0991		mg/L		99	75 - 125
Manganese	0.0019	J	0.100	0.107		mg/L		105	75 - 125
Nickel	0.00050	U	0.100	0.104		mg/L		104	75 - 125

Lab Sample ID: 490-84672-1 MSD
Matrix: Water
Analysis Batch: 272841

Client Sample ID: RW-7-080615
Prep Type: Dissolved
Prep Batch: 272585

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.42		1.00	1.27		mg/L		85	75 - 125	11	20
Antimony	0.0014	J	0.100	0.113		mg/L		111	75 - 125	0	20
Arsenic	0.00072	J B	0.100	0.0985		mg/L		98	75 - 125	3	20
Barium	0.0014	J	0.100	0.114		mg/L		112	75 - 125	1	20
Beryllium	0.00050	U	0.100	0.0997		mg/L		100	75 - 125	1	20
Cadmium	0.00040	U	0.100	0.107		mg/L		107	75 - 125	2	20
Calcium	11.6		10.0	20.10		mg/L		85	75 - 125	6	20
Chromium	0.00050	U	0.100	0.0979		mg/L		98	75 - 125	3	20
Cobalt	0.00050	U	0.100	0.0979		mg/L		98	75 - 125	3	20
Iron	0.14		1.00	1.09		mg/L		94	75 - 125	7	20
Lead	0.00020	U	0.100	0.103		mg/L		103	75 - 125	2	20
Magnesium	4.1		10.0	13.28		mg/L		91	75 - 125	3	20
Potassium	0.86	J	10.0	9.95		mg/L		91	75 - 125	3	20
Selenium	0.00060	U	0.100	0.0971		mg/L		97	75 - 125	6	20
Silver	0.00050	U	0.100	0.103		mg/L		103	75 - 125	2	20
Sodium	3.9		10.0	12.93		mg/L		90	75 - 125	3	20
Thallium	0.00064	J	0.100	0.0996		mg/L		99	75 - 125	2	20
Vanadium	0.0018	J B	0.100	0.102		mg/L		100	75 - 125	3	20
Zinc	0.010	U	0.100	0.0975		mg/L		98	75 - 125	2	20

Lab Sample ID: 490-84672-1 MSD
Matrix: Water
Analysis Batch: 278731

Client Sample ID: RW-7-080615
Prep Type: Dissolved
Prep Batch: 272585

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	0.00050	U	0.100	0.0994		mg/L		99	75 - 125	0	20
Manganese	0.0019	J	0.100	0.106		mg/L		104	75 - 125	1	20
Nickel	0.00050	U	0.100	0.102		mg/L		102	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 490-272420/1-A
Matrix: Water
Analysis Batch: 272825

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272420

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:27	08/12/15 19:24	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 490-272420/2-A
Matrix: Water
Analysis Batch: 272825

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272420

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000901		mg/L		90	80 - 120

Lab Sample ID: LCSD 490-272420/3-A
Matrix: Water
Analysis Batch: 272825

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 272420

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00100	0.000884		mg/L		88	80 - 120	2	20

Lab Sample ID: 490-84672-1 MS
Matrix: Water
Analysis Batch: 272825

Client Sample ID: RW-7-080615
Prep Type: Total/NA
Prep Batch: 272420

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.00103		mg/L		103	75 - 125

Lab Sample ID: 490-84672-1 MSD
Matrix: Water
Analysis Batch: 272825

Client Sample ID: RW-7-080615
Prep Type: Total/NA
Prep Batch: 272420

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.00101		mg/L		101	75 - 125	2	20

Lab Sample ID: MB 490-272424/1-B
Matrix: Water
Analysis Batch: 273136

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 272902

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/11/15 14:41	08/13/15 15:50	1

Lab Sample ID: LCS 490-272424/2-B
Matrix: Water
Analysis Batch: 273136

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 272902

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000858		mg/L		86	80 - 120

Lab Sample ID: 490-84672-1 MS
Matrix: Water
Analysis Batch: 273136

Client Sample ID: RW-7-080615
Prep Type: Dissolved
Prep Batch: 272902

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000811		mg/L		81	75 - 125

Lab Sample ID: 490-84672-1 MSD
Matrix: Water
Analysis Batch: 273136

Client Sample ID: RW-7-080615
Prep Type: Dissolved
Prep Batch: 272902

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000796		mg/L		80	75 - 125	2	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 490-271876/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 272365 — **Prep Batch: 271876**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/08/15 18:12	08/11/15 11:02	1

Lab Sample ID: LCS 490-271876/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 272365 — **Prep Batch: 271876**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.103		mg/L		103	90 - 110

Lab Sample ID: LCSD 490-271876/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 272365 — **Prep Batch: 271876**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.100	0.105		mg/L		105	90 - 110	2	20

Lab Sample ID: 490-84586-L-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 272365 — **Prep Batch: 271876**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1 F2	0.100	0.0176	F1	mg/L		18	70 - 130

Lab Sample ID: 490-84586-L-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 272365 — **Prep Batch: 271876**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1 F2	0.100	0.0686	F1 F2	mg/L		69	70 - 130	118	46

Lab Sample ID: 490-84672-9 MS — **Client Sample ID: RW-3 (77-87)-080615**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 272365 — **Prep Batch: 271876**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1	0.100	0.0666	F1	mg/L		67	70 - 130

Lab Sample ID: 490-84672-9 MSD — **Client Sample ID: RW-3 (77-87)-080615**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 272365 — **Prep Batch: 271876**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1	0.100	0.0710		mg/L		71	70 - 130	6	46

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: 490-84672-1 DU — **Client Sample ID: RW-7-080615**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 272365 — **Prep Batch: 271876**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.0070	U	0.0070	U	mg/L		NC	20

Lab Sample ID: MB 490-272799/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 273142 — **Prep Batch: 272799**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/12/15 17:02	08/13/15 10:15	1

Lab Sample ID: LCS 490-272799/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 273142 — **Prep Batch: 272799**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0948		mg/L		95	90 - 110

Lab Sample ID: 490-84672-1 MS — **Client Sample ID: RW-7-080615**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 273142 — **Prep Batch: 272799**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1	0.100	0.0687	F1	mg/L		69	70 - 130

Lab Sample ID: 490-84672-1 MSD — **Client Sample ID: RW-7-080615**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 273142 — **Prep Batch: 272799**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1	0.100	0.0575	F1	mg/L		58	70 - 130	18	46

Lab Sample ID: 490-84795-E-1-B DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 273142 — **Prep Batch: 272799**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.050		0.0537		mg/L		8	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 490-274025/43 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274025

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/11/15 20:01	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/11/15 20:01	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 490-274025/44
Matrix: Water
Analysis Batch: 274025

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity as CaCO3			100	91.16		mg/L		91	90 - 110		

Lab Sample ID: LCSD 490-274025/45
Matrix: Water
Analysis Batch: 274025

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Alkalinity as CaCO3			100	92.88		mg/L		93	90 - 110	2	20

Lab Sample ID: 490-84672-1 DU
Matrix: Water
Analysis Batch: 274025

Client Sample ID: RW-7-080615
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	40.8			40.55		mg/L				0.5	20
Total Alkalinity as CaCO3	40.8			40.55		mg/L				0.5	20

GC/MS VOA

Analysis Batch: 273831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-8	OB-30B-080615	Total/NA	Water	8260C	
490-85052-A-7 MS	Matrix Spike	Total/NA	Water	8260C	
490-85052-A-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	
LCS 490-273831/3	Lab Control Sample	Total/NA	Water	8260C	
MB 490-273831/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 273863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Total/NA	Water	8260C	
490-84672-1 MS	RW-7-080615	Total/NA	Water	8260C	
490-84672-1 MSD	RW-7-080615	Total/NA	Water	8260C	
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	8260C	
490-84672-10	TB-03-080715	Total/NA	Water	8260C	
LCS 490-273863/3	Lab Control Sample	Total/NA	Water	8260C	
MB 490-273863/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 273958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-2	OB-21-080615	Total/NA	Water	8260C	
490-84672-3	Dup-01-080615	Total/NA	Water	8260C	
490-84672-4	OB-6-080615	Total/NA	Water	8260C	
490-84672-5	OB-11R-080615	Total/NA	Water	8260C	
490-84672-6	OB-27-080615	Total/NA	Water	8260C	
490-84672-7	OB-30C-080615	Total/NA	Water	8260C	
LCS 490-273958/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-273958/4	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 490-273958/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 273991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Total/NA	Water	8260C SIM	
490-84672-1 MS	RW-7-080615	Total/NA	Water	8260C SIM	
490-84672-1 MSD	RW-7-080615	Total/NA	Water	8260C SIM	
490-84672-2	OB-21-080615	Total/NA	Water	8260C SIM	
490-84672-3	Dup-01-080615	Total/NA	Water	8260C SIM	
490-84672-4	OB-6-080615	Total/NA	Water	8260C SIM	
490-84672-5	OB-11R-080615	Total/NA	Water	8260C SIM	
490-84672-6	OB-27-080615	Total/NA	Water	8260C SIM	
490-84672-7	OB-30C-080615	Total/NA	Water	8260C SIM	
490-84672-10	TB-03-080715	Total/NA	Water	8260C SIM	
LCS 490-273991/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-273991/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-273991/7	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 274966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-8 - RE	OB-30B-080615	Total/NA	Water	8260C SIM	
490-84672-9 - RE	RW-3 (77-87)-080615	Total/NA	Water	8260C SIM	
490-84924-D-5 MS	Matrix Spike	Total/NA	Water	8260C SIM	
490-84924-D-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C SIM	
LCS 490-274966/6	Lab Control Sample	Total/NA	Water	8260C SIM	

GC/MS VOA (Continued)

Analysis Batch: 274966 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 490-274966/10	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-274966/9	Method Blank	Total/NA	Water	8260C SIM	

GC/MS Semi VOA

Prep Batch: 272534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-6	OB-27-080615	Total/NA	Water	3510C	
LCS 490-272534/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-272534/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 272619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-6	OB-27-080615	Total/NA	Water	8270D SIM	272534
LCS 490-272534/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	272534
MB 490-272534/1-A	Method Blank	Total/NA	Water	8270D SIM	272534

Prep Batch: 272786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Total/NA	Water	3510C	
490-84672-1 MS	RW-7-080615	Total/NA	Water	3510C	
490-84672-1 MSD	RW-7-080615	Total/NA	Water	3510C	
490-84672-2	OB-21-080615	Total/NA	Water	3510C	
490-84672-3	Dup-01-080615	Total/NA	Water	3510C	
490-84672-4	OB-6-080615	Total/NA	Water	3510C	
490-84672-5	OB-11R-080615	Total/NA	Water	3510C	
490-84672-6	OB-27-080615	Total/NA	Water	3510C	
490-84672-7	OB-30C-080615	Total/NA	Water	3510C	
490-84672-8	OB-30B-080615	Total/NA	Water	3510C	
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	3510C	
LCS 490-272786/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-272786/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 272922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Total/NA	Water	3510C	
490-84672-1 MS	RW-7-080615	Total/NA	Water	3510C	
490-84672-1 MSD	RW-7-080615	Total/NA	Water	3510C	
490-84672-2	OB-21-080615	Total/NA	Water	3510C	
490-84672-3	Dup-01-080615	Total/NA	Water	3510C	
490-84672-4	OB-6-080615	Total/NA	Water	3510C	
490-84672-5	OB-11R-080615	Total/NA	Water	3510C	
490-84672-6	OB-27-080615	Total/NA	Water	3510C	
490-84672-7	OB-30C-080615	Total/NA	Water	3510C	
490-84672-8	OB-30B-080615	Total/NA	Water	3510C	
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	3510C	
LCS 490-272922/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-272922/1-A	Method Blank	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Analysis Batch: 273026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Total/NA	Water	8270D	272786
490-84672-1 MS	RW-7-080615	Total/NA	Water	8270D	272786
490-84672-1 MSD	RW-7-080615	Total/NA	Water	8270D	272786
490-84672-2	OB-21-080615	Total/NA	Water	8270D	272786
490-84672-3	Dup-01-080615	Total/NA	Water	8270D	272786
490-84672-4	OB-6-080615	Total/NA	Water	8270D	272786
490-84672-5	OB-11R-080615	Total/NA	Water	8270D	272786
490-84672-6	OB-27-080615	Total/NA	Water	8270D	272786
490-84672-7	OB-30C-080615	Total/NA	Water	8270D	272786
490-84672-8	OB-30B-080615	Total/NA	Water	8270D	272786
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	8270D	272786
LCS 490-272786/2-A	Lab Control Sample	Total/NA	Water	8270D	272786
MB 490-272786/1-A	Method Blank	Total/NA	Water	8270D	272786

Analysis Batch: 273767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Total/NA	Water	8270D SIM	272922
490-84672-1 MS	RW-7-080615	Total/NA	Water	8270D SIM	272922
490-84672-1 MSD	RW-7-080615	Total/NA	Water	8270D SIM	272922
490-84672-2	OB-21-080615	Total/NA	Water	8270D SIM	272922
490-84672-3	Dup-01-080615	Total/NA	Water	8270D SIM	272922
490-84672-4	OB-6-080615	Total/NA	Water	8270D SIM	272922
490-84672-5	OB-11R-080615	Total/NA	Water	8270D SIM	272922
490-84672-6	OB-27-080615	Total/NA	Water	8270D SIM	272922
490-84672-7	OB-30C-080615	Total/NA	Water	8270D SIM	272922
490-84672-8	OB-30B-080615	Total/NA	Water	8270D SIM	272922
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	8270D SIM	272922
LCS 490-272922/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	272922
MB 490-272922/1-A	Method Blank	Total/NA	Water	8270D SIM	272922

Prep Batch: 274147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-274147/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-274147/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 274426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-274147/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	274147
MB 490-274147/1-A	Method Blank	Total/NA	Water	8270D SIM	274147

GC Semi VOA

Prep Batch: 272525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Total/NA	Water	3510C	
490-84672-1 MS	RW-7-080615	Total/NA	Water	3510C	
490-84672-1 MSD	RW-7-080615	Total/NA	Water	3510C	
490-84672-2	OB-21-080615	Total/NA	Water	3510C	
490-84672-3	Dup-01-080615	Total/NA	Water	3510C	
490-84672-4	OB-6-080615	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Prep Batch: 272525 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-5	OB-11R-080615	Total/NA	Water	3510C	
490-84672-6	OB-27-080615	Total/NA	Water	3510C	
490-84672-7	OB-30C-080615	Total/NA	Water	3510C	
490-84672-8	OB-30B-080615	Total/NA	Water	3510C	
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	3510C	
LCS 490-272525/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-272525/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 272901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Total/NA	Water	8082A	272525
490-84672-1 MS	RW-7-080615	Total/NA	Water	8082A	272525
490-84672-1 MSD	RW-7-080615	Total/NA	Water	8082A	272525
490-84672-2	OB-21-080615	Total/NA	Water	8082A	272525
490-84672-3	Dup-01-080615	Total/NA	Water	8082A	272525
490-84672-4	OB-6-080615	Total/NA	Water	8082A	272525
490-84672-5	OB-11R-080615	Total/NA	Water	8082A	272525
490-84672-6	OB-27-080615	Total/NA	Water	8082A	272525
490-84672-7	OB-30C-080615	Total/NA	Water	8082A	272525
490-84672-8	OB-30B-080615	Total/NA	Water	8082A	272525
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	8082A	272525
LCS 490-272525/2-A	Lab Control Sample	Total/NA	Water	8082A	272525
MB 490-272525/1-A	Method Blank	Total/NA	Water	8082A	272525

HPLC/IC

Analysis Batch: 274681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Total/NA	Water	9056A	
490-84672-1 MS	RW-7-080615	Total/NA	Water	9056A	
490-84672-1 MSD	RW-7-080615	Total/NA	Water	9056A	
490-84672-2	OB-21-080615	Total/NA	Water	9056A	
490-84672-3	Dup-01-080615	Total/NA	Water	9056A	
490-84672-4	OB-6-080615	Total/NA	Water	9056A	
490-84672-5	OB-11R-080615	Total/NA	Water	9056A	
490-84672-6	OB-27-080615	Total/NA	Water	9056A	
490-84672-7	OB-30C-080615	Total/NA	Water	9056A	
490-84672-8	OB-30B-080615	Total/NA	Water	9056A	
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	9056A	
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	9056A	
LCS 490-274681/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-274681/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-274681/3	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 272053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Total/NA	Water	3010A	
490-84672-1 MS	RW-7-080615	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 272053 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1 MSD	RW-7-080615	Total/NA	Water	3010A	
490-84672-2	OB-21-080615	Total/NA	Water	3010A	
490-84672-3	Dup-01-080615	Total/NA	Water	3010A	
490-84672-4	OB-6-080615	Total/NA	Water	3010A	
490-84672-5	OB-11R-080615	Total/NA	Water	3010A	
490-84672-6	OB-27-080615	Total/NA	Water	3010A	
490-84672-7	OB-30C-080615	Total/NA	Water	3010A	
490-84672-8	OB-30B-080615	Total/NA	Water	3010A	
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	3010A	
LCS 490-272053/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-272053/1-A	Method Blank	Total/NA	Water	3010A	

Filtration Batch: 272302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-7	OB-30C-080615	Dissolved	Water	Filtration	
490-84672-8	OB-30B-080615	Dissolved	Water	Filtration	
490-84672-9	RW-3 (77-87)-080615	Dissolved	Water	Filtration	

Prep Batch: 272304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84554-O-1-B MS	Matrix Spike	Dissolved	Water	3005A	
490-84554-O-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	
490-84672-7	OB-30C-080615	Dissolved	Water	3005A	272302
490-84672-8	OB-30B-080615	Dissolved	Water	3005A	272302
490-84672-9	RW-3 (77-87)-080615	Dissolved	Water	3005A	272302
LCS 490-272304/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 490-272304/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 272420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Total/NA	Water	7470A	
490-84672-1 MS	RW-7-080615	Total/NA	Water	7470A	
490-84672-1 MSD	RW-7-080615	Total/NA	Water	7470A	
490-84672-2	OB-21-080615	Total/NA	Water	7470A	
490-84672-3	Dup-01-080615	Total/NA	Water	7470A	
490-84672-4	OB-6-080615	Total/NA	Water	7470A	
490-84672-5	OB-11R-080615	Total/NA	Water	7470A	
490-84672-6	OB-27-080615	Total/NA	Water	7470A	
490-84672-7	OB-30C-080615	Total/NA	Water	7470A	
490-84672-8	OB-30B-080615	Total/NA	Water	7470A	
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	7470A	
LCS 490-272420/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 490-272420/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 490-272420/1-A	Method Blank	Total/NA	Water	7470A	

Filtration Batch: 272424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Dissolved	Water	Filtration	
490-84672-1 MS	RW-7-080615	Dissolved	Water	Filtration	
490-84672-1 MSD	RW-7-080615	Dissolved	Water	Filtration	
490-84672-2	OB-21-080615	Dissolved	Water	Filtration	

Metals (Continued)

Filtration Batch: 272424 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-3	Dup-01-080615	Dissolved	Water	Filtration	
490-84672-4	OB-6-080615	Dissolved	Water	Filtration	
490-84672-5	OB-11R-080615	Dissolved	Water	Filtration	
490-84672-6	OB-27-080615	Dissolved	Water	Filtration	
490-84672-7	OB-30C-080615	Dissolved	Water	Filtration	
490-84672-8	OB-30B-080615	Dissolved	Water	Filtration	
490-84672-9	RW-3 (77-87)-080615	Dissolved	Water	Filtration	
LCS 490-272424/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-272424/1-B	Method Blank	Dissolved	Water	Filtration	

Filtration Batch: 272584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Dissolved	Water	Filtration	
490-84672-1 MS	RW-7-080615	Dissolved	Water	Filtration	
490-84672-1 MSD	RW-7-080615	Dissolved	Water	Filtration	
490-84672-2	OB-21-080615	Dissolved	Water	Filtration	
490-84672-3	Dup-01-080615	Dissolved	Water	Filtration	
490-84672-4	OB-6-080615	Dissolved	Water	Filtration	
490-84672-5	OB-11R-080615	Dissolved	Water	Filtration	
490-84672-6	OB-27-080615	Dissolved	Water	Filtration	
LCS 490-272584/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-272584/1-B	Method Blank	Dissolved	Water	Filtration	

Prep Batch: 272585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Dissolved	Water	3005A	272584
490-84672-1 MS	RW-7-080615	Dissolved	Water	3005A	272584
490-84672-1 MSD	RW-7-080615	Dissolved	Water	3005A	272584
490-84672-2	OB-21-080615	Dissolved	Water	3005A	272584
490-84672-3	Dup-01-080615	Dissolved	Water	3005A	272584
490-84672-4	OB-6-080615	Dissolved	Water	3005A	272584
490-84672-5	OB-11R-080615	Dissolved	Water	3005A	272584
490-84672-6	OB-27-080615	Dissolved	Water	3005A	272584
LCS 490-272584/2-B	Lab Control Sample	Dissolved	Water	3005A	272584
MB 490-272584/1-B	Method Blank	Dissolved	Water	3005A	272584

Analysis Batch: 272623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84554-O-1-B MS	Matrix Spike	Dissolved	Water	6020A	272304
490-84554-O-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	272304
490-84672-7	OB-30C-080615	Dissolved	Water	6020A	272304
490-84672-8	OB-30B-080615	Dissolved	Water	6020A	272304
490-84672-9	RW-3 (77-87)-080615	Dissolved	Water	6020A	272304
LCS 490-272304/2-A	Lab Control Sample	Total Recoverable	Water	6020A	272304
MB 490-272304/1-A	Method Blank	Total Recoverable	Water	6020A	272304

Analysis Batch: 272825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Total/NA	Water	7470A	272420
490-84672-1 MS	RW-7-080615	Total/NA	Water	7470A	272420
490-84672-1 MSD	RW-7-080615	Total/NA	Water	7470A	272420

Metals (Continued)

Analysis Batch: 272825 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-2	OB-21-080615	Total/NA	Water	7470A	272420
490-84672-3	Dup-01-080615	Total/NA	Water	7470A	272420
490-84672-4	OB-6-080615	Total/NA	Water	7470A	272420
490-84672-5	OB-11R-080615	Total/NA	Water	7470A	272420
490-84672-6	OB-27-080615	Total/NA	Water	7470A	272420
490-84672-7	OB-30C-080615	Total/NA	Water	7470A	272420
490-84672-8	OB-30B-080615	Total/NA	Water	7470A	272420
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	7470A	272420
LCS 490-272420/2-A	Lab Control Sample	Total/NA	Water	7470A	272420
LCSD 490-272420/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	272420
MB 490-272420/1-A	Method Blank	Total/NA	Water	7470A	272420

Analysis Batch: 272841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84554-O-1-B MS	Matrix Spike	Dissolved	Water	6020A	272304
490-84554-O-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	272304
490-84672-1	RW-7-080615	Dissolved	Water	6020A	272585
490-84672-1	RW-7-080615	Total/NA	Water	6020A	272053
490-84672-1 MS	RW-7-080615	Dissolved	Water	6020A	272585
490-84672-1 MS	RW-7-080615	Total/NA	Water	6020A	272053
490-84672-1 MSD	RW-7-080615	Dissolved	Water	6020A	272585
490-84672-1 MSD	RW-7-080615	Total/NA	Water	6020A	272053
490-84672-2	OB-21-080615	Dissolved	Water	6020A	272585
490-84672-2	OB-21-080615	Total/NA	Water	6020A	272053
490-84672-3	Dup-01-080615	Dissolved	Water	6020A	272585
490-84672-3	Dup-01-080615	Total/NA	Water	6020A	272053
490-84672-4	OB-6-080615	Dissolved	Water	6020A	272585
490-84672-4	OB-6-080615	Total/NA	Water	6020A	272053
490-84672-5	OB-11R-080615	Dissolved	Water	6020A	272585
490-84672-5	OB-11R-080615	Total/NA	Water	6020A	272053
490-84672-6	OB-27-080615	Dissolved	Water	6020A	272585
490-84672-6	OB-27-080615	Total/NA	Water	6020A	272053
490-84672-7	OB-30C-080615	Dissolved	Water	6020A	272304
490-84672-7	OB-30C-080615	Total/NA	Water	6020A	272053
490-84672-8	OB-30B-080615	Dissolved	Water	6020A	272304
490-84672-8	OB-30B-080615	Total/NA	Water	6020A	272053
490-84672-9	RW-3 (77-87)-080615	Dissolved	Water	6020A	272304
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	6020A	272053
LCS 490-272053/2-A	Lab Control Sample	Total/NA	Water	6020A	272053
LCS 490-272304/2-A	Lab Control Sample	Total Recoverable	Water	6020A	272304
LCS 490-272584/2-B	Lab Control Sample	Dissolved	Water	6020A	272585
MB 490-272053/1-A	Method Blank	Total/NA	Water	6020A	272053
MB 490-272304/1-A	Method Blank	Total Recoverable	Water	6020A	272304
MB 490-272584/1-B	Method Blank	Dissolved	Water	6020A	272585

Prep Batch: 272902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Dissolved	Water	7470A	272424
490-84672-1 MS	RW-7-080615	Dissolved	Water	7470A	272424
490-84672-1 MSD	RW-7-080615	Dissolved	Water	7470A	272424
490-84672-2	OB-21-080615	Dissolved	Water	7470A	272424

Metals (Continued)

Prep Batch: 272902 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-3	Dup-01-080615	Dissolved	Water	7470A	272424
490-84672-4	OB-6-080615	Dissolved	Water	7470A	272424
490-84672-5	OB-11R-080615	Dissolved	Water	7470A	272424
490-84672-6	OB-27-080615	Dissolved	Water	7470A	272424
490-84672-7	OB-30C-080615	Dissolved	Water	7470A	272424
490-84672-8	OB-30B-080615	Dissolved	Water	7470A	272424
490-84672-9	RW-3 (77-87)-080615	Dissolved	Water	7470A	272424
LCS 490-272424/2-B	Lab Control Sample	Dissolved	Water	7470A	272424
MB 490-272424/1-B	Method Blank	Dissolved	Water	7470A	272424

Analysis Batch: 273136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Dissolved	Water	7470A	272902
490-84672-1 MS	RW-7-080615	Dissolved	Water	7470A	272902
490-84672-1 MSD	RW-7-080615	Dissolved	Water	7470A	272902
490-84672-2	OB-21-080615	Dissolved	Water	7470A	272902
490-84672-3	Dup-01-080615	Dissolved	Water	7470A	272902
490-84672-4	OB-6-080615	Dissolved	Water	7470A	272902
490-84672-5	OB-11R-080615	Dissolved	Water	7470A	272902
490-84672-6	OB-27-080615	Dissolved	Water	7470A	272902
490-84672-7	OB-30C-080615	Dissolved	Water	7470A	272902
490-84672-8	OB-30B-080615	Dissolved	Water	7470A	272902
490-84672-9	RW-3 (77-87)-080615	Dissolved	Water	7470A	272902
LCS 490-272424/2-B	Lab Control Sample	Dissolved	Water	7470A	272902
MB 490-272424/1-B	Method Blank	Dissolved	Water	7470A	272902

Analysis Batch: 273149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84554-O-1-B MS	Matrix Spike	Dissolved	Water	6020A	272304
490-84554-O-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	272304
490-84672-2	OB-21-080615	Dissolved	Water	6020A	272585
490-84672-3	Dup-01-080615	Dissolved	Water	6020A	272585
490-84672-4	OB-6-080615	Dissolved	Water	6020A	272585
490-84672-5	OB-11R-080615	Dissolved	Water	6020A	272585
490-84672-6	OB-27-080615	Dissolved	Water	6020A	272585
490-84672-7	OB-30C-080615	Dissolved	Water	6020A	272304
490-84672-8	OB-30B-080615	Dissolved	Water	6020A	272304
490-84672-9	RW-3 (77-87)-080615	Dissolved	Water	6020A	272304
LCS 490-272304/2-A	Lab Control Sample	Total Recoverable	Water	6020A	272304
MB 490-272304/1-A	Method Blank	Total Recoverable	Water	6020A	272304

Analysis Batch: 273153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Total/NA	Water	6020A	272053
490-84672-1 MS	RW-7-080615	Total/NA	Water	6020A	272053
490-84672-1 MSD	RW-7-080615	Total/NA	Water	6020A	272053
490-84672-2	OB-21-080615	Total/NA	Water	6020A	272053
490-84672-3	Dup-01-080615	Total/NA	Water	6020A	272053
490-84672-4	OB-6-080615	Total/NA	Water	6020A	272053
490-84672-5	OB-11R-080615	Total/NA	Water	6020A	272053
490-84672-6	OB-27-080615	Total/NA	Water	6020A	272053

Metals (Continued)

Analysis Batch: 273153 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-7	OB-30C-080615	Total/NA	Water	6020A	272053
490-84672-8	OB-30B-080615	Total/NA	Water	6020A	272053
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	6020A	272053
LCS 490-272053/2-A	Lab Control Sample	Total/NA	Water	6020A	272053
MB 490-272053/1-A	Method Blank	Total/NA	Water	6020A	272053

Analysis Batch: 275097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-5	OB-11R-080615	Total/NA	Water	6020A	272053

Analysis Batch: 278731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Dissolved	Water	6020A	272585
490-84672-1 MS	RW-7-080615	Dissolved	Water	6020A	272585
490-84672-1 MSD	RW-7-080615	Dissolved	Water	6020A	272585
490-84672-2	OB-21-080615	Dissolved	Water	6020A	272585
490-84672-3	Dup-01-080615	Dissolved	Water	6020A	272585
490-84672-4	OB-6-080615	Dissolved	Water	6020A	272585
490-84672-5	OB-11R-080615	Dissolved	Water	6020A	272585
490-84672-6	OB-27-080615	Dissolved	Water	6020A	272585
490-84672-6	OB-27-080615	Total/NA	Water	6020A	272053
LCS 490-272584/2-B	Lab Control Sample	Dissolved	Water	6020A	272585
MB 490-272584/1-B	Method Blank	Dissolved	Water	6020A	272585

Analysis Batch: 278734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-5	OB-11R-080615	Dissolved	Water	6020A	272585

General Chemistry

Prep Batch: 271876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84586-L-1-C MS	Matrix Spike	Total/NA	Water	9012B	
490-84586-L-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	
490-84672-1 DU	RW-7-080615	Total/NA	Water	9012B	
490-84672-2	OB-21-080615	Total/NA	Water	9012B	
490-84672-3	Dup-01-080615	Total/NA	Water	9012B	
490-84672-4	OB-6-080615	Total/NA	Water	9012B	
490-84672-5	OB-11R-080615	Total/NA	Water	9012B	
490-84672-6	OB-27-080615	Total/NA	Water	9012B	
490-84672-7	OB-30C-080615	Total/NA	Water	9012B	
490-84672-8	OB-30B-080615	Total/NA	Water	9012B	
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	9012B	
490-84672-9 MS	RW-3 (77-87)-080615	Total/NA	Water	9012B	
490-84672-9 MSD	RW-3 (77-87)-080615	Total/NA	Water	9012B	
LCS 490-271876/2-A	Lab Control Sample	Total/NA	Water	9012B	
LCSD 490-271876/3-A	Lab Control Sample Dup	Total/NA	Water	9012B	
MB 490-271876/1-A	Method Blank	Total/NA	Water	9012B	

General Chemistry (Continued)

Analysis Batch: 272365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84586-L-1-C MS	Matrix Spike	Total/NA	Water	9012B	271876
490-84586-L-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	271876
490-84672-1 DU	RW-7-080615	Total/NA	Water	9012B	271876
490-84672-2	OB-21-080615	Total/NA	Water	9012B	271876
490-84672-3	Dup-01-080615	Total/NA	Water	9012B	271876
490-84672-4	OB-6-080615	Total/NA	Water	9012B	271876
490-84672-5	OB-11R-080615	Total/NA	Water	9012B	271876
490-84672-6	OB-27-080615	Total/NA	Water	9012B	271876
490-84672-7	OB-30C-080615	Total/NA	Water	9012B	271876
490-84672-8	OB-30B-080615	Total/NA	Water	9012B	271876
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	9012B	271876
490-84672-9 MS	RW-3 (77-87)-080615	Total/NA	Water	9012B	271876
490-84672-9 MSD	RW-3 (77-87)-080615	Total/NA	Water	9012B	271876
LCS 490-271876/2-A	Lab Control Sample	Total/NA	Water	9012B	271876
LCSD 490-271876/3-A	Lab Control Sample Dup	Total/NA	Water	9012B	271876
MB 490-271876/1-A	Method Blank	Total/NA	Water	9012B	271876

Prep Batch: 272799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Total/NA	Water	9012B	
490-84672-1 MS	RW-7-080615	Total/NA	Water	9012B	
490-84672-1 MSD	RW-7-080615	Total/NA	Water	9012B	
490-84795-E-1-B DU	Duplicate	Total/NA	Water	9012B	
LCS 490-272799/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 490-272799/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 273142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Total/NA	Water	9012B	272799
490-84672-1 MS	RW-7-080615	Total/NA	Water	9012B	272799
490-84672-1 MSD	RW-7-080615	Total/NA	Water	9012B	272799
490-84795-E-1-B DU	Duplicate	Total/NA	Water	9012B	272799
LCS 490-272799/2-A	Lab Control Sample	Total/NA	Water	9012B	272799
MB 490-272799/1-A	Method Blank	Total/NA	Water	9012B	272799

Analysis Batch: 274025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84672-1	RW-7-080615	Total/NA	Water	SM 2320B	
490-84672-1 DU	RW-7-080615	Total/NA	Water	SM 2320B	
490-84672-2	OB-21-080615	Total/NA	Water	SM 2320B	
490-84672-3	Dup-01-080615	Total/NA	Water	SM 2320B	
490-84672-4	OB-6-080615	Total/NA	Water	SM 2320B	
490-84672-5	OB-11R-080615	Total/NA	Water	SM 2320B	
490-84672-6	OB-27-080615	Total/NA	Water	SM 2320B	
490-84672-7	OB-30C-080615	Total/NA	Water	SM 2320B	
490-84672-8	OB-30B-080615	Total/NA	Water	SM 2320B	
490-84672-9	RW-3 (77-87)-080615	Total/NA	Water	SM 2320B	
LCS 490-274025/44	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 490-274025/45	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 490-274025/43	Method Blank	Total/NA	Water	SM 2320B	

Client Sample ID: RW-7-080615

Date Collected: 08/06/15 10:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273863	08/18/15 01:23	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273991	08/18/15 19:31	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272786	08/12/15 17:47	MDW	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	273026	08/13/15 19:02	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272922	08/13/15 11:18	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	273767	08/17/15 13:40	BES	TAL NSH
Total/NA	Prep	3510C			950 mL	5 mL	272525	08/12/15 06:54	ET	TAL NSH
Total/NA	Analysis	8082A		1	950 mL	5 mL	272901	08/13/15 19:28	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		274681	08/20/15 10:51	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 16:49	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272841	08/13/15 00:20	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 14:04	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	273153	08/13/15 14:27	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	272902	08/11/15 14:41	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	272424	08/11/15 14:41	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	273136	08/13/15 15:55	RDF	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	272420	08/11/15 14:27	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	272825	08/12/15 19:31	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	272799	08/12/15 17:02	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	273142	08/13/15 10:17	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274025	08/11/15 20:50	SMB	TAL NSH

Client Sample ID: OB-21-080615

Date Collected: 08/06/15 10:35
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273958	08/18/15 19:25	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273991	08/18/15 20:00	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272786	08/12/15 17:47	MDW	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	273026	08/13/15 20:13	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272922	08/13/15 11:18	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	273767	08/17/15 15:01	BES	TAL NSH
Total/NA	Prep	3510C			970 mL	5 mL	272525	08/12/15 06:54	ET	TAL NSH
Total/NA	Analysis	8082A		1	970 mL	5 mL	272901	08/13/15 20:15	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		274681	08/20/15 05:15	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH

Client Sample ID: OB-21-080615

Date Collected: 08/06/15 10:35
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	273149	08/13/15 16:18	LEG	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 17:18	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272841	08/13/15 00:46	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 14:30	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	273153	08/13/15 14:58	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	272902	08/11/15 14:41	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	272424	08/11/15 14:41	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	273136	08/13/15 16:02	RDF	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	272420	08/11/15 14:27	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	272825	08/12/15 19:43	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	271876	08/08/15 18:12	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	272365	08/11/15 11:29	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274025	08/11/15 21:01	SMB	TAL NSH

Client Sample ID: Dup-01-080615

Date Collected: 08/06/15 12:00
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273958	08/18/15 19:53	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273991	08/18/15 20:28	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272786	08/12/15 17:47	MDW	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	273026	08/13/15 20:36	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272922	08/13/15 11:18	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	273767	08/17/15 15:28	BES	TAL NSH
Total/NA	Prep	3510C			970 mL	5 mL	272525	08/12/15 06:54	ET	TAL NSH
Total/NA	Analysis	8082A		1	970 mL	5 mL	272901	08/13/15 20:31	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		274681	08/20/15 05:35	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	273149	08/13/15 16:24	LEG	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 17:23	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272841	08/13/15 00:52	CME	TAL NSH

Client Sample ID: Dup-01-080615

Date Collected: 08/06/15 12:00
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 14:46	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	273153	08/13/15 15:03	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	272902	08/11/15 14:41	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	272424	08/11/15 14:41	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	273136	08/13/15 16:05	RDF	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	272420	08/11/15 14:27	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	272825	08/12/15 19:46	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	271876	08/08/15 18:12	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	272365	08/11/15 11:31	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274025	08/11/15 21:06	SMB	TAL NSH

Client Sample ID: OB-6-080615

Date Collected: 08/06/15 10:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273958	08/18/15 20:20	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273991	08/18/15 20:57	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272786	08/12/15 17:47	MDW	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	273026	08/13/15 20:59	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272922	08/13/15 11:18	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	273767	08/17/15 16:11	BES	TAL NSH
Total/NA	Prep	3510C			950 mL	5 mL	272525	08/12/15 06:54	ET	TAL NSH
Total/NA	Analysis	8082A		1	950 mL	5 mL	272901	08/13/15 20:46	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		274681	08/20/15 05:55	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	273149	08/13/15 16:30	LEG	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 17:41	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272841	08/13/15 00:57	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 14:51	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	273153	08/13/15 15:08	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	272902	08/11/15 14:41	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	272424	08/11/15 14:41	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	273136	08/13/15 16:07	RDF	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	272420	08/11/15 14:27	RDF	TAL NSH

Client Sample ID: OB-6-080615

Lab Sample ID: 490-84672-4

Date Collected: 08/06/15 10:05

Matrix: Water

Date Received: 08/08/15 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7470A		1	30 mL	30 mL	272825	08/12/15 19:48	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	271876	08/08/15 18:12	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	272365	08/11/15 11:34	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274025	08/11/15 21:11	SMB	TAL NSH

Client Sample ID: OB-11R-080615

Lab Sample ID: 490-84672-5

Date Collected: 08/06/15 12:00

Matrix: Water

Date Received: 08/08/15 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273958	08/18/15 20:48	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273991	08/18/15 21:26	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272786	08/12/15 17:47	MDW	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	273026	08/13/15 21:22	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272922	08/13/15 11:18	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	273767	08/17/15 16:38	BES	TAL NSH
Total/NA	Prep	3510C			950 mL	5 mL	272525	08/12/15 06:54	ET	TAL NSH
Total/NA	Analysis	8082A		1	950 mL	5 mL	272901	08/13/15 21:02	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		274681	08/20/15 06:15	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	273149	08/13/15 16:48	LEG	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		100	50 mL	50 mL	278731	08/14/15 17:46	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		100	50 mL	50 mL	278734	08/20/15 17:33	LEG	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272841	08/13/15 01:13	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		100	50 mL	50 mL	275097	08/20/15 17:33	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 14:56	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	273153	08/13/15 15:24	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	272902	08/11/15 14:41	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	272424	08/11/15 14:41	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	273136	08/13/15 16:09	RDF	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	272420	08/11/15 14:27	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	272825	08/12/15 19:50	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	271876	08/08/15 18:12	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	272365	08/11/15 11:36	DRM	TAL NSH

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274025	08/11/15 21:29	SMB	TAL NSH

Client Sample ID: OB-27-080615
Date Collected: 08/06/15 15:20
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273958	08/18/15 21:16	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273991	08/18/15 21:55	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272786	08/12/15 17:47	MDW	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	273026	08/13/15 21:46	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272922	08/13/15 11:18	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	273767	08/17/15 17:04	BES	TAL NSH
Total/NA	Prep	3510C			970 mL	1 mL	272534	08/12/15 07:44	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	970 mL	1 mL	272619	08/12/15 19:42	BES	TAL NSH
Total/NA	Prep	3510C			960 mL	5 mL	272525	08/12/15 06:54	ET	TAL NSH
Total/NA	Analysis	8082A		1	960 mL	5 mL	272901	08/13/15 21:17	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		274681	08/20/15 06:35	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	273149	08/13/15 16:53	LEG	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		5	50 mL	50 mL	278731	08/14/15 17:52	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272585	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272584	08/12/15 09:56	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272841	08/13/15 01:18	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		10	50 mL	50 mL	278731	08/14/15 21:24	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 15:01	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	273153	08/13/15 15:29	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	272902	08/11/15 14:41	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	272424	08/11/15 14:41	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	273136	08/13/15 16:12	RDF	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	272420	08/11/15 14:27	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	272825	08/12/15 19:53	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	271876	08/08/15 18:12	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	272365	08/11/15 11:50	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274025	08/11/15 21:33	SMB	TAL NSH

Client Sample ID: OB-30C-080615

Date Collected: 08/06/15 15:05
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273958	08/18/15 21:44	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273991	08/18/15 22:24	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272786	08/12/15 17:47	MDW	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	273026	08/13/15 22:09	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272922	08/13/15 11:18	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	273767	08/17/15 17:31	BES	TAL NSH
Total/NA	Prep	3510C			950 mL	5 mL	272525	08/12/15 06:54	ET	TAL NSH
Total/NA	Analysis	8082A		1	950 mL	5 mL	272901	08/13/15 21:33	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		274681	08/20/15 06:55	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272623	08/11/15 23:40	CME	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	273149	08/13/15 19:25	LEG	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 18:21	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 15:07	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	273153	08/13/15 15:34	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	272902	08/11/15 14:41	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	272424	08/11/15 14:41	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	273136	08/13/15 16:19	RDF	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	272420	08/11/15 14:27	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	272825	08/12/15 19:55	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	271876	08/08/15 18:12	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	272365	08/11/15 11:52	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274025	08/11/15 21:39	SMB	TAL NSH

Client Sample ID: OB-30B-080615

Date Collected: 08/06/15 15:10
Date Received: 08/08/15 10:00

Lab Sample ID: 490-84672-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273831	08/18/15 09:19	EML	TAL NSH
Total/NA	Analysis	8260C SIM	RE	1	10 mL	10 mL	274966	08/20/15 18:58	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272786	08/12/15 17:47	MDW	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	273026	08/13/15 22:33	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272922	08/13/15 11:18	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	273767	08/17/15 17:58	BES	TAL NSH
Total/NA	Prep	3510C			1000 mL	5 mL	272525	08/12/15 06:54	ET	TAL NSH

Client Sample ID: OB-30B-080615

Lab Sample ID: 490-84672-8

Date Collected: 08/06/15 15:10

Matrix: Water

Date Received: 08/08/15 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082A		1	1000 mL	5 mL	272901	08/13/15 21:49	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		274681	08/20/15 12:11	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272623	08/11/15 23:46	CME	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	273149	08/13/15 19:31	LEG	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 18:26	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 15:12	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	273153	08/13/15 15:39	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	272902	08/11/15 14:41	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	272424	08/11/15 14:41	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	273136	08/13/15 16:22	RDF	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	272420	08/11/15 14:27	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	272825	08/12/15 19:58	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	271876	08/08/15 18:12	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	272365	08/11/15 11:54	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274025	08/11/15 21:44	SMB	TAL NSH

Client Sample ID: RW-3 (77-87)-080615

Lab Sample ID: 490-84672-9

Date Collected: 08/06/15 14:35

Matrix: Water

Date Received: 08/08/15 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273863	08/18/15 01:49	EML	TAL NSH
Total/NA	Analysis	8260C SIM	RE	1	10 mL	10 mL	274966	08/20/15 19:26	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272786	08/12/15 17:47	MDW	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	273026	08/13/15 22:56	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272922	08/13/15 11:18	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	273767	08/17/15 18:25	BES	TAL NSH
Total/NA	Prep	3510C			950 mL	5 mL	272525	08/12/15 06:54	ET	TAL NSH
Total/NA	Analysis	8082A		1	950 mL	5 mL	272901	08/13/15 22:04	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		274681	08/20/15 08:16	JHS	TAL NSH
Total/NA	Analysis	9056A		5	10 mL		274681	08/20/15 08:36	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272623	08/11/15 23:52	CME	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH

Client Sample ID: RW-3 (77-87)-080615

Lab Sample ID: 490-84672-9

Date Collected: 08/06/15 14:35

Matrix: Water

Date Received: 08/08/15 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	273149	08/13/15 19:37	LEG	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	272302	08/11/15 10:36	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	272304	08/11/15 10:38	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 18:32	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	272841	08/12/15 15:17	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272053	08/10/15 10:44	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	273153	08/13/15 15:44	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	272902	08/11/15 14:41	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	272424	08/11/15 14:41	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	273136	08/13/15 16:24	RDF	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	272420	08/11/15 14:27	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	272825	08/12/15 20:00	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	271876	08/08/15 18:12	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	272365	08/11/15 11:43	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274025	08/11/15 21:50	SMB	TAL NSH

Client Sample ID: TB-03-080715

Lab Sample ID: 490-84672-10

Date Collected: 08/07/15 01:00

Matrix: Water

Date Received: 08/08/15 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273863	08/18/15 00:05	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	273991	08/18/15 19:02	MJH	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
9056A	Anions, Ion Chromatography	SW846	TAL NSH
6020A	Metals (ICP/MS)	SW846	TAL NSH
7470A	Mercury (CVAA)	SW846	TAL NSH
9012B	Cyanide, Total andor Amenable	SW846	TAL NSH
SM 2320B	Alkalinity	SM	TAL NSH

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84672-1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	TN965	09-30-15

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
8270D	3510C	Water	1,4-Dioxane

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total
8260C		Water	Dichlorobromomethane
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	1,4-Dioxane
8260C SIM		Water	Ethylene Dibromide
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-84672 Chain of Custody

Cooler Received/Opened On 8/8/2015 @ 0945

1. Tracking # 1Z08395Y4604D3752 (last 4 digits, FedEx)

Courier: UPS IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 1.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where:

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) ✓

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (intial) mam

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) mam

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA mam 8.8.15

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) mam

I certify that I attached a label with the unique LIMS number to each container (intial) mam

21. Were there Non-Conformance issues at login? YES NO mam 8.8.15 Was a NCM generated? YES NO mam 8.8.15 #

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

King of Prussia
Loc: 490
84672

Cooler Received/Opened On 8/8/2015 @ 0945

1. Tracking # 120839SE4916007 0746 (last 4 digits, FedEx)

Courier: UPS IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 1.3 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? (YES)...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other (None)

9. Cooling process: Ice Ice-pack (Ice (direct contact)) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? YES...(NO)..NA

b. Was there any observable headspace present in any VOA vial? YES...NO..(NA)

14. Was there a Trip Blank in this cooler? YES...NO..(NA) If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) _____ mbm

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? (YES)NO..NA

b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA

16. Was residual chlorine present? YES..(NO)..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) mbm

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..(NO)..NA mbm 8.8.15

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) mbm

I certify that I attached a label with the unique LIMS number to each container (intial) mbm

21. Were there Non-Conformance issues at login? (YES)..(NO) mbm 8.8.15 Was a NCM generated? (YES)..(NO) mbm 8.8.15 #_____

#4) No amber mbm 8.8.15 containers received for 8270 & 8082 analyses. mbm

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Loc: 490
84672

9/14/2015

Client Information	Sampler: Robert Lawrence	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:

Address: 100 Crystal Run Road Suite 101	Due Date Requested:
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package
State, Zip: NY, 10941	
Phone: 845-695-0252(Tel)	PO #:
Email: tim.roeper@cornerstoneeg.com	WO #:
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864
Site:	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate	Total Number of containers	Special Instructions/Note:
				Preservation Code:															
1	RW-7-080615 MS/MSD	8/6/15	10:05	G	Water	N	Y	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
2	OB-21-080615	8/6/15	10:35	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
3	Dup-01-080615	8/6/15	12:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
4	OB-6-080615	8/6/15	10:05	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
5	OB-11R-080615	8/6/15	12:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
6	OB-27-080615	8/6/15	15:20	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
7	OB-30C-080615	8/6/15	15:05	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
8	OB-30B-080615	8/6/15	15:10	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	~~RW-3-080615~~				Water														
9	RW-3 (77-87)-080615	8/6/15	14:35	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
10	TB-03-080715	8/7/15	—	—	Water	N	N	✓	✓										

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 8/7/15 730	Company: QS	Received by: James Thro	Date/Time: 8/7/15 730	Company: TA
Relinquished by:	Date/Time: 8/7/15 1320	Company: TA	Received by:	Date/Time: 8.8.15@1000 0945	Company: TAN
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.3/1.1c

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-84672 Chain of Custody

Cooler Received/Opened On: 8/11/2015 @0930

1. **Tracking #** 2140 (last 4 digits, FedEx)

Courier: Fed-Ex **IR Gun ID:** 14740456

2. Temperature of rep. sample or temp blank when opened: 1.6 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...(NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where: (0)

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? YES..(NO)..NA

I certify that I opened the cooler and answered questions 1-6 (intial) (0)

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? YES..(NO)...NA

b. Was there any observable headspace present in any VOA vial? YES...NO..(NA)

14. Was there a Trip Blank in this cooler? YES...NO..(NA) If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used YES..(NO)...NA

16. Was residual chlorine present? YES...NO..(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
84672

Cooler Received/Opened On: 8/11/2015 @0930

1. Tracking # 2107 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 0.9 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where: 0

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? YES..(NO)..NA

I certify that I opened the cooler and answered questions 1-6 (intial) (+)

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? YES..(NO)..NA

b. Was there any observable headspace present in any VOA vial? YES...NO..(NA)

14. Was there a Trip Blank in this cooler? YES...NO..(NA) If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) HHG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used YES..(NO)..NA

16. Was residual chlorine present? YES...NO..(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HHG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HHG

I certify that I attached a label with the unique LIMS number to each container (intial) HHG

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 490
84672

COOLER RECEIPT FORM

Cooler Received/Opened On 8/11/2015 @ 0930

1. Tracking # 2118 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 1.1 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) HHG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HHG

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HHG

I certify that I attached a label with the unique LIMS number to each container (intial) HHG

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Kin Loc: 490 sia
84672
#1
K

Cooler Received/Opened On 8/11/2015 @ 9:30

1. Tracking # 2129 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960358

2. Temperature of rep. sample or temp blank when opened: 0.9 Degrees Celsius

3. If item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? YES..(NO)...NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? YES..(NO)...NA

I certify that I opened the cooler and answered questions 1-6 (intial) ELA

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? YES...(NO)..NA

b. Was there any observable headspace present in any VOA vial? YES...NO...(NA)

14. Was there a Trip Blank in this cooler? YES...NO...(NA) If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used YES..(NO)...NA

16. Was residual chlorine present? YES...NO...(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..(NO) Was a PIPE generated? YES..(NO)..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 6/24/09

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
84672
#1
L

Cooler Received/Opened On: 8/11/2015 @0930

1. Tracking # 2092 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 0.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: Φ

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (intial) Φ

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) HMG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HMG

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HMG

I certify that I attached a label with the unique LIMS number to each container (intial) HMG

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
84672
#1
M

Cooler Received/Opened On: 8/11/2015 @0930

1. Tracking # 2081 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 2.0 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: 4

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) HG

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) HMG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HMG

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HMG

I certify that I attached a label with the unique LIMS number to each container (intial) HMG

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
84672
#1
N

Cooler Received/Opened On: 8/11/2015 @0930

1. Tracking # 2130 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 0.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. *Were custody seals on outside of cooler?* YES..(NO)..NA

If yes, how many and where: (P)

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? YES..(NO)..NA

I certify that I opened the cooler and answered questions 1-6 (intial) (F)

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? YES..(NO)..NA

b. Was there any observable headspace present in any VOA vial? YES...NO..(NA)

14. Was there a Trip Blank in this cooler? YES...NO..(NA) If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used YES..(NO)...NA

16. Was residual chlorine present? YES...NO..(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. *Were custody papers properly filled out (ink, signed, etc)?* (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

BIS = Broken in shipment

Loc: 490
84672
#1
O

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Robert Lawfesberg	Lab PM: Brown, Shali	Carrier:	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	8082A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:															
RW-7-080615 MS/MSD	8/6/15	10:05	G	Water	N	Y	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
OB-21-080615	8/6/15	10:35	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Dup-01-080615	8/6/15	12:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
OB-6-080615	8/6/15	10:05	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
OB-11R-080615	8/6/15	12:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
OB-27-080615	8/6/15	15:20	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
OB-30C-080615	8/6/15	15:05	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
OB-30B-080615	8/6/15	15:10	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
~~RW-3-080615~~				Water														
RW-3 (77-87)-080615	8/6/15	14:35	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
TB-03-080715	8/7/15	—	—	Water	N	N	✓	✓										

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 8/7/15	730	Company: C5	Received by: James Thro	Date/Time: 8/7/15	730	Company: TA
Relinquished by:	Date/Time: 8/7/15	1320	Company: TA	Received by:	Date/Time:		Company:
Relinquished by:	Date/Time: 8/10/15	1800	Company:	Received by: 1.6/0.9/1.1/0.9/0.1	Date/Time: 12.0/0.1 8/11/15	930	Company: TAN

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

9/14/2015

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 490-84672-1

Login Number: 84672
List Number: 1
Creator: McBride, Mike

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3/1.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-84924-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Tim Roeper

Authorized for release by:
9/17/2015 5:56:11 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-84924-1	OB-13-081015	Water	08/10/15 09:45	08/12/15 09:45
490-84924-2	OB-3-081015	Water	08/10/15 11:50	08/12/15 09:45
490-84924-3	Dup-02-081015	Water	08/10/15 12:00	08/12/15 09:45
490-84924-4	OB-12-081015	Water	08/10/15 14:45	08/12/15 09:45
490-84924-5	OB-5-081015	Water	08/10/15 10:25	08/12/15 09:45
490-84924-6	OB-4-081015	Water	08/10/15 14:30	08/12/15 09:45
490-84924-7	TB-05-081115	Water	08/11/15 00:01	08/12/15 09:45
490-84924-8	RW-3DD (175-180)-081015	Water	08/10/15 14:25	08/12/15 09:45
490-84924-9	RW-4 (393-403)-081015	Water	08/10/15 09:40	08/12/15 09:45
490-84924-10	RW-4A (62-72)-081015	Water	08/10/15 12:15	08/12/15 09:45
490-84924-11	FB-02-081115	Water	08/11/15 09:00	08/12/15 09:45

Job ID: 490-84924-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 490-84924-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 8/12/2015 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 9 coolers at receipt time were 0.2º C, 0.2º C, 0.7º C, 1.0º C, 1.5º C, 1.8º C, 2.1º C, 2.8º C and 2.8º C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples OB-13-081015 (490-84924-1), OB-3-081015 (490-84924-2), Dup-02-081015 (490-84924-3), OB-12-081015 (490-84924-4), OB-5-081015 (490-84924-5), OB-4-081015 (490-84924-6), TB-05-081115 (490-84924-7), RW-3DD (175-180)-081015 (490-84924-8), RW-4 (393-403)-081015 (490-84924-9), RW-4A (62-72)-081015 (490-84924-10) and FB-02-081115 (490-84924-11) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/18/2015.

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

VOLATILE ORGANIC COMPOUNDS (GC-MS SIM)

Samples OB-13-081015 (490-84924-1), OB-3-081015 (490-84924-2), Dup-02-081015 (490-84924-3), OB-12-081015 (490-84924-4), OB-5-081015 (490-84924-5), OB-4-081015 (490-84924-6), TB-05-081115 (490-84924-7), RW-3DD (175-180)-081015 (490-84924-8), RW-4 (393-403)-081015 (490-84924-9), RW-4A (62-72)-081015 (490-84924-10) and FB-02-081115 (490-84924-11) were analyzed for volatile organic compounds (GC-MS SIM) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/20/2015, 08/21/2015 and 08/24/2015.

Job ID: 490-84924-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

1,4-Dioxane failed the recovery criteria low for the MS of sample OB-5-081015MS (490-84924-5) in batch 490-274966.
1,4-Dioxane failed the recovery criteria low for the MSD of sample OB-5-081015MSD (490-84924-5) in batch 490-274966. Refer to the QC report for details.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GC MS)

Samples OB-13-081015 (490-84924-1), OB-3-081015 (490-84924-2), Dup-02-081015 (490-84924-3), OB-12-081015 (490-84924-4), OB-5-081015 (490-84924-5), OB-4-081015 (490-84924-6), RW-3DD (175-180)-081015 (490-84924-8), RW-4 (393-403)-081015 (490-84924-9), RW-4A (62-72)-081015 (490-84924-10) and FB-02-081115 (490-84924-11) were analyzed for semivolatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/15/2015 and analyzed on 08/17/2015 and 08/18/2015.

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

POLYCHLORINATED BIPHENYLS (PCBS)

Samples OB-13-081015 (490-84924-1), OB-3-081015 (490-84924-2), Dup-02-081015 (490-84924-3), OB-12-081015 (490-84924-4), OB-5-081015 (490-84924-5), OB-4-081015 (490-84924-6), RW-3DD (175-180)-081015 (490-84924-8), RW-4 (393-403)-081015 (490-84924-9), RW-4A (62-72)-081015 (490-84924-10) and FB-02-081115 (490-84924-11) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared and analyzed on 08/24/2015.

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

POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

Samples OB-13-081015 (490-84924-1), OB-3-081015 (490-84924-2), Dup-02-081015 (490-84924-3), OB-12-081015 (490-84924-4), OB-5-081015 (490-84924-5), OB-4-081015 (490-84924-6), RW-3DD (175-180)-081015 (490-84924-8), RW-4 (393-403)-081015 (490-84924-9), RW-4A (62-72)-081015 (490-84924-10) and FB-02-081115 (490-84924-11) were analyzed for polycyclic aromatic hydrocarbons (PAHs) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/13/2015 and 08/15/2015 and analyzed on 08/13/2015, 08/19/2015 and 08/20/2015.

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

DISSOLVED METALS (ICPMS)

Samples OB-13-081015 (490-84924-1), OB-3-081015 (490-84924-2), Dup-02-081015 (490-84924-3), OB-12-081015 (490-84924-4), OB-5-081015 (490-84924-5), OB-4-081015 (490-84924-6), RW-3DD (175-180)-081015 (490-84924-8), RW-4 (393-403)-081015 (490-84924-9), RW-4A (62-72)-081015 (490-84924-10) and FB-02-081115 (490-84924-11) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/14/2015 and analyzed on 08/15/2015, 08/17/2015, 08/21/2015 and 09/07/2015.

Vanadium was detected in method blank MB 490-273171/1-B at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

The continuing calibration verification (CCV) associated with batch 490-278731 recovered above the upper control limit for Beryllium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: OB-13-081015 (490-84924-1), OB-3-081015 (490-84924-2), Dup-02-081015 (490-84924-3), OB-12-081015 (490-84924-4), OB-5-081015 (490-84924-5), OB-4-081015 (490-84924-6), RW-3DD (175-180)-081015 (490-84924-8), RW-4 (393-403)-081015 (490-84924-9), RW-4A (62-72)-081015 (490-84924-10) and FB-02-081115 (490-84924-11).

Calcium and Manganese failed the recovery criteria low for the MS of sample OB-5-081015MS (490-84924-5) in batch 490-279689. Iron failed the recovery criteria high.
Calcium and Manganese failed the recovery criteria low for the MSD of sample OB-5-081015MSD (490-84924-5) in batch 490-279689. Iron failed the recovery criteria high. Refer to the QC report for details.

Job ID: 490-84924-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

Sample OB-4-081015 (490-84924-6)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

METALS (ICPMS)

Samples OB-13-081015 (490-84924-1), OB-3-081015 (490-84924-2), Dup-02-081015 (490-84924-3), OB-12-081015 (490-84924-4), OB-5-081015 (490-84924-5), OB-4-081015 (490-84924-6), RW-3DD (175-180)-081015 (490-84924-8), RW-4 (393-403)-081015 (490-84924-9), RW-4A (62-72)-081015 (490-84924-10) and FB-02-081115 (490-84924-11) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/13/2015 and analyzed on 08/14/2015, 08/17/2015, 08/19/2015 and 09/01/2015.

Sodium and Vanadium were detected in method blank MB 490-272910/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

The continuing calibration verification (CCV) associated with batch 490-278731 recovered above the upper control limit for Beryllium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: OB-13-081015 (490-84924-1), OB-3-081015 (490-84924-2), Dup-02-081015 (490-84924-3), OB-12-081015 (490-84924-4), OB-5-081015 (490-84924-5), OB-4-081015 (490-84924-6), RW-3DD (175-180)-081015 (490-84924-8), RW-4 (393-403) -081015 (490-84924-9), RW-4A (62-72)-081015 (490-84924-10) and FB-02-081115 (490-84924-11).

Selenium failed the recovery criteria low for the MS of sample OB-5-081015MS (490-84924-5) in batch 490-278731. Iron failed the recovery criteria high.
Selenium failed the recovery criteria low for the MSD of sample OB-5-081015MSD (490-84924-5) in batch 490-278731. Calcium, Iron and Manganese failed the recovery criteria high. Refer to the QC report for details.

Sample OB-4-081015 (490-84924-6)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

DISSOLVED MERCURY (CVAA)

Samples OB-13-081015 (490-84924-1), OB-3-081015 (490-84924-2), Dup-02-081015 (490-84924-3), OB-12-081015 (490-84924-4), OB-5-081015 (490-84924-5), OB-4-081015 (490-84924-6), RW-3DD (175-180)-081015 (490-84924-8), RW-4 (393-403)-081015 (490-84924-9), RW-4A (62-72)-081015 (490-84924-10) and FB-02-081115 (490-84924-11) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/14/2015 and analyzed on 08/18/2015.

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

TOTAL MERCURY

Samples OB-13-081015 (490-84924-1), OB-3-081015 (490-84924-2), Dup-02-081015 (490-84924-3), OB-12-081015 (490-84924-4), OB-5-081015 (490-84924-5), OB-4-081015 (490-84924-6), RW-3DD (175-180)-081015 (490-84924-8), RW-4 (393-403)-081015 (490-84924-9), RW-4A (62-72)-081015 (490-84924-10) and FB-02-081115 (490-84924-11) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/18/2015 and analyzed on 08/19/2015.

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

ALKALINITY

Samples OB-13-081015 (490-84924-1), OB-3-081015 (490-84924-2), Dup-02-081015 (490-84924-3), OB-12-081015 (490-84924-4), OB-5-081015 (490-84924-5), OB-4-081015 (490-84924-6), RW-3DD (175-180)-081015 (490-84924-8), RW-4 (393-403)-081015 (490-84924-9), RW-4A (62-72)-081015 (490-84924-10) and FB-02-081115 (490-84924-11) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/12/2015.

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

Job ID: 490-84924-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

TOTAL CYANIDE

Samples OB-13-081015 (490-84924-1), OB-3-081015 (490-84924-2), Dup-02-081015 (490-84924-3), OB-12-081015 (490-84924-4), OB-5-081015 (490-84924-5), OB-4-081015 (490-84924-6), RW-3DD (175-180)-081015 (490-84924-8), RW-4 (393-403)-081015 (490-84924-9), RW-4A (62-72)-081015 (490-84924-10) and FB-02-081115 (490-84924-11) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared on 08/13/2015 and 08/19/2015 and analyzed on 08/14/2015 and 08/21/2015.

Cyanide, Total failed the recovery criteria low for the MS of sample OB-5-081015MS (490-84924-5) in batch 490-274101.
Cyanide, Total failed the recovery criteria low for the MSD of sample OB-5-081015MSD (490-84924-5) in batch 490-274101. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

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

ANIONS

Samples OB-13-081015 (490-84924-1), OB-3-081015 (490-84924-2), Dup-02-081015 (490-84924-3), OB-12-081015 (490-84924-4), OB-5-081015 (490-84924-5), OB-4-081015 (490-84924-6), RW-3DD (175-180)-081015 (490-84924-8), RW-4 (393-403)-081015 (490-84924-9), RW-4A (62-72)-081015 (490-84924-10) and FB-02-081115 (490-84924-11) were analyzed for anions in accordance with SW-846 Method 9056. The samples were analyzed on 08/21/2015.

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
^	Instrument related QC is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-13-081015
Date Collected: 08/10/15 09:45
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/20/15 20:23	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/20/15 20:23	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/20/15 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/20/15 20:23*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/20/15 20:23*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/20/15 20:23*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/20/15 20:23*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/24/15 20:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/24/15 20:19*	*1*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*08/24/15 20:19*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/24/15 20:19*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/24/15 20:19*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 02:41	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 02:41	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 02:41	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 02:41	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 02:41	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 02:41	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 02:41	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 02:41	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 02:41	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 02:41	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 02:41	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 02:41	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 02:41	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 02:41	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 02:41	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 02:41	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 02:41	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 02:41	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 02:41	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 02:41	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 02:41	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 02:41	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 02:41	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 02:41	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 02:41	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 02:41	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 02:41	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 02:41	1

Client Sample ID: OB-13-081015
Date Collected: 08/10/15 09:45
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 02:41	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 02:41	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 02:41	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 02:41	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 02:41	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 02:41	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 02:41	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 02:41	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 02:41	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 02:41	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 02:41	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 02:41	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 02:41	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 02:41	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 02:41	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 02:41	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 02:41	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 02:41	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 02:41	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 02:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 02:41*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 02:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/18/15 02:41*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*08/18/15 02:41*	*1*
Toluene-d8 (Surr)	*113*		*70 - 130*		*08/18/15 02:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*08/18/15 02:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 18:08	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 18:08	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 18:08	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 06:53	08/13/15 18:08	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 06:53	08/13/15 18:08	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 06:53	08/13/15 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*56*		*29 - 120*	*08/13/15 06:53*	*08/13/15 18:08*	*1*
Nitrobenzene-d5	*51*		*27 - 120*	*08/13/15 06:53*	*08/13/15 18:08*	*1*
Terphenyl-d14	*69*		*13 - 120*	*08/13/15 06:53*	*08/13/15 18:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/15/15 08:20	08/19/15 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*64*		*10 - 120*	*08/15/15 08:20*	*08/19/15 22:58*	*1*

Client Sample ID: OB-13-081015
Date Collected: 08/10/15 09:45
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-1
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	*55*		*10 - 120*	*08/15/15 08:20*	*08/19/15 22:58*	*1*
Phenol-d5	*42*		*10 - 120*	*08/15/15 08:20*	*08/19/15 22:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.081	U	0.51	0.081	ug/L		08/15/15 13:28	08/17/15 15:34	1
1,2,4,5-Tetrachlorobenzene	0.53	U	2.5	0.53	ug/L		08/15/15 13:28	08/17/15 15:34	1
2,3,4,6-Tetrachlorophenol	1.7	U	2.5	1.7	ug/L		08/15/15 13:28	08/17/15 15:34	1
2,4,5-Trichlorophenol	1.8	U	2.5	1.8	ug/L		08/15/15 13:28	08/17/15 15:34	1
2,4,6-Trichlorophenol	1.7	U	2.5	1.7	ug/L		08/15/15 13:28	08/17/15 15:34	1
2,4-Dichlorophenol	1.4	U	2.5	1.4	ug/L		08/15/15 13:28	08/17/15 15:34	1
2,4-Dimethylphenol	1.1	U	2.5	1.1	ug/L		08/15/15 13:28	08/17/15 15:34	1
2,4-Dinitrophenol	1.5	U	6.3	1.5	ug/L		08/15/15 13:28	08/17/15 15:34	1
2,4-Dinitrotoluene	0.81	U	2.5	0.81	ug/L		08/15/15 13:28	08/17/15 15:34	1
2,6-Dinitrotoluene	0.58	U	2.5	0.58	ug/L		08/15/15 13:28	08/17/15 15:34	1
2-Chloronaphthalene	0.71	U	2.5	0.71	ug/L		08/15/15 13:28	08/17/15 15:34	1
2-Chlorophenol	1.2	U	2.5	1.2	ug/L		08/15/15 13:28	08/17/15 15:34	1
2-Methylnaphthalene	0.10	U	0.51	0.10	ug/L		08/15/15 13:28	08/17/15 15:34	1
2-Methylphenol	0.58	U	2.5	0.58	ug/L		08/15/15 13:28	08/17/15 15:34	1
2-Nitroaniline	0.93	U	6.3	0.93	ug/L		08/15/15 13:28	08/17/15 15:34	1
2-Nitrophenol	1.3	U	2.5	1.3	ug/L		08/15/15 13:28	08/17/15 15:34	1
3,3'-Dichlorobenzidine	0.83	U	2.5	0.83	ug/L		08/15/15 13:28	08/17/15 15:34	1
3 & 4 Methylphenol	0.56	U	2.5	0.56	ug/L		08/15/15 13:28	08/17/15 15:34	1
3-Nitroaniline	0.68	U	6.3	0.68	ug/L		08/15/15 13:28	08/17/15 15:34	1
4,6-Dinitro-2-methylphenol	2.3	U	6.3	2.3	ug/L		08/15/15 13:28	08/17/15 15:34	1
4-Bromophenyl phenyl ether	0.68	U	2.5	0.68	ug/L		08/15/15 13:28	08/17/15 15:34	1
4-Chloro-3-methylphenol	1.1	U	2.5	1.1	ug/L		08/15/15 13:28	08/17/15 15:34	1
4-Chloroaniline	1.1	U	2.5	1.1	ug/L		08/15/15 13:28	08/17/15 15:34	1
4-Chlorophenyl phenyl ether	0.71	U	2.5	0.71	ug/L		08/15/15 13:28	08/17/15 15:34	1
4-Nitroaniline	0.78	U	6.3	0.78	ug/L		08/15/15 13:28	08/17/15 15:34	1
4-Nitrophenol	1.4	U	6.3	1.4	ug/L		08/15/15 13:28	08/17/15 15:34	1
Acenaphthylene	0.088	U	0.51	0.088	ug/L		08/15/15 13:28	08/17/15 15:34	1
Acetophenone	0.58	U	2.5	0.58	ug/L		08/15/15 13:28	08/17/15 15:34	1
Anthracene	0.096	U	0.51	0.096	ug/L		08/15/15 13:28	08/17/15 15:34	1
Benzaldehyde	1.4	U	2.5	1.4	ug/L		08/15/15 13:28	08/17/15 15:34	1
Benzo[g,h,i]perylene	0.16	U	0.51	0.16	ug/L		08/15/15 13:28	08/17/15 15:34	1
Benzo[k]fluoranthene	0.093	U	0.51	0.093	ug/L		08/15/15 13:28	08/17/15 15:34	1
Bis(2-chloroethoxy)methane	0.78	U	2.5	0.78	ug/L		08/15/15 13:28	08/17/15 15:34	1
Bis(2-chloroethyl)ether	0.71	U	2.5	0.71	ug/L		08/15/15 13:28	08/17/15 15:34	1
Butyl benzyl phthalate	0.63	U	2.5	0.63	ug/L		08/15/15 13:28	08/17/15 15:34	1
Bis(2-ethylhexyl) phthalate	**3.1**		2.5	1.5	ug/L		08/15/15 13:28	08/17/15 15:34	1
Carbazole	0.71	U	2.5	0.71	ug/L		08/15/15 13:28	08/17/15 15:34	1
Caprolactam	0.61	U	2.5	0.61	ug/L		08/15/15 13:28	08/17/15 15:34	1
Chrysene	0.083	U	0.51	0.083	ug/L		08/15/15 13:28	08/17/15 15:34	1
Dibenz(a,h)anthracene	0.11	U	0.51	0.11	ug/L		08/15/15 13:28	08/17/15 15:34	1
Dibenzofuran	0.73	U	2.5	0.73	ug/L		08/15/15 13:28	08/17/15 15:34	1
Diethyl phthalate	0.76	U	2.5	0.76	ug/L		08/15/15 13:28	08/17/15 15:34	1
Dimethyl phthalate	0.78	U	2.5	0.78	ug/L		08/15/15 13:28	08/17/15 15:34	1
Di-n-butyl phthalate	0.63	U	2.5	0.63	ug/L		08/15/15 13:28	08/17/15 15:34	1

Client Sample ID: OB-13-081015
Date Collected: 08/10/15 09:45
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	0.081	U	0.51	0.081	ug/L		08/15/15 13:28	08/17/15 15:34	1
Fluorene	0.081	U	0.51	0.081	ug/L		08/15/15 13:28	08/17/15 15:34	1
Hexachlorocyclopentadiene	0.45	U	2.5	0.45	ug/L		08/15/15 13:28	08/17/15 15:34	1
Hexachloroethane	0.48	U	2.5	0.48	ug/L		08/15/15 13:28	08/17/15 15:34	1
Indeno[1,2,3-cd]pyrene	0.10	U	0.51	0.10	ug/L		08/15/15 13:28	08/17/15 15:34	1
Isophorone	0.78	U	2.5	0.78	ug/L		08/15/15 13:28	08/17/15 15:34	1
Naphthalene	0.093	U	0.51	0.093	ug/L		08/15/15 13:28	08/17/15 15:34	1
Nitrobenzene	0.68	U	2.5	0.68	ug/L		08/15/15 13:28	08/17/15 15:34	1
N-Nitrosodi-n-propylamine	0.86	U	2.5	0.86	ug/L		08/15/15 13:28	08/17/15 15:34	1
N-Nitrosodiphenylamine	0.91	U	2.5	0.91	ug/L		08/15/15 13:28	08/17/15 15:34	1
Phenanthrene	0.11	U	0.51	0.11	ug/L		08/15/15 13:28	08/17/15 15:34	1
Phenol	0.38	U	2.5	0.38	ug/L		08/15/15 13:28	08/17/15 15:34	1
Pyrene	0.088	U	0.51	0.088	ug/L		08/15/15 13:28	08/17/15 15:34	1
Diphenyl	0.56	U	2.5	0.56	ug/L		08/15/15 13:28	08/17/15 15:34	1
Di-n-octyl phthalate	0.63	U	2.5	0.63	ug/L		08/15/15 13:28	08/17/15 15:34	1
2,2'-oxybis[1-chloropropane]	0.71	U	2.5	0.71	ug/L		08/15/15 13:28	08/17/15 15:34	1
Atrazine	0.73	U	2.5	0.73	ug/L		08/15/15 13:28	08/17/15 15:34	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/15/15 13:28*	*08/17/15 15:34*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*63*		*10 - 120*	*08/15/15 13:28*	*08/17/15 15:34*	*1*
2-Fluorobiphenyl (Surr)	*57*		*29 - 120*	*08/15/15 13:28*	*08/17/15 15:34*	*1*
2-Fluorophenol (Surr)	*32*		*10 - 120*	*08/15/15 13:28*	*08/17/15 15:34*	*1*
Nitrobenzene-d5 (Surr)	*53*		*27 - 120*	*08/15/15 13:28*	*08/17/15 15:34*	*1*
Phenol-d5 (Surr)	*20*		*10 - 120*	*08/15/15 13:28*	*08/17/15 15:34*	*1*
Terphenyl-d14 (Surr)	*66*		*13 - 120*	*08/15/15 13:28*	*08/17/15 15:34*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 18:38	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/24/15 10:53	08/24/15 18:38	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/24/15 10:53	08/24/15 18:38	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/24/15 10:53	08/24/15 18:38	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/24/15 10:53	08/24/15 18:38	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/24/15 10:53	08/24/15 18:38	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/24/15 10:53	08/24/15 18:38	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*81*		*10 - 150*	*08/24/15 10:53*	*08/24/15 18:38*	*1*
Tetrachloro-m-xylene	*78*		*10 - 150*	*08/24/15 10:53*	*08/24/15 18:38*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.75**		1.00	0.70	mg/L			08/21/15 18:58	1
Sulfate	**7.65**		1.00	0.60	mg/L			08/21/15 18:58	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-13-081015
Date Collected: 08/10/15 09:45
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-1
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.020**		0.020	0.0096	mg/L		08/13/15 10:37	08/14/15 23:02	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:02	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:02	1
Barium	**0.0046**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:02	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:02	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/13/15 10:37	08/14/15 23:02	1
Calcium	**7.9**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:02	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:02	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:02	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/19/15 12:40	1
Iron	**0.020**	**J**	0.025	0.010	mg/L		08/13/15 10:37	08/14/15 23:02	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 23:02	1
Magnesium	**3.0**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:02	1
Manganese	**0.0045**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:02	1
Nickel	**0.00061**	**J**	0.0020	0.00050	mg/L		08/13/15 10:37	08/19/15 12:40	1
Potassium	**1.1**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:02	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/13/15 10:37	08/14/15 23:02	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:02	1
Sodium	**3.2**	**B**	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:02	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 23:02	1
Vanadium	**0.0014**	**J B**	0.0020	0.00010	mg/L		08/13/15 10:37	08/14/15 23:02	1
Zinc	0.010	U	0.025	0.010	mg/L		08/13/15 10:37	08/19/15 12:40	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/14/15 09:22	08/15/15 01:03	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:03	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:03	1
Barium	**0.0045**		0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:03	1
Beryllium	0.00050	U ^	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:03	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/14/15 09:22	08/15/15 01:03	1
Calcium	**7.6**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:03	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:03	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:03	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:03	1
Iron	0.010	U	0.025	0.010	mg/L		08/14/15 09:22	08/15/15 01:03	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 01:03	1
Magnesium	**2.9**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:03	1
Manganese	**0.0029**		0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:03	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:03	1
Potassium	**1.1**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:03	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/14/15 09:22	08/15/15 01:03	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:03	1
Sodium	**3.0**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:03	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 01:03	1
Vanadium	**0.0013**	**J B**	0.0020	0.00010	mg/L		08/14/15 09:22	08/15/15 01:03	1
Zinc	0.010	U	0.025	0.010	mg/L		08/14/15 09:22	08/15/15 01:03	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-13-081015
Date Collected: 08/10/15 09:45
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-1
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 18:16	08/19/15 13:53	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/14/15 08:28	08/18/15 20:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/13/15 15:34	08/14/15 12:31	1
Bicarbonate Alkalinity as CaCO3	**24.4**		10.0	5.0	mg/L			08/12/15 18:21	1
Total Alkalinity as CaCO3	**24.4**		10.0	5.0	mg/L			08/12/15 18:21	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-3-081015
Date Collected: 08/10/15 11:50
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/20/15 20:52	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/20/15 20:52	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/20/15 20:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*08/20/15 20:52*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*08/20/15 20:52*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/20/15 20:52*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/20/15 20:52*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/24/15 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/24/15 20:48*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*08/24/15 20:48*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/24/15 20:48*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/24/15 20:48*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 03:07	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 03:07	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 03:07	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 03:07	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 03:07	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 03:07	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 03:07	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 03:07	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 03:07	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 03:07	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 03:07	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 03:07	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 03:07	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 03:07	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 03:07	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 03:07	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 03:07	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 03:07	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 03:07	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 03:07	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 03:07	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 03:07	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 03:07	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 03:07	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 03:07	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 03:07	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 03:07	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 03:07	1

Client Sample ID: OB-3-081015
Date Collected: 08/10/15 11:50
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 03:07	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 03:07	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 03:07	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 03:07	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 03:07	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 03:07	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 03:07	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 03:07	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 03:07	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 03:07	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 03:07	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 03:07	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 03:07	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 03:07	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 03:07	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 03:07	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 03:07	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 03:07	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 03:07	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 03:07	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 03:07*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 03:07*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/18/15 03:07*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/18/15 03:07*	*1*
Toluene-d8 (Surr)	*112*		*70 - 130*		*08/18/15 03:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*08/18/15 03:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 18:36	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 18:36	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 18:36	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 06:53	08/13/15 18:36	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 06:53	08/13/15 18:36	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 06:53	08/13/15 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*54*		*29 - 120*	*08/13/15 06:53*	*08/13/15 18:36*	*1*
Nitrobenzene-d5	*49*		*27 - 120*	*08/13/15 06:53*	*08/13/15 18:36*	*1*
Terphenyl-d14	*68*		*13 - 120*	*08/13/15 06:53*	*08/13/15 18:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/15/15 08:20	08/19/15 23:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*57*		*10 - 120*	*08/15/15 08:20*	*08/19/15 23:25*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-3-081015
Date Collected: 08/10/15 11:50
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-2
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	*55*		*10 - 120*	*08/15/15 08:20*	*08/19/15 23:25*	*1*
Phenol-d5	*43*		*10 - 120*	*08/15/15 08:20*	*08/19/15 23:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.082	U	0.51	0.082	ug/L		08/15/15 13:28	08/17/15 16:13	1
1,2,4,5-Tetrachlorobenzene	0.54	U	2.6	0.54	ug/L		08/15/15 13:28	08/17/15 16:13	1
2,3,4,6-Tetrachlorophenol	1.8	U	2.6	1.8	ug/L		08/15/15 13:28	08/17/15 16:13	1
2,4,5-Trichlorophenol	1.8	U	2.6	1.8	ug/L		08/15/15 13:28	08/17/15 16:13	1
2,4,6-Trichlorophenol	1.7	U	2.6	1.7	ug/L		08/15/15 13:28	08/17/15 16:13	1
2,4-Dichlorophenol	1.4	U	2.6	1.4	ug/L		08/15/15 13:28	08/17/15 16:13	1
2,4-Dimethylphenol	1.1	U	2.6	1.1	ug/L		08/15/15 13:28	08/17/15 16:13	1
2,4-Dinitrophenol	1.5	U	6.4	1.5	ug/L		08/15/15 13:28	08/17/15 16:13	1
2,4-Dinitrotoluene	0.82	U	2.6	0.82	ug/L		08/15/15 13:28	08/17/15 16:13	1
2,6-Dinitrotoluene	0.59	U	2.6	0.59	ug/L		08/15/15 13:28	08/17/15 16:13	1
2-Chloronaphthalene	0.71	U	2.6	0.71	ug/L		08/15/15 13:28	08/17/15 16:13	1
2-Chlorophenol	1.2	U	2.6	1.2	ug/L		08/15/15 13:28	08/17/15 16:13	1
2-Methylnaphthalene	0.10	U	0.51	0.10	ug/L		08/15/15 13:28	08/17/15 16:13	1
2-Methylphenol	0.59	U	2.6	0.59	ug/L		08/15/15 13:28	08/17/15 16:13	1
2-Nitroaniline	0.94	U	6.4	0.94	ug/L		08/15/15 13:28	08/17/15 16:13	1
2-Nitrophenol	1.4	U	2.6	1.4	ug/L		08/15/15 13:28	08/17/15 16:13	1
3,3'-Dichlorobenzidine	0.84	U	2.6	0.84	ug/L		08/15/15 13:28	08/17/15 16:13	1
3 & 4 Methylphenol	0.56	U	2.6	0.56	ug/L		08/15/15 13:28	08/17/15 16:13	1
3-Nitroaniline	0.69	U	6.4	0.69	ug/L		08/15/15 13:28	08/17/15 16:13	1
4,6-Dinitro-2-methylphenol	2.4	U	6.4	2.4	ug/L		08/15/15 13:28	08/17/15 16:13	1
4-Bromophenyl phenyl ether	0.69	U	2.6	0.69	ug/L		08/15/15 13:28	08/17/15 16:13	1
4-Chloro-3-methylphenol	1.1	U	2.6	1.1	ug/L		08/15/15 13:28	08/17/15 16:13	1
4-Chloroaniline	1.1	U	2.6	1.1	ug/L		08/15/15 13:28	08/17/15 16:13	1
4-Chlorophenyl phenyl ether	0.71	U	2.6	0.71	ug/L		08/15/15 13:28	08/17/15 16:13	1
4-Nitroaniline	0.79	U	6.4	0.79	ug/L		08/15/15 13:28	08/17/15 16:13	1
4-Nitrophenol	1.4	U	6.4	1.4	ug/L		08/15/15 13:28	08/17/15 16:13	1
Acenaphthylene	0.089	U	0.51	0.089	ug/L		08/15/15 13:28	08/17/15 16:13	1
Acetophenone	0.59	U	2.6	0.59	ug/L		08/15/15 13:28	08/17/15 16:13	1
Anthracene	0.097	U	0.51	0.097	ug/L		08/15/15 13:28	08/17/15 16:13	1
Benzaldehyde	1.5	U	2.6	1.5	ug/L		08/15/15 13:28	08/17/15 16:13	1
Benzo[g,h,i]perylene	0.16	U	0.51	0.16	ug/L		08/15/15 13:28	08/17/15 16:13	1
Benzo[k]fluoranthene	0.094	U	0.51	0.094	ug/L		08/15/15 13:28	08/17/15 16:13	1
Bis(2-chloroethoxy)methane	0.79	U	2.6	0.79	ug/L		08/15/15 13:28	08/17/15 16:13	1
Bis(2-chloroethyl)ether	0.71	U	2.6	0.71	ug/L		08/15/15 13:28	08/17/15 16:13	1
Butyl benzyl phthalate	0.64	U	2.6	0.64	ug/L		08/15/15 13:28	08/17/15 16:13	1
Bis(2-ethylhexyl) phthalate	**6.3**		2.6	1.5	ug/L		08/15/15 13:28	08/17/15 16:13	1
Carbazole	0.71	U	2.6	0.71	ug/L		08/15/15 13:28	08/17/15 16:13	1
Caprolactam	0.61	U	2.6	0.61	ug/L		08/15/15 13:28	08/17/15 16:13	1
Chrysene	0.084	U	0.51	0.084	ug/L		08/15/15 13:28	08/17/15 16:13	1
Dibenz(a,h)anthracene	0.11	U	0.51	0.11	ug/L		08/15/15 13:28	08/17/15 16:13	1
Dibenzofuran	0.74	U	2.6	0.74	ug/L		08/15/15 13:28	08/17/15 16:13	1
Diethyl phthalate	0.77	U	2.6	0.77	ug/L		08/15/15 13:28	08/17/15 16:13	1
Dimethyl phthalate	0.79	U	2.6	0.79	ug/L		08/15/15 13:28	08/17/15 16:13	1
Di-n-butyl phthalate	0.64	U	2.6	0.64	ug/L		08/15/15 13:28	08/17/15 16:13	1

Client Sample ID: OB-3-081015
Date Collected: 08/10/15 11:50
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	0.082	U	0.51	0.082	ug/L		08/15/15 13:28	08/17/15 16:13	1
Fluorene	0.082	U	0.51	0.082	ug/L		08/15/15 13:28	08/17/15 16:13	1
Hexachlorocyclopentadiene	0.46	U	2.6	0.46	ug/L		08/15/15 13:28	08/17/15 16:13	1
Hexachloroethane	0.48	U	2.6	0.48	ug/L		08/15/15 13:28	08/17/15 16:13	1
Indeno[1,2,3-cd]pyrene	0.10	U	0.51	0.10	ug/L		08/15/15 13:28	08/17/15 16:13	1
Isophorone	0.79	U	2.6	0.79	ug/L		08/15/15 13:28	08/17/15 16:13	1
Naphthalene	0.094	U	0.51	0.094	ug/L		08/15/15 13:28	08/17/15 16:13	1
Nitrobenzene	0.69	U	2.6	0.69	ug/L		08/15/15 13:28	08/17/15 16:13	1
N-Nitrosodi-n-propylamine	0.87	U	2.6	0.87	ug/L		08/15/15 13:28	08/17/15 16:13	1
N-Nitrosodiphenylamine	0.92	U	2.6	0.92	ug/L		08/15/15 13:28	08/17/15 16:13	1
Phenanthrene	0.11	U	0.51	0.11	ug/L		08/15/15 13:28	08/17/15 16:13	1
Phenol	0.38	U	2.6	0.38	ug/L		08/15/15 13:28	08/17/15 16:13	1
Pyrene	0.089	U	0.51	0.089	ug/L		08/15/15 13:28	08/17/15 16:13	1
Diphenyl	0.56	U	2.6	0.56	ug/L		08/15/15 13:28	08/17/15 16:13	1
Di-n-octyl phthalate	0.64	U	2.6	0.64	ug/L		08/15/15 13:28	08/17/15 16:13	1
2,2'-oxybis[1-chloropropane]	0.71	U	2.6	0.71	ug/L		08/15/15 13:28	08/17/15 16:13	1
Atrazine	0.74	U	2.6	0.74	ug/L		08/15/15 13:28	08/17/15 16:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/15/15 13:28*	*08/17/15 16:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*70*		*10 - 120*	*08/15/15 13:28*	*08/17/15 16:13*	*1*
2-Fluorobiphenyl (Surr)	*67*		*29 - 120*	*08/15/15 13:28*	*08/17/15 16:13*	*1*
2-Fluorophenol (Surr)	*31*		*10 - 120*	*08/15/15 13:28*	*08/17/15 16:13*	*1*
Nitrobenzene-d5 (Surr)	*57*		*27 - 120*	*08/15/15 13:28*	*08/17/15 16:13*	*1*
Phenol-d5 (Surr)	*19*		*10 - 120*	*08/15/15 13:28*	*08/17/15 16:13*	*1*
Terphenyl-d14 (Surr)	*69*		*13 - 120*	*08/15/15 13:28*	*08/17/15 16:13*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 18:54	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/24/15 10:53	08/24/15 18:54	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/24/15 10:53	08/24/15 18:54	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/24/15 10:53	08/24/15 18:54	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/24/15 10:53	08/24/15 18:54	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/24/15 10:53	08/24/15 18:54	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/24/15 10:53	08/24/15 18:54	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*88*		*10 - 150*	*08/24/15 10:53*	*08/24/15 18:54*	*1*
Tetrachloro-m-xylene	*88*		*10 - 150*	*08/24/15 10:53*	*08/24/15 18:54*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.66**		1.00	0.70	mg/L			08/21/15 19:17	1
Sulfate	**8.50**		1.00	0.60	mg/L			08/21/15 19:17	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-3-081015
Date Collected: 08/10/15 11:50
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-2
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/13/15 10:37	08/14/15 22:56	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:56	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:56	1
Barium	**0.0029**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:56	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:56	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/13/15 10:37	08/14/15 22:56	1
Calcium	**17.3**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 22:56	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:56	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:56	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/17/15 14:40	1
Iron	**1.8**		0.025	0.010	mg/L		08/13/15 10:37	08/14/15 22:56	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 22:56	1
Magnesium	**4.9**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 22:56	1
Manganese	**0.13**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:56	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/17/15 14:40	1
Potassium	**1.1**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 22:56	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/13/15 10:37	08/14/15 22:56	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:56	1
Sodium	**3.5**	**B**	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 22:56	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 22:56	1
Vanadium	**0.0011**	**J B**	0.0020	0.00010	mg/L		08/13/15 10:37	08/14/15 22:56	1
Zinc	0.010	U	0.025	0.010	mg/L		08/13/15 10:37	08/17/15 14:40	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/14/15 09:22	08/15/15 01:09	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:09	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:09	1
Barium	**0.0029**		0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:09	1
Beryllium	0.00050	U ^	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:09	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/14/15 09:22	08/15/15 01:09	1
Calcium	**16.9**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:09	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:09	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:09	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:09	1
Iron	**0.11**		0.025	0.010	mg/L		08/14/15 09:22	08/15/15 01:09	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 01:09	1
Magnesium	**4.8**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:09	1
Manganese	**0.12**		0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:09	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:09	1
Potassium	**1.1**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:09	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/14/15 09:22	08/15/15 01:09	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:09	1
Sodium	**3.4**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:09	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 01:09	1
Vanadium	**0.00082**	**J B**	0.0020	0.00010	mg/L		08/14/15 09:22	08/15/15 01:09	1
Zinc	0.010	U	0.025	0.010	mg/L		08/14/15 09:22	08/15/15 01:09	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-3-081015
Date Collected: 08/10/15 11:50
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-2
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 18:16	08/19/15 13:56	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/14/15 08:28	08/18/15 20:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/13/15 15:34	08/14/15 12:31	1
Bicarbonate Alkalinity as CaCO3	**47.7**		10.0	5.0	mg/L			08/12/15 18:26	1
Total Alkalinity as CaCO3	**47.7**		10.0	5.0	mg/L			08/12/15 18:26	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: Dup-02-081015
Date Collected: 08/10/15 12:00
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/20/15 21:21	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/20/15 21:21	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/20/15 21:21	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/20/15 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/20/15 21:21*	*1*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*08/20/15 21:21*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/20/15 21:21*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/20/15 21:21*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 03:33	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 03:33	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 03:33	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 03:33	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 03:33	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 03:33	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 03:33	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 03:33	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 03:33	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 03:33	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 03:33	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 03:33	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 03:33	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 03:33	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 03:33	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 03:33	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 03:33	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 03:33	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 03:33	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 03:33	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 03:33	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 03:33	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 03:33	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 03:33	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 03:33	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 03:33	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 03:33	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 03:33	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 03:33	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 03:33	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 03:33	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 03:33	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 03:33	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 03:33	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 03:33	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 03:33	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 03:33	1

Client Sample ID: Dup-02-081015
Date Collected: 08/10/15 12:00
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 03:33	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 03:33	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 03:33	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 03:33	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 03:33	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 03:33	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 03:33	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 03:33	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 03:33	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 03:33	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 03:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 03:33*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 03:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/18/15 03:33*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/18/15 03:33*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*08/18/15 03:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*08/18/15 03:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 19:03	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 19:03	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 19:03	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 06:53	08/13/15 19:03	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 06:53	08/13/15 19:03	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 06:53	08/13/15 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*50*		*29 - 120*	*08/13/15 06:53*	*08/13/15 19:03*	*1*
Nitrobenzene-d5	*46*		*27 - 120*	*08/13/15 06:53*	*08/13/15 19:03*	*1*
Terphenyl-d14	*64*		*13 - 120*	*08/13/15 06:53*	*08/13/15 19:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/15/15 08:20	08/19/15 23:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*65*		*10 - 120*	*08/15/15 08:20*	*08/19/15 23:53*	*1*
2-Fluorophenol	*45*		*10 - 120*	*08/15/15 08:20*	*08/19/15 23:53*	*1*
Phenol-d5	*37*		*10 - 120*	*08/15/15 08:20*	*08/19/15 23:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.084	U	0.53	0.084	ug/L		08/15/15 13:28	08/17/15 16:36	1
1,2,4,5-Tetrachlorobenzene	0.55	U	2.6	0.55	ug/L		08/15/15 13:28	08/17/15 16:36	1
2,3,4,6-Tetrachlorophenol	1.8	U	2.6	1.8	ug/L		08/15/15 13:28	08/17/15 16:36	1
2,4,5-Trichlorophenol	1.9	U	2.6	1.9	ug/L		08/15/15 13:28	08/17/15 16:36	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: Dup-02-081015
Date Collected: 08/10/15 12:00
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	1.8	U	2.6	1.8	ug/L		08/15/15 13:28	08/17/15 16:36	1
2,4-Dichlorophenol	1.5	U	2.6	1.5	ug/L		08/15/15 13:28	08/17/15 16:36	1
2,4-Dimethylphenol	1.1	U	2.6	1.1	ug/L		08/15/15 13:28	08/17/15 16:36	1
2,4-Dinitrophenol	1.6	U	6.6	1.6	ug/L		08/15/15 13:28	08/17/15 16:36	1
2,4-Dinitrotoluene	0.84	U	2.6	0.84	ug/L		08/15/15 13:28	08/17/15 16:36	1
2,6-Dinitrotoluene	0.61	U	2.6	0.61	ug/L		08/15/15 13:28	08/17/15 16:36	1
2-Chloronaphthalene	0.74	U	2.6	0.74	ug/L		08/15/15 13:28	08/17/15 16:36	1
2-Chlorophenol	1.3	U	2.6	1.3	ug/L		08/15/15 13:28	08/17/15 16:36	1
2-Methylnaphthalene	0.11	U	0.53	0.11	ug/L		08/15/15 13:28	08/17/15 16:36	1
2-Methylphenol	0.61	U	2.6	0.61	ug/L		08/15/15 13:28	08/17/15 16:36	1
2-Nitroaniline	0.97	U	6.6	0.97	ug/L		08/15/15 13:28	08/17/15 16:36	1
2-Nitrophenol	1.4	U	2.6	1.4	ug/L		08/15/15 13:28	08/17/15 16:36	1
3,3'-Dichlorobenzidine	0.87	U	2.6	0.87	ug/L		08/15/15 13:28	08/17/15 16:36	1
3 & 4 Methylphenol	0.58	U	2.6	0.58	ug/L		08/15/15 13:28	08/17/15 16:36	1
3-Nitroaniline	0.71	U	6.6	0.71	ug/L		08/15/15 13:28	08/17/15 16:36	1
4,6-Dinitro-2-methylphenol	2.4	U	6.6	2.4	ug/L		08/15/15 13:28	08/17/15 16:36	1
4-Bromophenyl phenyl ether	0.71	U	2.6	0.71	ug/L		08/15/15 13:28	08/17/15 16:36	1
4-Chloro-3-methylphenol	1.2	U	2.6	1.2	ug/L		08/15/15 13:28	08/17/15 16:36	1
4-Chloroaniline	1.1	U	2.6	1.1	ug/L		08/15/15 13:28	08/17/15 16:36	1
4-Chlorophenyl phenyl ether	0.74	U	2.6	0.74	ug/L		08/15/15 13:28	08/17/15 16:36	1
4-Nitroaniline	0.82	U	6.6	0.82	ug/L		08/15/15 13:28	08/17/15 16:36	1
4-Nitrophenol	1.4	U	6.6	1.4	ug/L		08/15/15 13:28	08/17/15 16:36	1
Acenaphthylene	0.092	U	0.53	0.092	ug/L		08/15/15 13:28	08/17/15 16:36	1
Acetophenone	0.61	U	2.6	0.61	ug/L		08/15/15 13:28	08/17/15 16:36	1
Anthracene	0.10	U	0.53	0.10	ug/L		08/15/15 13:28	08/17/15 16:36	1
Benzaldehyde	1.5	U	2.6	1.5	ug/L		08/15/15 13:28	08/17/15 16:36	1
Benzo[g,h,i]perylene	0.16	U	0.53	0.16	ug/L		08/15/15 13:28	08/17/15 16:36	1
Benzo[k]fluoranthene	0.097	U	0.53	0.097	ug/L		08/15/15 13:28	08/17/15 16:36	1
Bis(2-chloroethoxy)methane	0.82	U	2.6	0.82	ug/L		08/15/15 13:28	08/17/15 16:36	1
Bis(2-chloroethyl)ether	0.74	U	2.6	0.74	ug/L		08/15/15 13:28	08/17/15 16:36	1
Butyl benzyl phthalate	0.66	U	2.6	0.66	ug/L		08/15/15 13:28	08/17/15 16:36	1
Bis(2-ethylhexyl) phthalate	**3.6**		2.6	1.6	ug/L		08/15/15 13:28	08/17/15 16:36	1
Carbazole	0.74	U	2.6	0.74	ug/L		08/15/15 13:28	08/17/15 16:36	1
Caprolactam	0.63	U	2.6	0.63	ug/L		08/15/15 13:28	08/17/15 16:36	1
Chrysene	0.087	U	0.53	0.087	ug/L		08/15/15 13:28	08/17/15 16:36	1
Dibenz(a,h)anthracene	0.12	U	0.53	0.12	ug/L		08/15/15 13:28	08/17/15 16:36	1
Dibenzofuran	0.76	U	2.6	0.76	ug/L		08/15/15 13:28	08/17/15 16:36	1
Diethyl phthalate	0.79	U	2.6	0.79	ug/L		08/15/15 13:28	08/17/15 16:36	1
Dimethyl phthalate	0.82	U	2.6	0.82	ug/L		08/15/15 13:28	08/17/15 16:36	1
Di-n-butyl phthalate	0.66	U	2.6	0.66	ug/L		08/15/15 13:28	08/17/15 16:36	1
Fluoranthene	0.084	U	0.53	0.084	ug/L		08/15/15 13:28	08/17/15 16:36	1
Fluorene	0.084	U	0.53	0.084	ug/L		08/15/15 13:28	08/17/15 16:36	1
Hexachlorocyclopentadiene	0.47	U	2.6	0.47	ug/L		08/15/15 13:28	08/17/15 16:36	1
Hexachloroethane	0.50	U	2.6	0.50	ug/L		08/15/15 13:28	08/17/15 16:36	1
Indeno[1,2,3-cd]pyrene	0.11	U	0.53	0.11	ug/L		08/15/15 13:28	08/17/15 16:36	1
Isophorone	0.82	U	2.6	0.82	ug/L		08/15/15 13:28	08/17/15 16:36	1
Naphthalene	0.097	U	0.53	0.097	ug/L		08/15/15 13:28	08/17/15 16:36	1
Nitrobenzene	0.71	U	2.6	0.71	ug/L		08/15/15 13:28	08/17/15 16:36	1
N-Nitrosodi-n-propylamine	0.89	U	2.6	0.89	ug/L		08/15/15 13:28	08/17/15 16:36	1

Client Sample ID: Dup-02-081015

Date Collected: 08/10/15 12:00
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	0.95	U	2.6	0.95	ug/L		08/15/15 13:28	08/17/15 16:36	1
Phenanthrene	0.11	U	0.53	0.11	ug/L		08/15/15 13:28	08/17/15 16:36	1
Phenol	0.39	U	2.6	0.39	ug/L		08/15/15 13:28	08/17/15 16:36	1
Pyrene	0.092	U	0.53	0.092	ug/L		08/15/15 13:28	08/17/15 16:36	1
Diphenyl	0.58	U	2.6	0.58	ug/L		08/15/15 13:28	08/17/15 16:36	1
Di-n-octyl phthalate	0.66	U	2.6	0.66	ug/L		08/15/15 13:28	08/17/15 16:36	1
2,2'-oxybis[1-chloropropane]	0.74	U	2.6	0.74	ug/L		08/15/15 13:28	08/17/15 16:36	1
Atrazine	0.76	U	2.6	0.76	ug/L		08/15/15 13:28	08/17/15 16:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Diethyltoluamide	*4.7*	*J N*	*ug/L*		*7.89*	*134-62-3*	*08/15/15 13:28*	*08/17/15 16:36*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*63*		*10 - 120*	*08/15/15 13:28*	*08/17/15 16:36*	*1*
2-Fluorobiphenyl (Surr)	*62*		*29 - 120*	*08/15/15 13:28*	*08/17/15 16:36*	*1*
2-Fluorophenol (Surr)	*35*		*10 - 120*	*08/15/15 13:28*	*08/17/15 16:36*	*1*
Nitrobenzene-d5 (Surr)	*56*		*27 - 120*	*08/15/15 13:28*	*08/17/15 16:36*	*1*
Phenol-d5 (Surr)	*22*		*10 - 120*	*08/15/15 13:28*	*08/17/15 16:36*	*1*
Terphenyl-d14 (Surr)	*67*		*13 - 120*	*08/15/15 13:28*	*08/17/15 16:36*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 19:10	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/24/15 10:53	08/24/15 19:10	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/24/15 10:53	08/24/15 19:10	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/24/15 10:53	08/24/15 19:10	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/24/15 10:53	08/24/15 19:10	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/24/15 10:53	08/24/15 19:10	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/24/15 10:53	08/24/15 19:10	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*114*		*10 - 150*	*08/24/15 10:53*	*08/24/15 19:10*	*1*
Tetrachloro-m-xylene	*108*		*10 - 150*	*08/24/15 10:53*	*08/24/15 19:10*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.73**		1.00	0.70	mg/L			08/21/15 19:36	1
Sulfate	**7.34**		1.00	0.60	mg/L			08/21/15 19:36	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.019**	**J**	0.020	0.0096	mg/L		08/13/15 10:37	08/14/15 22:51	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:51	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:51	1
Barium	**0.0049**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:51	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:51	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/13/15 10:37	08/14/15 22:51	1
Calcium	**8.2**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 22:51	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:51	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:51	1

Client Sample ID: Dup-02-081015

Date Collected: 08/10/15 12:00
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-3

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/17/15 14:34	1
Iron	**0.020**	**J**	0.025	0.010	mg/L		08/13/15 10:37	08/14/15 22:51	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 22:51	1
Magnesium	**3.2**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 22:51	1
Manganese	**0.0049**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:51	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/17/15 14:34	1
Potassium	**1.2**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 22:51	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/13/15 10:37	08/14/15 22:51	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:51	1
Sodium	**3.2**	**B**	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 22:51	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 22:51	1
Vanadium	**0.0015**	**J B**	0.0020	0.00010	mg/L		08/13/15 10:37	08/14/15 22:51	1
Zinc	0.010	U	0.025	0.010	mg/L		08/13/15 10:37	08/17/15 14:34	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.0098**	**J**	0.020	0.0096	mg/L		08/14/15 09:22	08/15/15 01:26	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:26	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:26	1
Barium	**0.0045**		0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:26	1
Beryllium	0.00050	U ^	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:26	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/14/15 09:22	08/15/15 01:26	1
Calcium	**7.7**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:26	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:26	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:26	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/17/15 17:21	1
Iron	0.010	U	0.025	0.010	mg/L		08/14/15 09:22	08/15/15 01:26	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 01:26	1
Magnesium	**3.0**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:26	1
Manganese	**0.0035**		0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:26	1
Nickel	**0.00070**	**J**	0.0020	0.00050	mg/L		08/14/15 09:22	08/21/15 17:59	1
Potassium	**1.1**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:26	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/14/15 09:22	08/15/15 01:26	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:26	1
Sodium	**3.4**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:26	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 01:26	1
Vanadium	**0.0013**	**J B**	0.0020	0.00010	mg/L		08/14/15 09:22	08/15/15 01:26	1
Zinc	0.010	U	0.025	0.010	mg/L		08/14/15 09:22	08/21/15 17:59	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 18:16	08/19/15 13:58	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/14/15 08:28	08/18/15 20:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/13/15 15:34	08/14/15 12:32	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: Dup-02-081015
Date Collected: 08/10/15 12:00
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	22.9		10.0	5.0	mg/L			08/12/15 18:31	1
Total Alkalinity as CaCO3	22.9		10.0	5.0	mg/L			08/12/15 18:31	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-12-081015
Date Collected: 08/10/15 14:45
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/20/15 21:49	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/20/15 21:49	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/20/15 21:49	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/20/15 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/20/15 21:49*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/20/15 21:49*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/20/15 21:49*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*08/20/15 21:49*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 03:59	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 03:59	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 03:59	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 03:59	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 03:59	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 03:59	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 03:59	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 03:59	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 03:59	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 03:59	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 03:59	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 03:59	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 03:59	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 03:59	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 03:59	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 03:59	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 03:59	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 03:59	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 03:59	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 03:59	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 03:59	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 03:59	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 03:59	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 03:59	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 03:59	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 03:59	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 03:59	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 03:59	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 03:59	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 03:59	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 03:59	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 03:59	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 03:59	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 03:59	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 03:59	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 03:59	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 03:59	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-12-081015
Date Collected: 08/10/15 14:45
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 03:59	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 03:59	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 03:59	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 03:59	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 03:59	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 03:59	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 03:59	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 03:59	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 03:59	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 03:59	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 03:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 03:59*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 03:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/18/15 03:59*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*08/18/15 03:59*	*1*
Toluene-d8 (Surr)	*109*		*70 - 130*		*08/18/15 03:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/18/15 03:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 19:31	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 19:31	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 19:31	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 06:53	08/13/15 19:31	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 06:53	08/13/15 19:31	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 06:53	08/13/15 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*55*		*29 - 120*	*08/13/15 06:53*	*08/13/15 19:31*	*1*
Nitrobenzene-d5	*50*		*27 - 120*	*08/13/15 06:53*	*08/13/15 19:31*	*1*
Terphenyl-d14	*73*		*13 - 120*	*08/13/15 06:53*	*08/13/15 19:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/15/15 08:20	08/20/15 00:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*62*		*10 - 120*	*08/15/15 08:20*	*08/20/15 00:20*	*1*
2-Fluorophenol	*48*		*10 - 120*	*08/15/15 08:20*	*08/20/15 00:20*	*1*
Phenol-d5	*40*		*10 - 120*	*08/15/15 08:20*	*08/20/15 00:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.082	U	0.51	0.082	ug/L		08/15/15 13:28	08/18/15 11:17	1
1,2,4,5-Tetrachlorobenzene	0.54	U	2.6	0.54	ug/L		08/15/15 13:28	08/18/15 11:17	1
2,3,4,6-Tetrachlorophenol	1.8	U	2.6	1.8	ug/L		08/15/15 13:28	08/18/15 11:17	1
2,4,5-Trichlorophenol	1.8	U	2.6	1.8	ug/L		08/15/15 13:28	08/18/15 11:17	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-12-081015
Date Collected: 08/10/15 14:45
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	1.7	U	2.6	1.7	ug/L		08/15/15 13:28	08/18/15 11:17	1
2,4-Dichlorophenol	1.4	U	2.6	1.4	ug/L		08/15/15 13:28	08/18/15 11:17	1
2,4-Dimethylphenol	1.1	U	2.6	1.1	ug/L		08/15/15 13:28	08/18/15 11:17	1
2,4-Dinitrophenol	1.5	U	6.4	1.5	ug/L		08/15/15 13:28	08/18/15 11:17	1
2,4-Dinitrotoluene	0.82	U	2.6	0.82	ug/L		08/15/15 13:28	08/18/15 11:17	1
2,6-Dinitrotoluene	0.59	U	2.6	0.59	ug/L		08/15/15 13:28	08/18/15 11:17	1
2-Chloronaphthalene	0.71	U	2.6	0.71	ug/L		08/15/15 13:28	08/18/15 11:17	1
2-Chlorophenol	1.2	U	2.6	1.2	ug/L		08/15/15 13:28	08/18/15 11:17	1
2-Methylnaphthalene	0.10	U	0.51	0.10	ug/L		08/15/15 13:28	08/18/15 11:17	1
2-Methylphenol	0.59	U	2.6	0.59	ug/L		08/15/15 13:28	08/18/15 11:17	1
2-Nitroaniline	0.94	U	6.4	0.94	ug/L		08/15/15 13:28	08/18/15 11:17	1
2-Nitrophenol	1.4	U	2.6	1.4	ug/L		08/15/15 13:28	08/18/15 11:17	1
3,3'-Dichlorobenzidine	0.84	U	2.6	0.84	ug/L		08/15/15 13:28	08/18/15 11:17	1
3 & 4 Methylphenol	0.56	U	2.6	0.56	ug/L		08/15/15 13:28	08/18/15 11:17	1
3-Nitroaniline	0.69	U	6.4	0.69	ug/L		08/15/15 13:28	08/18/15 11:17	1
4,6-Dinitro-2-methylphenol	2.4	U	6.4	2.4	ug/L		08/15/15 13:28	08/18/15 11:17	1
4-Bromophenyl phenyl ether	0.69	U	2.6	0.69	ug/L		08/15/15 13:28	08/18/15 11:17	1
4-Chloro-3-methylphenol	1.1	U	2.6	1.1	ug/L		08/15/15 13:28	08/18/15 11:17	1
4-Chloroaniline	1.1	U	2.6	1.1	ug/L		08/15/15 13:28	08/18/15 11:17	1
4-Chlorophenyl phenyl ether	0.71	U	2.6	0.71	ug/L		08/15/15 13:28	08/18/15 11:17	1
4-Nitroaniline	0.79	U	6.4	0.79	ug/L		08/15/15 13:28	08/18/15 11:17	1
4-Nitrophenol	1.4	U	6.4	1.4	ug/L		08/15/15 13:28	08/18/15 11:17	1
Acenaphthylene	0.089	U	0.51	0.089	ug/L		08/15/15 13:28	08/18/15 11:17	1
Acetophenone	0.59	U	2.6	0.59	ug/L		08/15/15 13:28	08/18/15 11:17	1
Anthracene	0.097	U	0.51	0.097	ug/L		08/15/15 13:28	08/18/15 11:17	1
Benzaldehyde	1.5	U	2.6	1.5	ug/L		08/15/15 13:28	08/18/15 11:17	1
Benzo[g,h,i]perylene	0.16	U	0.51	0.16	ug/L		08/15/15 13:28	08/18/15 11:17	1
Benzo[k]fluoranthene	0.094	U	0.51	0.094	ug/L		08/15/15 13:28	08/18/15 11:17	1
Bis(2-chloroethoxy)methane	0.79	U	2.6	0.79	ug/L		08/15/15 13:28	08/18/15 11:17	1
Bis(2-chloroethyl)ether	0.71	U	2.6	0.71	ug/L		08/15/15 13:28	08/18/15 11:17	1
Butyl benzyl phthalate	0.64	U	2.6	0.64	ug/L		08/15/15 13:28	08/18/15 11:17	1
Bis(2-ethylhexyl) phthalate	**3.7**		2.6	1.5	ug/L		08/15/15 13:28	08/18/15 11:17	1
Carbazole	0.71	U	2.6	0.71	ug/L		08/15/15 13:28	08/18/15 11:17	1
Caprolactam	0.61	U	2.6	0.61	ug/L		08/15/15 13:28	08/18/15 11:17	1
Chrysene	0.084	U	0.51	0.084	ug/L		08/15/15 13:28	08/18/15 11:17	1
Dibenz(a,h)anthracene	0.11	U	0.51	0.11	ug/L		08/15/15 13:28	08/18/15 11:17	1
Dibenzofuran	0.74	U	2.6	0.74	ug/L		08/15/15 13:28	08/18/15 11:17	1
Diethyl phthalate	0.77	U	2.6	0.77	ug/L		08/15/15 13:28	08/18/15 11:17	1
Dimethyl phthalate	0.79	U	2.6	0.79	ug/L		08/15/15 13:28	08/18/15 11:17	1
Di-n-butyl phthalate	0.64	U	2.6	0.64	ug/L		08/15/15 13:28	08/18/15 11:17	1
Fluoranthene	0.082	U	0.51	0.082	ug/L		08/15/15 13:28	08/18/15 11:17	1
Fluorene	0.082	U	0.51	0.082	ug/L		08/15/15 13:28	08/18/15 11:17	1
Hexachlorocyclopentadiene	0.46	U	2.6	0.46	ug/L		08/15/15 13:28	08/18/15 11:17	1
Hexachloroethane	0.48	U	2.6	0.48	ug/L		08/15/15 13:28	08/18/15 11:17	1
Indeno[1,2,3-cd]pyrene	0.10	U	0.51	0.10	ug/L		08/15/15 13:28	08/18/15 11:17	1
Isophorone	0.79	U	2.6	0.79	ug/L		08/15/15 13:28	08/18/15 11:17	1
Naphthalene	0.094	U	0.51	0.094	ug/L		08/15/15 13:28	08/18/15 11:17	1
Nitrobenzene	0.69	U	2.6	0.69	ug/L		08/15/15 13:28	08/18/15 11:17	1
N-Nitrosodi-n-propylamine	0.87	U	2.6	0.87	ug/L		08/15/15 13:28	08/18/15 11:17	1

Client Sample ID: OB-12-081015
Date Collected: 08/10/15 14:45
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	0.92	U	2.6	0.92	ug/L		08/15/15 13:28	08/18/15 11:17	1
Phenanthrene	0.11	U	0.51	0.11	ug/L		08/15/15 13:28	08/18/15 11:17	1
Phenol	0.38	U	2.6	0.38	ug/L		08/15/15 13:28	08/18/15 11:17	1
Pyrene	0.089	U	0.51	0.089	ug/L		08/15/15 13:28	08/18/15 11:17	1
Diphenyl	0.56	U	2.6	0.56	ug/L		08/15/15 13:28	08/18/15 11:17	1
Di-n-octyl phthalate	0.64	U	2.6	0.64	ug/L		08/15/15 13:28	08/18/15 11:17	1
2,2'-oxybis[1-chloropropane]	0.71	U	2.6	0.71	ug/L		08/15/15 13:28	08/18/15 11:17	1
Atrazine	0.74	U	2.6	0.74	ug/L		08/15/15 13:28	08/18/15 11:17	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/15/15 13:28*	*08/18/15 11:17*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*73*		*10 - 120*	*08/15/15 13:28*	*08/18/15 11:17*	*1*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*	*08/15/15 13:28*	*08/18/15 11:17*	*1*
2-Fluorophenol (Surr)	*40*		*10 - 120*	*08/15/15 13:28*	*08/18/15 11:17*	*1*
Nitrobenzene-d5 (Surr)	*66*		*27 - 120*	*08/15/15 13:28*	*08/18/15 11:17*	*1*
Phenol-d5 (Surr)	*25*		*10 - 120*	*08/15/15 13:28*	*08/18/15 11:17*	*1*
Terphenyl-d14 (Surr)	*70*		*13 - 120*	*08/15/15 13:28*	*08/18/15 11:17*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 19:25	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/24/15 10:53	08/24/15 19:25	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/24/15 10:53	08/24/15 19:25	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/24/15 10:53	08/24/15 19:25	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/24/15 10:53	08/24/15 19:25	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/24/15 10:53	08/24/15 19:25	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/24/15 10:53	08/24/15 19:25	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*85*		*10 - 150*	*08/24/15 10:53*	*08/24/15 19:25*	*1*
Tetrachloro-m-xylene	*81*		*10 - 150*	*08/24/15 10:53*	*08/24/15 19:25*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.22**		1.00	0.70	mg/L			08/21/15 19:55	1
Sulfate	**15.3**		1.00	0.60	mg/L			08/21/15 19:55	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.021**		0.020	0.0096	mg/L		08/13/15 10:37	08/14/15 22:45	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:45	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:45	1
Barium	**0.0030**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:45	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:45	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/13/15 10:37	08/14/15 22:45	1
Calcium	**9.8**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 22:45	1
Chromium	**0.00056**	**J**	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:45	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:45	1

Client Sample ID: OB-12-081015
Date Collected: 08/10/15 14:45
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-4
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.0046		0.0020	0.00050	mg/L		08/13/15 10:37	08/17/15 14:29	1
Iron	0.061		0.025	0.010	mg/L		08/13/15 10:37	08/14/15 22:45	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 22:45	1
Magnesium	3.7		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 22:45	1
Manganese	0.0019	J	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:45	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/17/15 14:29	1
Potassium	0.61	J	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 22:45	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/13/15 10:37	08/14/15 22:45	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:45	1
Sodium	3.2	B	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 22:45	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 22:45	1
Vanadium	0.0011	J B	0.0020	0.00010	mg/L		08/13/15 10:37	08/14/15 22:45	1
Zinc	0.010	U	0.025	0.010	mg/L		08/13/15 10:37	08/17/15 14:29	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.014	J	0.020	0.0096	mg/L		08/14/15 09:22	08/15/15 01:32	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:32	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:32	1
Barium	0.0028		0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:32	1
Beryllium	0.00050	U ^	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:32	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/14/15 09:22	08/15/15 01:32	1
Calcium	9.5		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:32	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:32	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:32	1
Copper	0.0041		0.0020	0.00050	mg/L		08/14/15 09:22	08/17/15 17:26	1
Iron	0.014	J	0.025	0.010	mg/L		08/14/15 09:22	08/15/15 01:32	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 01:32	1
Magnesium	3.5		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:32	1
Manganese	0.0013	J	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:32	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/21/15 18:04	1
Potassium	0.61	J	1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:32	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/14/15 09:22	08/15/15 01:32	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:32	1
Sodium	3.2		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:32	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 01:32	1
Vanadium	0.00096	J B	0.0020	0.00010	mg/L		08/14/15 09:22	08/15/15 01:32	1
Zinc	0.010	U	0.025	0.010	mg/L		08/14/15 09:22	08/21/15 18:04	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 18:16	08/19/15 14:00	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/14/15 08:28	08/18/15 20:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/13/15 15:34	08/14/15 12:33	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-12-081015
Date Collected: 08/10/15 14:45
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	17.2		10.0	5.0	mg/L			08/12/15 18:35	1
Total Alkalinity as CaCO3	17.2		10.0	5.0	mg/L			08/12/15 18:35	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-5-081015
Date Collected: 08/10/15 10:25
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/20/15 19:55	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/20/15 19:55	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/20/15 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/20/15 19:55*	*1*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*08/20/15 19:55*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/20/15 19:55*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/20/15 19:55*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.35**	**J**	10	0.27	ug/L			08/24/15 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*08/24/15 21:16*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/24/15 21:16*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/24/15 21:16*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/24/15 21:16*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 02:15	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 02:15	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 02:15	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 02:15	1
1,1-Dichloroethane	**0.37**	**J**	1.0	0.24	ug/L			08/18/15 02:15	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 02:15	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 02:15	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 02:15	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 02:15	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 02:15	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 02:15	1
1,4-Dichlorobenzene	**0.20**	**J**	1.0	0.17	ug/L			08/18/15 02:15	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 02:15	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 02:15	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 02:15	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 02:15	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 02:15	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 02:15	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 02:15	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 02:15	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 02:15	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 02:15	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 02:15	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 02:15	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 02:15	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 02:15	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 02:15	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 02:15	1

Client Sample ID: OB-5-081015
Date Collected: 08/10/15 10:25
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 02:15	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 02:15	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 02:15	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 02:15	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 02:15	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 02:15	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 02:15	1
Methyl tert-butyl ether	**0.27**	**J**	1.0	0.17	ug/L			08/18/15 02:15	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 02:15	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 02:15	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 02:15	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 02:15	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 02:15	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 02:15	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 02:15	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 02:15	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 02:15	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 02:15	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 02:15	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 02:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethyl ether	*0.95*	*J*	*ug/L*		*1.66*	*60-29-7*		*08/18/15 02:15*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 02:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/18/15 02:15*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/18/15 02:15*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*08/18/15 02:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*08/18/15 02:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 19:59	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 19:59	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 19:59	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 06:53	08/13/15 19:59	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 06:53	08/13/15 19:59	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 06:53	08/13/15 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*53*		*29 - 120*	*08/13/15 06:53*	*08/13/15 19:59*	*1*
Nitrobenzene-d5	*48*		*27 - 120*	*08/13/15 06:53*	*08/13/15 19:59*	*1*
Terphenyl-d14	*84*		*13 - 120*	*08/13/15 06:53*	*08/13/15 19:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/15/15 08:20	08/20/15 00:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*53*		*10 - 120*	*08/15/15 08:20*	*08/20/15 00:47*	*1*

Client Sample ID: OB-5-081015
Date Collected: 08/10/15 10:25
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	*38*		*10 - 120*	*08/15/15 08:20*	*08/20/15 00:47*	*1*
Phenol-d5	*30*		*10 - 120*	*08/15/15 08:20*	*08/20/15 00:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.082	U	0.52	0.082	ug/L		08/15/15 13:28	08/18/15 11:41	1
1,2,4,5-Tetrachlorobenzene	0.54	U	2.6	0.54	ug/L		08/15/15 13:28	08/18/15 11:41	1
2,3,4,6-Tetrachlorophenol	1.8	U	2.6	1.8	ug/L		08/15/15 13:28	08/18/15 11:41	1
2,4,5-Trichlorophenol	1.8	U	2.6	1.8	ug/L		08/15/15 13:28	08/18/15 11:41	1
2,4,6-Trichlorophenol	1.8	U	2.6	1.8	ug/L		08/15/15 13:28	08/18/15 11:41	1
2,4-Dichlorophenol	1.4	U	2.6	1.4	ug/L		08/15/15 13:28	08/18/15 11:41	1
2,4-Dimethylphenol	1.1	U	2.6	1.1	ug/L		08/15/15 13:28	08/18/15 11:41	1
2,4-Dinitrophenol	1.5	U	6.4	1.5	ug/L		08/15/15 13:28	08/18/15 11:41	1
2,4-Dinitrotoluene	0.82	U	2.6	0.82	ug/L		08/15/15 13:28	08/18/15 11:41	1
2,6-Dinitrotoluene	0.59	U	2.6	0.59	ug/L		08/15/15 13:28	08/18/15 11:41	1
2-Chloronaphthalene	0.72	U	2.6	0.72	ug/L		08/15/15 13:28	08/18/15 11:41	1
2-Chlorophenol	1.2	U	2.6	1.2	ug/L		08/15/15 13:28	08/18/15 11:41	1
2-Methylnaphthalene	0.10	U	0.52	0.10	ug/L		08/15/15 13:28	08/18/15 11:41	1
2-Methylphenol	0.59	U	2.6	0.59	ug/L		08/15/15 13:28	08/18/15 11:41	1
2-Nitroaniline	0.95	U	6.4	0.95	ug/L		08/15/15 13:28	08/18/15 11:41	1
2-Nitrophenol	1.4	U	2.6	1.4	ug/L		08/15/15 13:28	08/18/15 11:41	1
3,3'-Dichlorobenzidine	0.85	U	2.6	0.85	ug/L		08/15/15 13:28	08/18/15 11:41	1
3 & 4 Methylphenol	0.57	U	2.6	0.57	ug/L		08/15/15 13:28	08/18/15 11:41	1
3-Nitroaniline	0.70	U	6.4	0.70	ug/L		08/15/15 13:28	08/18/15 11:41	1
4,6-Dinitro-2-methylphenol	2.4	U	6.4	2.4	ug/L		08/15/15 13:28	08/18/15 11:41	1
4-Bromophenyl phenyl ether	0.70	U	2.6	0.70	ug/L		08/15/15 13:28	08/18/15 11:41	1
4-Chloro-3-methylphenol	1.2	U	2.6	1.2	ug/L		08/15/15 13:28	08/18/15 11:41	1
4-Chloroaniline	1.1	U	2.6	1.1	ug/L		08/15/15 13:28	08/18/15 11:41	1
4-Chlorophenyl phenyl ether	0.72	U	2.6	0.72	ug/L		08/15/15 13:28	08/18/15 11:41	1
4-Nitroaniline	0.80	U	6.4	0.80	ug/L		08/15/15 13:28	08/18/15 11:41	1
4-Nitrophenol	1.4	U	6.4	1.4	ug/L		08/15/15 13:28	08/18/15 11:41	1
Acenaphthylene	0.090	U	0.52	0.090	ug/L		08/15/15 13:28	08/18/15 11:41	1
Acetophenone	0.59	U	2.6	0.59	ug/L		08/15/15 13:28	08/18/15 11:41	1
Anthracene	0.098	U	0.52	0.098	ug/L		08/15/15 13:28	08/18/15 11:41	1
Benzaldehyde	1.5	U	2.6	1.5	ug/L		08/15/15 13:28	08/18/15 11:41	1
Benzo[g,h,i]perylene	0.16	U	0.52	0.16	ug/L		08/15/15 13:28	08/18/15 11:41	1
Benzo[k]fluoranthene	0.095	U	0.52	0.095	ug/L		08/15/15 13:28	08/18/15 11:41	1
Bis(2-chloroethoxy)methane	0.80	U	2.6	0.80	ug/L		08/15/15 13:28	08/18/15 11:41	1
Bis(2-chloroethyl)ether	0.72	U	2.6	0.72	ug/L		08/15/15 13:28	08/18/15 11:41	1
Butyl benzyl phthalate	0.64	U	2.6	0.64	ug/L		08/15/15 13:28	08/18/15 11:41	1
Bis(2-ethylhexyl) phthalate	**2.2**	**J**	2.6	1.5	ug/L		08/15/15 13:28	08/18/15 11:41	1
Carbazole	0.72	U	2.6	0.72	ug/L		08/15/15 13:28	08/18/15 11:41	1
Caprolactam	0.62	U	2.6	0.62	ug/L		08/15/15 13:28	08/18/15 11:41	1
Chrysene	0.085	U	0.52	0.085	ug/L		08/15/15 13:28	08/18/15 11:41	1
Dibenz(a,h)anthracene	0.12	U	0.52	0.12	ug/L		08/15/15 13:28	08/18/15 11:41	1
Dibenzofuran	0.75	U	2.6	0.75	ug/L		08/15/15 13:28	08/18/15 11:41	1
Diethyl phthalate	0.77	U	2.6	0.77	ug/L		08/15/15 13:28	08/18/15 11:41	1
Dimethyl phthalate	0.80	U	2.6	0.80	ug/L		08/15/15 13:28	08/18/15 11:41	1
Di-n-butyl phthalate	0.64	U	2.6	0.64	ug/L		08/15/15 13:28	08/18/15 11:41	1

Client Sample ID: OB-5-081015
Date Collected: 08/10/15 10:25
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	0.082	U	0.52	0.082	ug/L		08/15/15 13:28	08/18/15 11:41	1
Fluorene	0.082	U	0.52	0.082	ug/L		08/15/15 13:28	08/18/15 11:41	1
Hexachlorocyclopentadiene	0.46	U	2.6	0.46	ug/L		08/15/15 13:28	08/18/15 11:41	1
Hexachloroethane	0.49	U	2.6	0.49	ug/L		08/15/15 13:28	08/18/15 11:41	1
Indeno[1,2,3-cd]pyrene	0.11	U	0.52	0.11	ug/L		08/15/15 13:28	08/18/15 11:41	1
Isophorone	0.80	U	2.6	0.80	ug/L		08/15/15 13:28	08/18/15 11:41	1
Naphthalene	0.095	U	0.52	0.095	ug/L		08/15/15 13:28	08/18/15 11:41	1
Nitrobenzene	0.70	U	2.6	0.70	ug/L		08/15/15 13:28	08/18/15 11:41	1
N-Nitrosodi-n-propylamine	0.88	U	2.6	0.88	ug/L		08/15/15 13:28	08/18/15 11:41	1
N-Nitrosodiphenylamine	0.93	U	2.6	0.93	ug/L		08/15/15 13:28	08/18/15 11:41	1
Phenanthrene	0.11	U	0.52	0.11	ug/L		08/15/15 13:28	08/18/15 11:41	1
Phenol	0.39	U	2.6	0.39	ug/L		08/15/15 13:28	08/18/15 11:41	1
Pyrene	0.090	U	0.52	0.090	ug/L		08/15/15 13:28	08/18/15 11:41	1
Diphenyl	0.57	U	2.6	0.57	ug/L		08/15/15 13:28	08/18/15 11:41	1
Di-n-octyl phthalate	0.64	U	2.6	0.64	ug/L		08/15/15 13:28	08/18/15 11:41	1
2,2'-oxybis[1-chloropropane]	0.72	U	2.6	0.72	ug/L		08/15/15 13:28	08/18/15 11:41	1
Atrazine	0.75	U	2.6	0.75	ug/L		08/15/15 13:28	08/18/15 11:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/15/15 13:28*	*08/18/15 11:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*70*		*10 - 120*	*08/15/15 13:28*	*08/18/15 11:41*	*1*
2-Fluorobiphenyl (Surr)	*60*		*29 - 120*	*08/15/15 13:28*	*08/18/15 11:41*	*1*
2-Fluorophenol (Surr)	*32*		*10 - 120*	*08/15/15 13:28*	*08/18/15 11:41*	*1*
Nitrobenzene-d5 (Surr)	*53*		*27 - 120*	*08/15/15 13:28*	*08/18/15 11:41*	*1*
Phenol-d5 (Surr)	*21*		*10 - 120*	*08/15/15 13:28*	*08/18/15 11:41*	*1*
Terphenyl-d14 (Surr)	*56*		*13 - 120*	*08/15/15 13:28*	*08/18/15 11:41*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 19:41	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/24/15 10:53	08/24/15 19:41	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/24/15 10:53	08/24/15 19:41	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/24/15 10:53	08/24/15 19:41	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/24/15 10:53	08/24/15 19:41	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/24/15 10:53	08/24/15 19:41	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/24/15 10:53	08/24/15 19:41	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*112*		*10 - 150*	*08/24/15 10:53*	*08/24/15 19:41*	*1*
Tetrachloro-m-xylene	*101*		*10 - 150*	*08/24/15 10:53*	*08/24/15 19:41*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**67.0**		1.00	0.70	mg/L			08/21/15 20:15	1
Sulfate	**4.49**		1.00	0.60	mg/L			08/21/15 20:15	1

Client Sample ID: OB-5-081015

Date Collected: 08/10/15 10:25
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-5

Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/13/15 10:37	08/14/15 22:05	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:05	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:05	1
Barium	**0.026**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:05	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:05	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/13/15 10:37	08/14/15 22:05	1
Calcium	**82.0**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 22:05	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:05	1
Cobalt	**0.0052**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:05	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/17/15 13:59	1
Iron	**31.3**		0.025	0.010	mg/L		08/13/15 10:37	08/14/15 22:05	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 22:05	1
Magnesium	**39.5**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 22:05	1
Manganese	**2.2**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:05	1
Nickel	**0.0020**		0.0020	0.00050	mg/L		08/13/15 10:37	08/17/15 13:59	1
Potassium	**3.6**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 22:05	1
Selenium	0.00060	U F1	0.0020	0.00060	mg/L		08/13/15 10:37	08/14/15 22:05	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 22:05	1
Sodium	**32.1**	**B**	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 22:05	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 22:05	1
Vanadium	**0.0012**	**J B**	0.0020	0.00010	mg/L		08/13/15 10:37	08/14/15 22:05	1
Zinc	0.010	U	0.025	0.010	mg/L		08/13/15 10:37	08/17/15 13:59	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/14/15 09:22	08/15/15 00:34	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:34	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:34	1
Barium	**0.015**		0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:34	1
Beryllium	0.00050	U ^	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:34	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/14/15 09:22	09/07/15 17:08	1
Calcium	**82.6**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 00:34	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:34	1
Cobalt	**0.0045**		0.0020	0.00050	mg/L		08/14/15 09:22	09/07/15 17:08	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:34	1
Iron	**8.4**		0.025	0.010	mg/L		08/14/15 09:22	09/07/15 17:08	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 00:34	1
Magnesium	**40.4**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 00:34	1
Manganese	**2.3**		0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:34	1
Nickel	**0.0015**	**J**	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:34	1
Potassium	**3.7**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 00:34	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/14/15 09:22	08/15/15 00:34	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	09/07/15 17:08	1
Sodium	**32.7**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 00:34	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 00:34	1
Vanadium	**0.00084**	**J B**	0.0020	0.00010	mg/L		08/14/15 09:22	08/15/15 00:34	1
Zinc	0.010	U	0.025	0.010	mg/L		08/14/15 09:22	08/15/15 00:34	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-5-081015
Date Collected: 08/10/15 10:25
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-5
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 18:16	08/19/15 13:10	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/14/15 08:28	08/18/15 20:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U F1	0.010	0.0070	mg/L		08/13/15 15:34	08/14/15 12:28	1
Bicarbonate Alkalinity as CaCO3	**318**		10.0	5.0	mg/L			08/12/15 18:53	1
Total Alkalinity as CaCO3	**318**		10.0	5.0	mg/L			08/12/15 18:53	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-4-081015
Date Collected: 08/10/15 14:30
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/20/15 22:18	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/20/15 22:18	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/20/15 22:18	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/20/15 22:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/20/15 22:18*	*1*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*		*08/20/15 22:18*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/20/15 22:18*	*1*
Toluene-d8 (Surr)	*111*		*70 - 130*		*08/20/15 22:18*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 04:25	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 04:25	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 04:25	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 04:25	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 04:25	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 04:25	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 04:25	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 04:25	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 04:25	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 04:25	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 04:25	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 04:25	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 04:25	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 04:25	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 04:25	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 04:25	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 04:25	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 04:25	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 04:25	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 04:25	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 04:25	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 04:25	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 04:25	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 04:25	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 04:25	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 04:25	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 04:25	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 04:25	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 04:25	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 04:25	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 04:25	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 04:25	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 04:25	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 04:25	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 04:25	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 04:25	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 04:25	1

Client Sample ID: OB-4-081015

Date Collected: 08/10/15 14:30
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 04:25	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 04:25	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 04:25	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 04:25	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 04:25	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 04:25	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 04:25	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 04:25	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 04:25	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 04:25	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 04:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 04:25*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 04:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/18/15 04:25*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/18/15 04:25*	*1*
Toluene-d8 (Surr)	*109*		*70 - 130*		*08/18/15 04:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/18/15 04:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 21:22	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 21:22	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 21:22	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 06:53	08/13/15 21:22	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 06:53	08/13/15 21:22	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 06:53	08/13/15 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*48*		*29 - 120*	*08/13/15 06:53*	*08/13/15 21:22*	*1*
Nitrobenzene-d5	*44*		*27 - 120*	*08/13/15 06:53*	*08/13/15 21:22*	*1*
Terphenyl-d14	*65*		*13 - 120*	*08/13/15 06:53*	*08/13/15 21:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/15/15 08:20	08/20/15 02:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*68*		*10 - 120*	*08/15/15 08:20*	*08/20/15 02:08*	*1*
2-Fluorophenol	*45*		*10 - 120*	*08/15/15 08:20*	*08/20/15 02:08*	*1*
Phenol-d5	*36*		*10 - 120*	*08/15/15 08:20*	*08/20/15 02:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.082	U	0.51	0.082	ug/L		08/15/15 13:28	08/18/15 12:53	1
1,2,4,5-Tetrachlorobenzene	0.54	U	2.6	0.54	ug/L		08/15/15 13:28	08/18/15 12:53	1
2,3,4,6-Tetrachlorophenol	1.8	U	2.6	1.8	ug/L		08/15/15 13:28	08/18/15 12:53	1
2,4,5-Trichlorophenol	1.8	U	2.6	1.8	ug/L		08/15/15 13:28	08/18/15 12:53	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-4-081015
Date Collected: 08/10/15 14:30
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	1.7	U	2.6	1.7	ug/L		08/15/15 13:28	08/18/15 12:53	1
2,4-Dichlorophenol	1.4	U	2.6	1.4	ug/L		08/15/15 13:28	08/18/15 12:53	1
2,4-Dimethylphenol	1.1	U	2.6	1.1	ug/L		08/15/15 13:28	08/18/15 12:53	1
2,4-Dinitrophenol	1.5	U	6.4	1.5	ug/L		08/15/15 13:28	08/18/15 12:53	1
2,4-Dinitrotoluene	0.82	U	2.6	0.82	ug/L		08/15/15 13:28	08/18/15 12:53	1
2,6-Dinitrotoluene	0.59	U	2.6	0.59	ug/L		08/15/15 13:28	08/18/15 12:53	1
2-Chloronaphthalene	0.72	U	2.6	0.72	ug/L		08/15/15 13:28	08/18/15 12:53	1
2-Chlorophenol	1.2	U	2.6	1.2	ug/L		08/15/15 13:28	08/18/15 12:53	1
2-Methylnaphthalene	0.10	U	0.51	0.10	ug/L		08/15/15 13:28	08/18/15 12:53	1
2-Methylphenol	0.59	U	2.6	0.59	ug/L		08/15/15 13:28	08/18/15 12:53	1
2-Nitroaniline	0.95	U	6.4	0.95	ug/L		08/15/15 13:28	08/18/15 12:53	1
2-Nitrophenol	1.4	U	2.6	1.4	ug/L		08/15/15 13:28	08/18/15 12:53	1
3,3'-Dichlorobenzidine	0.85	U	2.6	0.85	ug/L		08/15/15 13:28	08/18/15 12:53	1
3 & 4 Methylphenol	0.56	U	2.6	0.56	ug/L		08/15/15 13:28	08/18/15 12:53	1
3-Nitroaniline	0.69	U	6.4	0.69	ug/L		08/15/15 13:28	08/18/15 12:53	1
4,6-Dinitro-2-methylphenol	2.4	U	6.4	2.4	ug/L		08/15/15 13:28	08/18/15 12:53	1
4-Bromophenyl phenyl ether	0.69	U	2.6	0.69	ug/L		08/15/15 13:28	08/18/15 12:53	1
4-Chloro-3-methylphenol	1.2	U	2.6	1.2	ug/L		08/15/15 13:28	08/18/15 12:53	1
4-Chloroaniline	1.1	U	2.6	1.1	ug/L		08/15/15 13:28	08/18/15 12:53	1
4-Chlorophenyl phenyl ether	0.72	U	2.6	0.72	ug/L		08/15/15 13:28	08/18/15 12:53	1
4-Nitroaniline	0.79	U	6.4	0.79	ug/L		08/15/15 13:28	08/18/15 12:53	1
4-Nitrophenol	1.4	U	6.4	1.4	ug/L		08/15/15 13:28	08/18/15 12:53	1
Acenaphthylene	0.090	U	0.51	0.090	ug/L		08/15/15 13:28	08/18/15 12:53	1
Acetophenone	0.59	U	2.6	0.59	ug/L		08/15/15 13:28	08/18/15 12:53	1
Anthracene	0.097	U	0.51	0.097	ug/L		08/15/15 13:28	08/18/15 12:53	1
Benzaldehyde	1.5	U	2.6	1.5	ug/L		08/15/15 13:28	08/18/15 12:53	1
Benzo[g,h,i]perylene	0.16	U	0.51	0.16	ug/L		08/15/15 13:28	08/18/15 12:53	1
Benzo[k]fluoranthene	0.095	U	0.51	0.095	ug/L		08/15/15 13:28	08/18/15 12:53	1
Bis(2-chloroethoxy)methane	0.79	U	2.6	0.79	ug/L		08/15/15 13:28	08/18/15 12:53	1
Bis(2-chloroethyl)ether	0.72	U	2.6	0.72	ug/L		08/15/15 13:28	08/18/15 12:53	1
Butyl benzyl phthalate	0.64	U	2.6	0.64	ug/L		08/15/15 13:28	08/18/15 12:53	1
Bis(2-ethylhexyl) phthalate	**1.7**	**J**	2.6	1.5	ug/L		08/15/15 13:28	08/18/15 12:53	1
Carbazole	0.72	U	2.6	0.72	ug/L		08/15/15 13:28	08/18/15 12:53	1
Caprolactam	0.62	U	2.6	0.62	ug/L		08/15/15 13:28	08/18/15 12:53	1
Chrysene	0.085	U	0.51	0.085	ug/L		08/15/15 13:28	08/18/15 12:53	1
Dibenz(a,h)anthracene	0.12	U	0.51	0.12	ug/L		08/15/15 13:28	08/18/15 12:53	1
Dibenzofuran	0.74	U	2.6	0.74	ug/L		08/15/15 13:28	08/18/15 12:53	1
Diethyl phthalate	0.77	U	2.6	0.77	ug/L		08/15/15 13:28	08/18/15 12:53	1
Dimethyl phthalate	0.79	U	2.6	0.79	ug/L		08/15/15 13:28	08/18/15 12:53	1
Di-n-butyl phthalate	0.64	U	2.6	0.64	ug/L		08/15/15 13:28	08/18/15 12:53	1
Fluoranthene	0.082	U	0.51	0.082	ug/L		08/15/15 13:28	08/18/15 12:53	1
Fluorene	0.082	U	0.51	0.082	ug/L		08/15/15 13:28	08/18/15 12:53	1
Hexachlorocyclopentadiene	0.46	U	2.6	0.46	ug/L		08/15/15 13:28	08/18/15 12:53	1
Hexachloroethane	0.49	U	2.6	0.49	ug/L		08/15/15 13:28	08/18/15 12:53	1
Indeno[1,2,3-cd]pyrene	0.11	U	0.51	0.11	ug/L		08/15/15 13:28	08/18/15 12:53	1
Isophorone	0.79	U	2.6	0.79	ug/L		08/15/15 13:28	08/18/15 12:53	1
Naphthalene	0.095	U	0.51	0.095	ug/L		08/15/15 13:28	08/18/15 12:53	1
Nitrobenzene	0.69	U	2.6	0.69	ug/L		08/15/15 13:28	08/18/15 12:53	1
N-Nitrosodi-n-propylamine	0.87	U	2.6	0.87	ug/L		08/15/15 13:28	08/18/15 12:53	1

Client Sample ID: OB-4-081015

Date Collected: 08/10/15 14:30
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	0.92	U	2.6	0.92	ug/L		08/15/15 13:28	08/18/15 12:53	1
Phenanthrene	0.11	U	0.51	0.11	ug/L		08/15/15 13:28	08/18/15 12:53	1
Phenol	0.38	U	2.6	0.38	ug/L		08/15/15 13:28	08/18/15 12:53	1
Pyrene	0.090	U	0.51	0.090	ug/L		08/15/15 13:28	08/18/15 12:53	1
Diphenyl	0.56	U	2.6	0.56	ug/L		08/15/15 13:28	08/18/15 12:53	1
Di-n-octyl phthalate	0.64	U	2.6	0.64	ug/L		08/15/15 13:28	08/18/15 12:53	1
2,2'-oxybis[1-chloropropane]	0.72	U	2.6	0.72	ug/L		08/15/15 13:28	08/18/15 12:53	1
Atrazine	0.74	U	2.6	0.74	ug/L		08/15/15 13:28	08/18/15 12:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/15/15 13:28*	*08/18/15 12:53*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*74*		*10 - 120*	*08/15/15 13:28*	*08/18/15 12:53*	*1*
2-Fluorobiphenyl (Surr)	*73*		*29 - 120*	*08/15/15 13:28*	*08/18/15 12:53*	*1*
2-Fluorophenol (Surr)	*42*		*10 - 120*	*08/15/15 13:28*	*08/18/15 12:53*	*1*
Nitrobenzene-d5 (Surr)	*67*		*27 - 120*	*08/15/15 13:28*	*08/18/15 12:53*	*1*
Phenol-d5 (Surr)	*26*		*10 - 120*	*08/15/15 13:28*	*08/18/15 12:53*	*1*
Terphenyl-d14 (Surr)	*58*		*13 - 120*	*08/15/15 13:28*	*08/18/15 12:53*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 20:28	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/24/15 10:53	08/24/15 20:28	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/24/15 10:53	08/24/15 20:28	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/24/15 10:53	08/24/15 20:28	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/24/15 10:53	08/24/15 20:28	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/24/15 10:53	08/24/15 20:28	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/24/15 10:53	08/24/15 20:28	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*108*		*10 - 150*	*08/24/15 10:53*	*08/24/15 20:28*	*1*
Tetrachloro-m-xylene	*102*		*10 - 150*	*08/24/15 10:53*	*08/24/15 20:28*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**238**		1.00	0.70	mg/L			08/21/15 21:12	1
Sulfate	**3.15**		1.00	0.60	mg/L			08/21/15 21:12	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.0096**	**J**	0.020	0.0096	mg/L		08/13/15 10:37	08/14/15 23:14	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:14	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:14	1
Barium	**0.090**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:14	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:14	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/13/15 10:37	08/14/15 23:14	1
Calcium	**86.7**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:14	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:14	1
Cobalt	**0.0011**	**J**	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:14	1

Client Sample ID: OB-4-081015

Date Collected: 08/10/15 14:30
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-6

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/19/15 12:51	1
Iron	**13.5**		0.025	0.010	mg/L		08/13/15 10:37	08/14/15 23:14	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 23:14	1
Magnesium	**25.0**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:14	1
Manganese	**2.6**	**B**	0.020	0.0050	mg/L		08/13/15 10:37	08/19/15 12:57	10
Nickel	**0.00087**	**J**	0.0020	0.00050	mg/L		08/13/15 10:37	08/19/15 12:51	1
Potassium	**3.9**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:14	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/13/15 10:37	08/14/15 23:14	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:14	1
Sodium	**109**		10.0	1.3	mg/L		08/13/15 10:37	08/19/15 12:57	10
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 23:14	1
Vanadium	**0.0017**	**J B**	0.0020	0.00010	mg/L		08/13/15 10:37	08/14/15 23:14	1
Zinc	0.010	U	0.025	0.010	mg/L		08/13/15 10:37	08/19/15 12:51	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/14/15 09:22	08/15/15 01:37	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:37	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:37	1
Barium	**0.079**		0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:37	1
Beryllium	0.00050	U ^	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:37	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/14/15 09:22	08/15/15 01:37	1
Calcium	**86.3**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:37	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:37	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:37	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/17/15 17:55	1
Iron	**6.3**		0.025	0.010	mg/L		08/14/15 09:22	08/15/15 01:37	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 01:37	1
Magnesium	**24.9**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:37	1
Manganese	**2.7**		0.020	0.0050	mg/L		08/14/15 09:22	08/17/15 18:01	10
Nickel	**0.0011**	**J**	0.0020	0.00050	mg/L		08/14/15 09:22	08/21/15 18:10	1
Potassium	**3.8**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:37	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/14/15 09:22	08/15/15 01:37	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:37	1
Sodium	**97.2**		10.0	1.3	mg/L		08/14/15 09:22	08/21/15 18:15	10
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 01:37	1
Vanadium	**0.00096**	**J B**	0.0020	0.00010	mg/L		08/14/15 09:22	08/15/15 01:37	1
Zinc	0.010	U	0.025	0.010	mg/L		08/14/15 09:22	08/21/15 18:10	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 18:16	08/19/15 14:03	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/14/15 08:28	08/18/15 20:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.010**		0.010	0.0070	mg/L		08/13/15 15:34	08/14/15 12:34	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-4-081015
Date Collected: 08/10/15 14:30
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-6
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	204		10.0	5.0	mg/L			08/12/15 19:03	1
Total Alkalinity as CaCO3	204		10.0	5.0	mg/L			08/12/15 19:03	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: TB-05-081115
Date Collected: 08/11/15 00:01
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/20/15 18:29	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/20/15 18:29	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/20/15 18:29	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/20/15 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*08/20/15 18:29*	*1*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*08/20/15 18:29*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/20/15 18:29*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/20/15 18:29*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 00:31	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 00:31	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 00:31	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 00:31	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 00:31	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 00:31	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 00:31	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 00:31	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 00:31	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 00:31	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 00:31	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 00:31	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 00:31	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 00:31	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 00:31	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 00:31	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 00:31	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 00:31	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 00:31	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 00:31	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 00:31	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 00:31	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 00:31	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 00:31	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 00:31	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 00:31	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 00:31	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 00:31	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 00:31	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 00:31	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 00:31	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 00:31	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 00:31	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 00:31	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 00:31	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 00:31	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 00:31	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: TB-05-081115
Date Collected: 08/11/15 00:01
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 00:31	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 00:31	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 00:31	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 00:31	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 00:31	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 00:31	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 00:31	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 00:31	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 00:31	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 00:31	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 00:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 00:31*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 00:31*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/18/15 00:31*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*08/18/15 00:31*	*1*
Toluene-d8 (Surr)	*116*		*70 - 130*		*08/18/15 00:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/18/15 00:31*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: RW-3DD (175-180)-081015
Date Collected: 08/10/15 14:25
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/20/15 22:46	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/20/15 22:46	1
1,4-Dioxane	**20**		10	0.27	ug/L			08/20/15 22:46	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/20/15 22:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/20/15 22:46*	*1*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*08/20/15 22:46*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/20/15 22:46*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*08/20/15 22:46*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 04:51	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 04:51	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 04:51	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 04:51	1
1,1-Dichloroethane	**1.9**		1.0	0.24	ug/L			08/18/15 04:51	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 04:51	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 04:51	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 04:51	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 04:51	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 04:51	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 04:51	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 04:51	1
2-Butanone (MEK)	**5.5**	**J**	50	2.6	ug/L			08/18/15 04:51	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 04:51	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 04:51	1
Acetone	**12**	**J**	25	2.7	ug/L			08/18/15 04:51	1
Benzene	**0.44**	**J**	1.0	0.20	ug/L			08/18/15 04:51	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 04:51	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 04:51	1
Carbon disulfide	**3.7**		1.0	0.22	ug/L			08/18/15 04:51	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 04:51	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 04:51	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 04:51	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 04:51	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 04:51	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 04:51	1
cis-1,2-Dichloroethene	**0.22**	**J**	1.0	0.21	ug/L			08/18/15 04:51	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 04:51	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 04:51	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 04:51	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 04:51	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 04:51	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 04:51	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 04:51	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 04:51	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 04:51	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 04:51	1

Client Sample ID: RW-3DD (175-180)-081015

Lab Sample ID: 490-84924-8

Date Collected: 08/10/15 14:25

Matrix: Water

Date Received: 08/12/15 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 04:51	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 04:51	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 04:51	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 04:51	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 04:51	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 04:51	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 04:51	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 04:51	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 04:51	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 04:51	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 04:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrahydrofuran	*1.1*	*J*	*ug/L*		*2.90*	*109-99-9*		*08/18/15 04:51*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 04:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/18/15 04:51*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/18/15 04:51*	*1*
Toluene-d8 (Surr)	*112*		*70 - 130*		*08/18/15 04:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/18/15 04:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 21:49	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 21:49	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 21:49	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 06:53	08/13/15 21:49	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 06:53	08/13/15 21:49	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 06:53	08/13/15 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*51*		*29 - 120*	*08/13/15 06:53*	*08/13/15 21:49*	*1*
Nitrobenzene-d5	*47*		*27 - 120*	*08/13/15 06:53*	*08/13/15 21:49*	*1*
Terphenyl-d14	*68*		*13 - 120*	*08/13/15 06:53*	*08/13/15 21:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/15/15 08:20	08/20/15 02:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*74*		*10 - 120*	*08/15/15 08:20*	*08/20/15 02:35*	*1*
2-Fluorophenol	*49*		*10 - 120*	*08/15/15 08:20*	*08/20/15 02:35*	*1*
Phenol-d5	*41*		*10 - 120*	*08/15/15 08:20*	*08/20/15 02:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.084	U	0.53	0.084	ug/L		08/15/15 13:28	08/18/15 13:17	1
1,2,4,5-Tetrachlorobenzene	0.55	U	2.6	0.55	ug/L		08/15/15 13:28	08/18/15 13:17	1
2,3,4,6-Tetrachlorophenol	1.8	U	2.6	1.8	ug/L		08/15/15 13:28	08/18/15 13:17	1
2,4,5-Trichlorophenol	1.9	U	2.6	1.9	ug/L		08/15/15 13:28	08/18/15 13:17	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: RW-3DD (175-180)-081015
Date Collected: 08/10/15 14:25
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	1.8	U	2.6	1.8	ug/L		08/15/15 13:28	08/18/15 13:17	1
2,4-Dichlorophenol	1.5	U	2.6	1.5	ug/L		08/15/15 13:28	08/18/15 13:17	1
2,4-Dimethylphenol	1.1	U	2.6	1.1	ug/L		08/15/15 13:28	08/18/15 13:17	1
2,4-Dinitrophenol	1.6	U	6.6	1.6	ug/L		08/15/15 13:28	08/18/15 13:17	1
2,4-Dinitrotoluene	0.84	U	2.6	0.84	ug/L		08/15/15 13:28	08/18/15 13:17	1
2,6-Dinitrotoluene	0.61	U	2.6	0.61	ug/L		08/15/15 13:28	08/18/15 13:17	1
2-Chloronaphthalene	0.74	U	2.6	0.74	ug/L		08/15/15 13:28	08/18/15 13:17	1
2-Chlorophenol	1.3	U	2.6	1.3	ug/L		08/15/15 13:28	08/18/15 13:17	1
2-Methylnaphthalene	0.11	U	0.53	0.11	ug/L		08/15/15 13:28	08/18/15 13:17	1
2-Methylphenol	0.61	U	2.6	0.61	ug/L		08/15/15 13:28	08/18/15 13:17	1
2-Nitroaniline	0.97	U	6.6	0.97	ug/L		08/15/15 13:28	08/18/15 13:17	1
2-Nitrophenol	1.4	U	2.6	1.4	ug/L		08/15/15 13:28	08/18/15 13:17	1
3,3'-Dichlorobenzidine	0.87	U	2.6	0.87	ug/L		08/15/15 13:28	08/18/15 13:17	1
3 & 4 Methylphenol	0.58	U	2.6	0.58	ug/L		08/15/15 13:28	08/18/15 13:17	1
3-Nitroaniline	0.71	U	6.6	0.71	ug/L		08/15/15 13:28	08/18/15 13:17	1
4,6-Dinitro-2-methylphenol	2.4	U	6.6	2.4	ug/L		08/15/15 13:28	08/18/15 13:17	1
4-Bromophenyl phenyl ether	0.71	U	2.6	0.71	ug/L		08/15/15 13:28	08/18/15 13:17	1
4-Chloro-3-methylphenol	1.2	U	2.6	1.2	ug/L		08/15/15 13:28	08/18/15 13:17	1
4-Chloroaniline	1.1	U	2.6	1.1	ug/L		08/15/15 13:28	08/18/15 13:17	1
4-Chlorophenyl phenyl ether	0.74	U	2.6	0.74	ug/L		08/15/15 13:28	08/18/15 13:17	1
4-Nitroaniline	0.82	U	6.6	0.82	ug/L		08/15/15 13:28	08/18/15 13:17	1
4-Nitrophenol	1.4	U	6.6	1.4	ug/L		08/15/15 13:28	08/18/15 13:17	1
Acenaphthylene	0.092	U	0.53	0.092	ug/L		08/15/15 13:28	08/18/15 13:17	1
Acetophenone	0.61	U	2.6	0.61	ug/L		08/15/15 13:28	08/18/15 13:17	1
Anthracene	0.10	U	0.53	0.10	ug/L		08/15/15 13:28	08/18/15 13:17	1
Benzaldehyde	1.5	U	2.6	1.5	ug/L		08/15/15 13:28	08/18/15 13:17	1
Benzo[g,h,i]perylene	0.16	U	0.53	0.16	ug/L		08/15/15 13:28	08/18/15 13:17	1
Benzo[k]fluoranthene	0.097	U	0.53	0.097	ug/L		08/15/15 13:28	08/18/15 13:17	1
Bis(2-chloroethoxy)methane	0.82	U	2.6	0.82	ug/L		08/15/15 13:28	08/18/15 13:17	1
Bis(2-chloroethyl)ether	0.74	U	2.6	0.74	ug/L		08/15/15 13:28	08/18/15 13:17	1
Butyl benzyl phthalate	0.66	U	2.6	0.66	ug/L		08/15/15 13:28	08/18/15 13:17	1
Bis(2-ethylhexyl) phthalate	**2.8**		2.6	1.6	ug/L		08/15/15 13:28	08/18/15 13:17	1
Carbazole	0.74	U	2.6	0.74	ug/L		08/15/15 13:28	08/18/15 13:17	1
Caprolactam	0.63	U	2.6	0.63	ug/L		08/15/15 13:28	08/18/15 13:17	1
Chrysene	0.087	U	0.53	0.087	ug/L		08/15/15 13:28	08/18/15 13:17	1
Dibenz(a,h)anthracene	0.12	U	0.53	0.12	ug/L		08/15/15 13:28	08/18/15 13:17	1
Dibenzofuran	0.76	U	2.6	0.76	ug/L		08/15/15 13:28	08/18/15 13:17	1
Diethyl phthalate	0.79	U	2.6	0.79	ug/L		08/15/15 13:28	08/18/15 13:17	1
Dimethyl phthalate	0.82	U	2.6	0.82	ug/L		08/15/15 13:28	08/18/15 13:17	1
Di-n-butyl phthalate	0.66	U	2.6	0.66	ug/L		08/15/15 13:28	08/18/15 13:17	1
Fluoranthene	0.084	U	0.53	0.084	ug/L		08/15/15 13:28	08/18/15 13:17	1
Fluorene	0.084	U	0.53	0.084	ug/L		08/15/15 13:28	08/18/15 13:17	1
Hexachlorocyclopentadiene	0.47	U	2.6	0.47	ug/L		08/15/15 13:28	08/18/15 13:17	1
Hexachloroethane	0.50	U	2.6	0.50	ug/L		08/15/15 13:28	08/18/15 13:17	1
Indeno[1,2,3-cd]pyrene	0.11	U	0.53	0.11	ug/L		08/15/15 13:28	08/18/15 13:17	1
Isophorone	0.82	U	2.6	0.82	ug/L		08/15/15 13:28	08/18/15 13:17	1
Naphthalene	0.097	U	0.53	0.097	ug/L		08/15/15 13:28	08/18/15 13:17	1
Nitrobenzene	0.71	U	2.6	0.71	ug/L		08/15/15 13:28	08/18/15 13:17	1
N-Nitrosodi-n-propylamine	0.89	U	2.6	0.89	ug/L		08/15/15 13:28	08/18/15 13:17	1

Client Sample ID: RW-3DD (175-180)-081015
Date Collected: 08/10/15 14:25
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	0.95	U	2.6	0.95	ug/L		08/15/15 13:28	08/18/15 13:17	1
Phenanthrene	0.11	U	0.53	0.11	ug/L		08/15/15 13:28	08/18/15 13:17	1
Phenol	**3.6**		2.6	0.39	ug/L		08/15/15 13:28	08/18/15 13:17	1
Pyrene	0.092	U	0.53	0.092	ug/L		08/15/15 13:28	08/18/15 13:17	1
Diphenyl	0.58	U	2.6	0.58	ug/L		08/15/15 13:28	08/18/15 13:17	1
Di-n-octyl phthalate	0.66	U	2.6	0.66	ug/L		08/15/15 13:28	08/18/15 13:17	1
2,2'-oxybis[1-chloropropane]	0.74	U	2.6	0.74	ug/L		08/15/15 13:28	08/18/15 13:17	1
Atrazine	0.76	U	2.6	0.76	ug/L		08/15/15 13:28	08/18/15 13:17	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Diethyltoluamide	*14*	*J N*	*ug/L*		*7.87*	*134-62-3*	*08/15/15 13:28*	*08/18/15 13:17*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*88*		*10 - 120*	*08/15/15 13:28*	*08/18/15 13:17*	*1*
2-Fluorobiphenyl (Surr)	*82*		*29 - 120*	*08/15/15 13:28*	*08/18/15 13:17*	*1*
2-Fluorophenol (Surr)	*49*		*10 - 120*	*08/15/15 13:28*	*08/18/15 13:17*	*1*
Nitrobenzene-d5 (Surr)	*73*		*27 - 120*	*08/15/15 13:28*	*08/18/15 13:17*	*1*
Phenol-d5 (Surr)	*32*		*10 - 120*	*08/15/15 13:28*	*08/18/15 13:17*	*1*
Terphenyl-d14 (Surr)	*80*		*13 - 120*	*08/15/15 13:28*	*08/18/15 13:17*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 20:43	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/24/15 10:53	08/24/15 20:43	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/24/15 10:53	08/24/15 20:43	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/24/15 10:53	08/24/15 20:43	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/24/15 10:53	08/24/15 20:43	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/24/15 10:53	08/24/15 20:43	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/24/15 10:53	08/24/15 20:43	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*74*		*10 - 150*	*08/24/15 10:53*	*08/24/15 20:43*	*1*
Tetrachloro-m-xylene	*74*		*10 - 150*	*08/24/15 10:53*	*08/24/15 20:43*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.43**		1.00	0.70	mg/L			08/21/15 21:31	1
Sulfate	**39.5**		1.00	0.60	mg/L			08/21/15 21:31	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.11**		0.020	0.0096	mg/L		08/13/15 10:37	08/14/15 23:19	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:19	1
Arsenic	**0.020**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:19	1
Barium	**0.0064**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:19	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:19	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/13/15 10:37	08/14/15 23:19	1
Calcium	**21.8**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:19	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:19	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:19	1

Client Sample ID: RW-3DD (175-180)-081015

Date Collected: 08/10/15 14:25
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-8

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/19/15 13:03	1
Iron	**0.014**	**J**	0.025	0.010	mg/L		08/13/15 10:37	08/14/15 23:19	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 23:19	1
Magnesium	**0.72**	**J**	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:19	1
Manganese	**0.00099**	**J**	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:19	1
Nickel	**0.0035**		0.0020	0.00050	mg/L		08/13/15 10:37	08/19/15 13:03	1
Potassium	**12.5**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:19	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/13/15 10:37	08/14/15 23:19	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:19	1
Sodium	**53.7**	**B**	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:19	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 23:19	1
Vanadium	**0.0079**	**B**	0.0020	0.00010	mg/L		08/13/15 10:37	08/14/15 23:19	1
Zinc	0.010	U	0.025	0.010	mg/L		08/13/15 10:37	08/19/15 13:03	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.099**		0.020	0.0096	mg/L		08/14/15 09:22	08/15/15 01:43	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:43	1
Arsenic	**0.019**		0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:43	1
Barium	**0.0068**		0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:43	1
Beryllium	0.00050	U ^	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:43	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/14/15 09:22	08/15/15 01:43	1
Calcium	**22.5**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:43	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:43	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:43	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/17/15 17:32	1
Iron	**0.017**	**J**	0.025	0.010	mg/L		08/14/15 09:22	08/15/15 01:43	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 01:43	1
Magnesium	**0.76**	**J**	1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:43	1
Manganese	**0.0015**	**J**	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:43	1
Nickel	**0.0022**		0.0020	0.00050	mg/L		08/14/15 09:22	08/21/15 18:20	1
Potassium	**11.7**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:43	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/14/15 09:22	08/15/15 01:43	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:43	1
Sodium	**51.2**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:43	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 01:43	1
Vanadium	**0.0070**	**B**	0.0020	0.00010	mg/L		08/14/15 09:22	08/15/15 01:43	1
Zinc	0.010	U	0.025	0.010	mg/L		08/14/15 09:22	08/21/15 18:20	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 18:20	08/19/15 14:25	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/14/15 08:28	08/18/15 21:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/13/15 15:34	08/14/15 12:34	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: RW-3DD (175-180)-081015
Date Collected: 08/10/15 14:25
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-8
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/12/15 19:10	1
Total Alkalinity as CaCO3	**96.8**		10.0	5.0	mg/L			08/12/15 19:10	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: RW-4 (393-403)-081015
Date Collected: 08/10/15 09:40
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/20/15 23:15	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/20/15 23:15	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/20/15 23:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/20/15 23:15*	*1*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*08/20/15 23:15*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/20/15 23:15*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/20/15 23:15*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/24/15 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/24/15 21:45*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*08/24/15 21:45*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/24/15 21:45*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/24/15 21:45*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 05:17	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 05:17	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 05:17	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 05:17	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 05:17	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 05:17	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 05:17	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 05:17	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 05:17	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 05:17	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 05:17	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 05:17	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 05:17	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 05:17	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 05:17	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 05:17	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 05:17	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 05:17	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 05:17	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 05:17	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 05:17	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 05:17	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 05:17	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 05:17	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 05:17	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 05:17	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 05:17	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 05:17	1

Client Sample ID: RW-4 (393-403)-081015
Date Collected: 08/10/15 09:40
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 05:17	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 05:17	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 05:17	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 05:17	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 05:17	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 05:17	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 05:17	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 05:17	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 05:17	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 05:17	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 05:17	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 05:17	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 05:17	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 05:17	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 05:17	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 05:17	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 05:17	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 05:17	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 05:17	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 05:17	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Propene, hexafluoro-	*22*	*J N*	*ug/L*		*0.94*	*116-15-4*		*08/18/15 05:17*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 05:17*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*08/18/15 05:17*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*08/18/15 05:17*	*1*
Toluene-d8 (Surr)	*110*		*70 - 130*		*08/18/15 05:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*08/18/15 05:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 22:17	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 22:17	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 22:17	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 06:53	08/13/15 22:17	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 06:53	08/13/15 22:17	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 06:53	08/13/15 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*52*		*29 - 120*	*08/13/15 06:53*	*08/13/15 22:17*	*1*
Nitrobenzene-d5	*46*		*27 - 120*	*08/13/15 06:53*	*08/13/15 22:17*	*1*
Terphenyl-d14	*65*		*13 - 120*	*08/13/15 06:53*	*08/13/15 22:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/15/15 08:20	08/20/15 03:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*48*		*10 - 120*	*08/15/15 08:20*	*08/20/15 03:02*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: RW-4 (393-403)-081015
Date Collected: 08/10/15 09:40
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-9
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	*39*		*10 - 120*	*08/15/15 08:20*	*08/20/15 03:02*	*1*
Phenol-d5	*34*		*10 - 120*	*08/15/15 08:20*	*08/20/15 03:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.080	U	0.50	0.080	ug/L		08/15/15 13:28	08/18/15 13:41	1
1,2,4,5-Tetrachlorobenzene	0.53	U	2.5	0.53	ug/L		08/15/15 13:28	08/18/15 13:41	1
2,3,4,6-Tetrachlorophenol	1.7	U	2.5	1.7	ug/L		08/15/15 13:28	08/18/15 13:41	1
2,4,5-Trichlorophenol	1.8	U	2.5	1.8	ug/L		08/15/15 13:28	08/18/15 13:41	1
2,4,6-Trichlorophenol	1.7	U	2.5	1.7	ug/L		08/15/15 13:28	08/18/15 13:41	1
2,4-Dichlorophenol	1.4	U	2.5	1.4	ug/L		08/15/15 13:28	08/18/15 13:41	1
2,4-Dimethylphenol	1.1	U	2.5	1.1	ug/L		08/15/15 13:28	08/18/15 13:41	1
2,4-Dinitrophenol	1.5	U	6.3	1.5	ug/L		08/15/15 13:28	08/18/15 13:41	1
2,4-Dinitrotoluene	0.80	U	2.5	0.80	ug/L		08/15/15 13:28	08/18/15 13:41	1
2,6-Dinitrotoluene	0.58	U	2.5	0.58	ug/L		08/15/15 13:28	08/18/15 13:41	1
2-Chloronaphthalene	0.70	U	2.5	0.70	ug/L		08/15/15 13:28	08/18/15 13:41	1
2-Chlorophenol	1.2	U	2.5	1.2	ug/L		08/15/15 13:28	08/18/15 13:41	1
2-Methylnaphthalene	0.10	U	0.50	0.10	ug/L		08/15/15 13:28	08/18/15 13:41	1
2-Methylphenol	0.58	U	2.5	0.58	ug/L		08/15/15 13:28	08/18/15 13:41	1
2-Nitroaniline	0.93	U	6.3	0.93	ug/L		08/15/15 13:28	08/18/15 13:41	1
2-Nitrophenol	1.3	U	2.5	1.3	ug/L		08/15/15 13:28	08/18/15 13:41	1
3,3'-Dichlorobenzidine	0.83	U	2.5	0.83	ug/L		08/15/15 13:28	08/18/15 13:41	1
3 & 4 Methylphenol	0.55	U	2.5	0.55	ug/L		08/15/15 13:28	08/18/15 13:41	1
3-Nitroaniline	0.68	U	6.3	0.68	ug/L		08/15/15 13:28	08/18/15 13:41	1
4,6-Dinitro-2-methylphenol	2.3	U	6.3	2.3	ug/L		08/15/15 13:28	08/18/15 13:41	1
4-Bromophenyl phenyl ether	0.68	U	2.5	0.68	ug/L		08/15/15 13:28	08/18/15 13:41	1
4-Chloro-3-methylphenol	1.1	U	2.5	1.1	ug/L		08/15/15 13:28	08/18/15 13:41	1
4-Chloroaniline	1.1	U	2.5	1.1	ug/L		08/15/15 13:28	08/18/15 13:41	1
4-Chlorophenyl phenyl ether	0.70	U	2.5	0.70	ug/L		08/15/15 13:28	08/18/15 13:41	1
4-Nitroaniline	0.78	U	6.3	0.78	ug/L		08/15/15 13:28	08/18/15 13:41	1
4-Nitrophenol	1.4	U	6.3	1.4	ug/L		08/15/15 13:28	08/18/15 13:41	1
Acenaphthylene	0.088	U	0.50	0.088	ug/L		08/15/15 13:28	08/18/15 13:41	1
Acetophenone	0.58	U	2.5	0.58	ug/L		08/15/15 13:28	08/18/15 13:41	1
Anthracene	0.095	U	0.50	0.095	ug/L		08/15/15 13:28	08/18/15 13:41	1
Benzaldehyde	1.4	U	2.5	1.4	ug/L		08/15/15 13:28	08/18/15 13:41	1
Benzo[g,h,i]perylene	0.16	U	0.50	0.16	ug/L		08/15/15 13:28	08/18/15 13:41	1
Benzo[k]fluoranthene	0.093	U	0.50	0.093	ug/L		08/15/15 13:28	08/18/15 13:41	1
Bis(2-chloroethoxy)methane	0.78	U	2.5	0.78	ug/L		08/15/15 13:28	08/18/15 13:41	1
Bis(2-chloroethyl)ether	0.70	U	2.5	0.70	ug/L		08/15/15 13:28	08/18/15 13:41	1
Butyl benzyl phthalate	0.63	U	2.5	0.63	ug/L		08/15/15 13:28	08/18/15 13:41	1
Bis(2-ethylhexyl) phthalate	**2.4**	**J**	2.5	1.5	ug/L		08/15/15 13:28	08/18/15 13:41	1
Carbazole	0.70	U	2.5	0.70	ug/L		08/15/15 13:28	08/18/15 13:41	1
Caprolactam	0.60	U	2.5	0.60	ug/L		08/15/15 13:28	08/18/15 13:41	1
Chrysene	0.083	U	0.50	0.083	ug/L		08/15/15 13:28	08/18/15 13:41	1
Dibenz(a,h)anthracene	0.11	U	0.50	0.11	ug/L		08/15/15 13:28	08/18/15 13:41	1
Dibenzofuran	0.73	U	2.5	0.73	ug/L		08/15/15 13:28	08/18/15 13:41	1
Diethyl phthalate	0.75	U	2.5	0.75	ug/L		08/15/15 13:28	08/18/15 13:41	1
Dimethyl phthalate	0.78	U	2.5	0.78	ug/L		08/15/15 13:28	08/18/15 13:41	1
Di-n-butyl phthalate	0.63	U	2.5	0.63	ug/L		08/15/15 13:28	08/18/15 13:41	1

Client Sample ID: RW-4 (393-403)-081015
Date Collected: 08/10/15 09:40
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	0.080	U	0.50	0.080	ug/L		08/15/15 13:28	08/18/15 13:41	1
Fluorene	0.080	U	0.50	0.080	ug/L		08/15/15 13:28	08/18/15 13:41	1
Hexachlorocyclopentadiene	0.45	U	2.5	0.45	ug/L		08/15/15 13:28	08/18/15 13:41	1
Hexachloroethane	0.48	U	2.5	0.48	ug/L		08/15/15 13:28	08/18/15 13:41	1
Indeno[1,2,3-cd]pyrene	0.10	U	0.50	0.10	ug/L		08/15/15 13:28	08/18/15 13:41	1
Isophorone	0.78	U	2.5	0.78	ug/L		08/15/15 13:28	08/18/15 13:41	1
Naphthalene	0.093	U	0.50	0.093	ug/L		08/15/15 13:28	08/18/15 13:41	1
Nitrobenzene	0.68	U	2.5	0.68	ug/L		08/15/15 13:28	08/18/15 13:41	1
N-Nitrosodi-n-propylamine	0.85	U	2.5	0.85	ug/L		08/15/15 13:28	08/18/15 13:41	1
N-Nitrosodiphenylamine	0.90	U	2.5	0.90	ug/L		08/15/15 13:28	08/18/15 13:41	1
Phenanthrene	0.11	U	0.50	0.11	ug/L		08/15/15 13:28	08/18/15 13:41	1
Phenol	0.38	U	2.5	0.38	ug/L		08/15/15 13:28	08/18/15 13:41	1
Pyrene	0.088	U	0.50	0.088	ug/L		08/15/15 13:28	08/18/15 13:41	1
Diphenyl	0.55	U	2.5	0.55	ug/L		08/15/15 13:28	08/18/15 13:41	1
Di-n-octyl phthalate	0.63	U	2.5	0.63	ug/L		08/15/15 13:28	08/18/15 13:41	1
2,2'-oxybis[1-chloropropane]	0.70	U	2.5	0.70	ug/L		08/15/15 13:28	08/18/15 13:41	1
Atrazine	0.73	U	2.5	0.73	ug/L		08/15/15 13:28	08/18/15 13:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/15/15 13:28*	*08/18/15 13:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*71*		*10 - 120*	*08/15/15 13:28*	*08/18/15 13:41*	*1*
2-Fluorobiphenyl (Surr)	*64*		*29 - 120*	*08/15/15 13:28*	*08/18/15 13:41*	*1*
2-Fluorophenol (Surr)	*36*		*10 - 120*	*08/15/15 13:28*	*08/18/15 13:41*	*1*
Nitrobenzene-d5 (Surr)	*58*		*27 - 120*	*08/15/15 13:28*	*08/18/15 13:41*	*1*
Phenol-d5 (Surr)	*22*		*10 - 120*	*08/15/15 13:28*	*08/18/15 13:41*	*1*
Terphenyl-d14 (Surr)	*52*		*13 - 120*	*08/15/15 13:28*	*08/18/15 13:41*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 20:59	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/24/15 10:53	08/24/15 20:59	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/24/15 10:53	08/24/15 20:59	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/24/15 10:53	08/24/15 20:59	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/24/15 10:53	08/24/15 20:59	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/24/15 10:53	08/24/15 20:59	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/24/15 10:53	08/24/15 20:59	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*94*		*10 - 150*	*08/24/15 10:53*	*08/24/15 20:59*	*1*
Tetrachloro-m-xylene	*100*		*10 - 150*	*08/24/15 10:53*	*08/24/15 20:59*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.41**		1.00	0.70	mg/L			08/21/15 21:50	1
Sulfate	**15.5**		1.00	0.60	mg/L			08/21/15 21:50	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: RW-4 (393-403)-081015
Date Collected: 08/10/15 09:40
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-9
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1.6**		0.020	0.0096	mg/L		08/13/15 10:37	08/14/15 23:25	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:25	1
Arsenic	**0.00059**	**J**	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:25	1
Barium	**0.023**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:25	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:25	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/13/15 10:37	08/14/15 23:25	1
Calcium	**23.5**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:25	1
Chromium	**0.0014**	**J**	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:25	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:25	1
Copper	**0.0013**	**J**	0.0020	0.00050	mg/L		08/13/15 10:37	08/19/15 13:10	1
Iron	**0.90**		0.025	0.010	mg/L		08/13/15 10:37	08/14/15 23:25	1
Lead	**0.0018**	**J**	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 23:25	1
Magnesium	**7.5**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:25	1
Manganese	**0.0084**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:25	1
Nickel	**0.0031**		0.0020	0.00050	mg/L		08/13/15 10:37	08/19/15 13:10	1
Potassium	**2.8**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:25	1
Selenium	**0.00065**	**J**	0.0020	0.00060	mg/L		08/13/15 10:37	08/14/15 23:25	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:25	1
Sodium	**8.9**	**B**	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:25	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 23:25	1
Vanadium	**0.0018**	**J B**	0.0020	0.00010	mg/L		08/13/15 10:37	08/14/15 23:25	1
Zinc	0.010	U	0.025	0.010	mg/L		08/13/15 10:37	08/19/15 13:10	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.16**		0.020	0.0096	mg/L		08/14/15 09:22	08/15/15 01:49	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:49	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:49	1
Barium	**0.014**		0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:49	1
Beryllium	0.00050	U ^	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:49	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/14/15 09:22	08/15/15 01:49	1
Calcium	**19.9**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:49	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:49	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:49	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/17/15 17:38	1
Iron	**0.068**		0.025	0.010	mg/L		08/14/15 09:22	08/15/15 01:49	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 01:49	1
Magnesium	**6.3**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:49	1
Manganese	**0.00090**	**J**	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:49	1
Nickel	**0.00056**	**J**	0.0020	0.00050	mg/L		08/14/15 09:22	08/21/15 18:25	1
Potassium	**2.1**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:49	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/14/15 09:22	08/15/15 01:49	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:49	1
Sodium	**8.0**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:49	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 01:49	1
Vanadium	**0.0012**	**J B**	0.0020	0.00010	mg/L		08/14/15 09:22	08/15/15 01:49	1
Zinc	0.010	U	0.025	0.010	mg/L		08/14/15 09:22	08/21/15 18:25	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: RW-4 (393-403)-081015
Date Collected: 08/10/15 09:40
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-9
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 18:20	08/19/15 14:32	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/14/15 08:28	08/18/15 21:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/13/15 15:34	08/14/15 12:35	1
Bicarbonate Alkalinity as CaCO3	**64.6**		10.0	5.0	mg/L			08/12/15 19:16	1
Total Alkalinity as CaCO3	**64.6**		10.0	5.0	mg/L			08/12/15 19:16	1

Client Sample ID: RW-4A (62-72)-081015

Date Collected: 08/10/15 12:15
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/20/15 23:43	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/20/15 23:43	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/20/15 23:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/20/15 23:43*	*1*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*08/20/15 23:43*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/20/15 23:43*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/20/15 23:43*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/24/15 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/24/15 22:13*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*08/24/15 22:13*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/24/15 22:13*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/24/15 22:13*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 22:12	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 22:12	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 22:12	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 22:12	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 22:12	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 22:12	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 22:12	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 22:12	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 22:12	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 22:12	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 22:12	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 22:12	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 22:12	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 22:12	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 22:12	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 22:12	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 22:12	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 22:12	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 22:12	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 22:12	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 22:12	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 22:12	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 22:12	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 22:12	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 22:12	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 22:12	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 22:12	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 22:12	1

Client Sample ID: RW-4A (62-72)-081015
Date Collected: 08/10/15 12:15
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 22:12	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 22:12	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 22:12	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 22:12	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 22:12	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 22:12	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 22:12	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 22:12	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 22:12	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 22:12	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 22:12	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 22:12	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 22:12	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 22:12	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 22:12	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 22:12	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 22:12	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 22:12	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 22:12	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 22:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 22:12*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 22:12*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/18/15 22:12*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/18/15 22:12*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/18/15 22:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*08/18/15 22:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 22:44	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 22:44	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 22:44	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 06:53	08/13/15 22:44	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 06:53	08/13/15 22:44	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 06:53	08/13/15 22:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*50*		*29 - 120*	*08/13/15 06:53*	*08/13/15 22:44*	*1*
Nitrobenzene-d5	*44*		*27 - 120*	*08/13/15 06:53*	*08/13/15 22:44*	*1*
Terphenyl-d14	*64*		*13 - 120*	*08/13/15 06:53*	*08/13/15 22:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/15/15 08:20	08/20/15 03:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*44*		*10 - 120*	*08/15/15 08:20*	*08/20/15 03:29*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: RW-4A (62-72)-081015
Date Collected: 08/10/15 12:15
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-10
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	*44*		*10 - 120*	*08/15/15 08:20*	*08/20/15 03:29*	*1*
Phenol-d5	*34*		*10 - 120*	*08/15/15 08:20*	*08/20/15 03:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.083	U	0.52	0.083	ug/L		08/15/15 13:28	08/18/15 14:05	1
1,2,4,5-Tetrachlorobenzene	0.55	U	2.6	0.55	ug/L		08/15/15 13:28	08/18/15 14:05	1
2,3,4,6-Tetrachlorophenol	1.8	U	2.6	1.8	ug/L		08/15/15 13:28	08/18/15 14:05	1
2,4,5-Trichlorophenol	1.8	U	2.6	1.8	ug/L		08/15/15 13:28	08/18/15 14:05	1
2,4,6-Trichlorophenol	1.8	U	2.6	1.8	ug/L		08/15/15 13:28	08/18/15 14:05	1
2,4-Dichlorophenol	1.5	U	2.6	1.5	ug/L		08/15/15 13:28	08/18/15 14:05	1
2,4-Dimethylphenol	1.1	U	2.6	1.1	ug/L		08/15/15 13:28	08/18/15 14:05	1
2,4-Dinitrophenol	1.5	U	6.5	1.5	ug/L		08/15/15 13:28	08/18/15 14:05	1
2,4-Dinitrotoluene	0.83	U	2.6	0.83	ug/L		08/15/15 13:28	08/18/15 14:05	1
2,6-Dinitrotoluene	0.60	U	2.6	0.60	ug/L		08/15/15 13:28	08/18/15 14:05	1
2-Chloronaphthalene	0.73	U	2.6	0.73	ug/L		08/15/15 13:28	08/18/15 14:05	1
2-Chlorophenol	1.3	U	2.6	1.3	ug/L		08/15/15 13:28	08/18/15 14:05	1
2-Methylnaphthalene	0.10	U	0.52	0.10	ug/L		08/15/15 13:28	08/18/15 14:05	1
2-Methylphenol	0.60	U	2.6	0.60	ug/L		08/15/15 13:28	08/18/15 14:05	1
2-Nitroaniline	0.96	U	6.5	0.96	ug/L		08/15/15 13:28	08/18/15 14:05	1
2-Nitrophenol	1.4	U	2.6	1.4	ug/L		08/15/15 13:28	08/18/15 14:05	1
3,3'-Dichlorobenzidine	0.86	U	2.6	0.86	ug/L		08/15/15 13:28	08/18/15 14:05	1
3 & 4 Methylphenol	0.57	U	2.6	0.57	ug/L		08/15/15 13:28	08/18/15 14:05	1
3-Nitroaniline	0.70	U	6.5	0.70	ug/L		08/15/15 13:28	08/18/15 14:05	1
4,6-Dinitro-2-methylphenol	2.4	U	6.5	2.4	ug/L		08/15/15 13:28	08/18/15 14:05	1
4-Bromophenyl phenyl ether	0.70	U	2.6	0.70	ug/L		08/15/15 13:28	08/18/15 14:05	1
4-Chloro-3-methylphenol	1.2	U	2.6	1.2	ug/L		08/15/15 13:28	08/18/15 14:05	1
4-Chloroaniline	1.1	U	2.6	1.1	ug/L		08/15/15 13:28	08/18/15 14:05	1
4-Chlorophenyl phenyl ether	0.73	U	2.6	0.73	ug/L		08/15/15 13:28	08/18/15 14:05	1
4-Nitroaniline	0.81	U	6.5	0.81	ug/L		08/15/15 13:28	08/18/15 14:05	1
4-Nitrophenol	1.4	U	6.5	1.4	ug/L		08/15/15 13:28	08/18/15 14:05	1
Acenaphthylene	0.091	U	0.52	0.091	ug/L		08/15/15 13:28	08/18/15 14:05	1
Acetophenone	0.60	U	2.6	0.60	ug/L		08/15/15 13:28	08/18/15 14:05	1
Anthracene	0.099	U	0.52	0.099	ug/L		08/15/15 13:28	08/18/15 14:05	1
Benzaldehyde	1.5	U	2.6	1.5	ug/L		08/15/15 13:28	08/18/15 14:05	1
Benzo[g,h,i]perylene	0.16	U	0.52	0.16	ug/L		08/15/15 13:28	08/18/15 14:05	1
Benzo[k]fluoranthene	0.096	U	0.52	0.096	ug/L		08/15/15 13:28	08/18/15 14:05	1
Bis(2-chloroethoxy)methane	0.81	U	2.6	0.81	ug/L		08/15/15 13:28	08/18/15 14:05	1
Bis(2-chloroethyl)ether	0.73	U	2.6	0.73	ug/L		08/15/15 13:28	08/18/15 14:05	1
Butyl benzyl phthalate	0.65	U	2.6	0.65	ug/L		08/15/15 13:28	08/18/15 14:05	1
Bis(2-ethylhexyl) phthalate	1.6	U	2.6	1.6	ug/L		08/15/15 13:28	08/18/15 14:05	1
Carbazole	0.73	U	2.6	0.73	ug/L		08/15/15 13:28	08/18/15 14:05	1
Caprolactam	0.63	U	2.6	0.63	ug/L		08/15/15 13:28	08/18/15 14:05	1
Chrysene	0.086	U	0.52	0.086	ug/L		08/15/15 13:28	08/18/15 14:05	1
Dibenz(a,h)anthracene	0.12	U	0.52	0.12	ug/L		08/15/15 13:28	08/18/15 14:05	1
Dibenzofuran	0.76	U	2.6	0.76	ug/L		08/15/15 13:28	08/18/15 14:05	1
Diethyl phthalate	0.78	U	2.6	0.78	ug/L		08/15/15 13:28	08/18/15 14:05	1
Dimethyl phthalate	0.81	U	2.6	0.81	ug/L		08/15/15 13:28	08/18/15 14:05	1
Di-n-butyl phthalate	0.65	U	2.6	0.65	ug/L		08/15/15 13:28	08/18/15 14:05	1

Client Sample ID: RW-4A (62-72)-081015
Date Collected: 08/10/15 12:15
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	0.083	U	0.52	0.083	ug/L		08/15/15 13:28	08/18/15 14:05	1
Fluorene	0.083	U	0.52	0.083	ug/L		08/15/15 13:28	08/18/15 14:05	1
Hexachlorocyclopentadiene	0.47	U	2.6	0.47	ug/L		08/15/15 13:28	08/18/15 14:05	1
Hexachloroethane	0.49	U	2.6	0.49	ug/L		08/15/15 13:28	08/18/15 14:05	1
Indeno[1,2,3-cd]pyrene	0.11	U	0.52	0.11	ug/L		08/15/15 13:28	08/18/15 14:05	1
Isophorone	0.81	U	2.6	0.81	ug/L		08/15/15 13:28	08/18/15 14:05	1
Naphthalene	0.096	U	0.52	0.096	ug/L		08/15/15 13:28	08/18/15 14:05	1
Nitrobenzene	0.70	U	2.6	0.70	ug/L		08/15/15 13:28	08/18/15 14:05	1
N-Nitrosodi-n-propylamine	0.89	U	2.6	0.89	ug/L		08/15/15 13:28	08/18/15 14:05	1
N-Nitrosodiphenylamine	0.94	U	2.6	0.94	ug/L		08/15/15 13:28	08/18/15 14:05	1
Phenanthrene	0.11	U	0.52	0.11	ug/L		08/15/15 13:28	08/18/15 14:05	1
Phenol	0.39	U	2.6	0.39	ug/L		08/15/15 13:28	08/18/15 14:05	1
Pyrene	0.091	U	0.52	0.091	ug/L		08/15/15 13:28	08/18/15 14:05	1
Diphenyl	0.57	U	2.6	0.57	ug/L		08/15/15 13:28	08/18/15 14:05	1
Di-n-octyl phthalate	0.65	U	2.6	0.65	ug/L		08/15/15 13:28	08/18/15 14:05	1
2,2'-oxybis[1-chloropropane]	0.73	U	2.6	0.73	ug/L		08/15/15 13:28	08/18/15 14:05	1
Atrazine	0.76	U	2.6	0.76	ug/L		08/15/15 13:28	08/18/15 14:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/15/15 13:28*	*08/18/15 14:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*71*		*10 - 120*	*08/15/15 13:28*	*08/18/15 14:05*	*1*
2-Fluorobiphenyl (Surr)	*76*		*29 - 120*	*08/15/15 13:28*	*08/18/15 14:05*	*1*
2-Fluorophenol (Surr)	*48*		*10 - 120*	*08/15/15 13:28*	*08/18/15 14:05*	*1*
Nitrobenzene-d5 (Surr)	*67*		*27 - 120*	*08/15/15 13:28*	*08/18/15 14:05*	*1*
Phenol-d5 (Surr)	*31*		*10 - 120*	*08/15/15 13:28*	*08/18/15 14:05*	*1*
Terphenyl-d14 (Surr)	*79*		*13 - 120*	*08/15/15 13:28*	*08/18/15 14:05*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 21:15	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/24/15 10:53	08/24/15 21:15	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/24/15 10:53	08/24/15 21:15	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/24/15 10:53	08/24/15 21:15	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/24/15 10:53	08/24/15 21:15	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/24/15 10:53	08/24/15 21:15	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/24/15 10:53	08/24/15 21:15	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*95*		*10 - 150*	*08/24/15 10:53*	*08/24/15 21:15*	*1*
Tetrachloro-m-xylene	*87*		*10 - 150*	*08/24/15 10:53*	*08/24/15 21:15*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.31**		1.00	0.70	mg/L			08/21/15 22:47	1
Sulfate	**9.97**		1.00	0.60	mg/L			08/21/15 22:47	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: RW-4A (62-72)-081015
Date Collected: 08/10/15 12:15
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-10
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.086**		0.020	0.0096	mg/L		08/13/15 10:37	08/14/15 23:31	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:31	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:31	1
Barium	**0.0041**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:31	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:31	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/13/15 10:37	08/14/15 23:31	1
Calcium	**9.8**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:31	1
Chromium	**0.00061**	**J**	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:31	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:31	1
Copper	**0.00081**	**J**	0.0020	0.00050	mg/L		08/13/15 10:37	08/19/15 13:16	1
Iron	**0.14**		0.025	0.010	mg/L		08/13/15 10:37	08/14/15 23:31	1
Lead	**0.00044**	**J**	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 23:31	1
Magnesium	**4.0**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:31	1
Manganese	**0.0021**		0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:31	1
Nickel	**0.027**		0.0020	0.00050	mg/L		08/13/15 10:37	08/19/15 13:16	1
Potassium	**1.2**		1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:31	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/13/15 10:37	08/14/15 23:31	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:31	1
Sodium	**5.7**	**B**	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:31	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 23:31	1
Vanadium	**0.0017**	**J B**	0.0020	0.00010	mg/L		08/13/15 10:37	08/14/15 23:31	1
Zinc	0.010	U	0.025	0.010	mg/L		08/13/15 10:37	08/19/15 13:16	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.016**	**J**	0.020	0.0096	mg/L		08/14/15 09:22	08/15/15 01:55	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:55	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:55	1
Barium	**0.0041**		0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:55	1
Beryllium	0.00050	U ^	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:55	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/14/15 09:22	08/15/15 01:55	1
Calcium	**9.9**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:55	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:55	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:55	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/17/15 17:44	1
Iron	**0.019**	**J**	0.025	0.010	mg/L		08/14/15 09:22	08/15/15 01:55	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 01:55	1
Magnesium	**4.2**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:55	1
Manganese	**0.00086**	**J**	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:55	1
Nickel	**0.028**		0.0020	0.00050	mg/L		08/14/15 09:22	08/21/15 18:31	1
Potassium	**1.3**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:55	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/14/15 09:22	08/15/15 01:55	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 01:55	1
Sodium	**5.9**		1.0	0.13	mg/L		08/14/15 09:22	08/15/15 01:55	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 01:55	1
Vanadium	**0.0014**	**J B**	0.0020	0.00010	mg/L		08/14/15 09:22	08/15/15 01:55	1
Zinc	0.010	U	0.025	0.010	mg/L		08/14/15 09:22	08/21/15 18:31	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: RW-4A (62-72)-081015
Date Collected: 08/10/15 12:15
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-10
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 18:20	08/19/15 14:34	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/14/15 08:28	08/18/15 21:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/13/15 15:34	08/14/15 12:36	1
Bicarbonate Alkalinity as CaCO3	**36.1**		10.0	5.0	mg/L			08/12/15 19:21	1
Total Alkalinity as CaCO3	**36.1**		10.0	5.0	mg/L			08/12/15 19:21	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: FB-02-081115
Date Collected: 08/11/15 09:00
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/21/15 00:12	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/21/15 00:12	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/21/15 00:12	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/21/15 00:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/21/15 00:12*	*1*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*08/21/15 00:12*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/21/15 00:12*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/21/15 00:12*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 00:57	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 00:57	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 00:57	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 00:57	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 00:57	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 00:57	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 00:57	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 00:57	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 00:57	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 00:57	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 00:57	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 00:57	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 00:57	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 00:57	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 00:57	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 00:57	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 00:57	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 00:57	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 00:57	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 00:57	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 00:57	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 00:57	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 00:57	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 00:57	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 00:57	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 00:57	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 00:57	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 00:57	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 00:57	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 00:57	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 00:57	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 00:57	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 00:57	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 00:57	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 00:57	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 00:57	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 00:57	1

Client Sample ID: FB-02-081115
Date Collected: 08/11/15 09:00
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 00:57	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 00:57	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 00:57	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 00:57	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 00:57	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 00:57	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 00:57	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 00:57	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 00:57	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 00:57	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 00:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 00:57*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 00:57*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/18/15 00:57*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/18/15 00:57*	*1*
Toluene-d8 (Surr)	*109*		*70 - 130*		*08/18/15 00:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/18/15 00:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 23:11	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 23:11	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 23:11	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 06:53	08/13/15 23:11	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 06:53	08/13/15 23:11	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 06:53	08/13/15 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*48*		*29 - 120*	*08/13/15 06:53*	*08/13/15 23:11*	*1*
Nitrobenzene-d5	*43*		*27 - 120*	*08/13/15 06:53*	*08/13/15 23:11*	*1*
Terphenyl-d14	*63*		*13 - 120*	*08/13/15 06:53*	*08/13/15 23:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/15/15 08:20	08/20/15 03:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*55*		*10 - 120*	*08/15/15 08:20*	*08/20/15 03:56*	*1*
2-Fluorophenol	*43*		*10 - 120*	*08/15/15 08:20*	*08/20/15 03:56*	*1*
Phenol-d5	*34*		*10 - 120*	*08/15/15 08:20*	*08/20/15 03:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.081	U	0.51	0.081	ug/L		08/15/15 13:28	08/18/15 14:30	1
1,2,4,5-Tetrachlorobenzene	0.53	U	2.5	0.53	ug/L		08/15/15 13:28	08/18/15 14:30	1
2,3,4,6-Tetrachlorophenol	1.7	U	2.5	1.7	ug/L		08/15/15 13:28	08/18/15 14:30	1
2,4,5-Trichlorophenol	1.8	U	2.5	1.8	ug/L		08/15/15 13:28	08/18/15 14:30	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: FB-02-081115
Date Collected: 08/11/15 09:00
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	1.7	U	2.5	1.7	ug/L		08/15/15 13:28	08/18/15 14:30	1
2,4-Dichlorophenol	1.4	U	2.5	1.4	ug/L		08/15/15 13:28	08/18/15 14:30	1
2,4-Dimethylphenol	1.1	U	2.5	1.1	ug/L		08/15/15 13:28	08/18/15 14:30	1
2,4-Dinitrophenol	1.5	U	6.3	1.5	ug/L		08/15/15 13:28	08/18/15 14:30	1
2,4-Dinitrotoluene	0.81	U	2.5	0.81	ug/L		08/15/15 13:28	08/18/15 14:30	1
2,6-Dinitrotoluene	0.58	U	2.5	0.58	ug/L		08/15/15 13:28	08/18/15 14:30	1
2-Chloronaphthalene	0.71	U	2.5	0.71	ug/L		08/15/15 13:28	08/18/15 14:30	1
2-Chlorophenol	1.2	U	2.5	1.2	ug/L		08/15/15 13:28	08/18/15 14:30	1
2-Methylnaphthalene	0.10	U	0.51	0.10	ug/L		08/15/15 13:28	08/18/15 14:30	1
2-Methylphenol	0.58	U	2.5	0.58	ug/L		08/15/15 13:28	08/18/15 14:30	1
2-Nitroaniline	0.93	U	6.3	0.93	ug/L		08/15/15 13:28	08/18/15 14:30	1
2-Nitrophenol	1.3	U	2.5	1.3	ug/L		08/15/15 13:28	08/18/15 14:30	1
3,3'-Dichlorobenzidine	0.83	U	2.5	0.83	ug/L		08/15/15 13:28	08/18/15 14:30	1
3 & 4 Methylphenol	0.56	U	2.5	0.56	ug/L		08/15/15 13:28	08/18/15 14:30	1
3-Nitroaniline	0.68	U	6.3	0.68	ug/L		08/15/15 13:28	08/18/15 14:30	1
4,6-Dinitro-2-methylphenol	2.3	U	6.3	2.3	ug/L		08/15/15 13:28	08/18/15 14:30	1
4-Bromophenyl phenyl ether	0.68	U	2.5	0.68	ug/L		08/15/15 13:28	08/18/15 14:30	1
4-Chloro-3-methylphenol	1.1	U	2.5	1.1	ug/L		08/15/15 13:28	08/18/15 14:30	1
4-Chloroaniline	1.1	U	2.5	1.1	ug/L		08/15/15 13:28	08/18/15 14:30	1
4-Chlorophenyl phenyl ether	0.71	U	2.5	0.71	ug/L		08/15/15 13:28	08/18/15 14:30	1
4-Nitroaniline	0.78	U	6.3	0.78	ug/L		08/15/15 13:28	08/18/15 14:30	1
4-Nitrophenol	1.4	U	6.3	1.4	ug/L		08/15/15 13:28	08/18/15 14:30	1
Acenaphthylene	0.088	U	0.51	0.088	ug/L		08/15/15 13:28	08/18/15 14:30	1
Acetophenone	0.58	U	2.5	0.58	ug/L		08/15/15 13:28	08/18/15 14:30	1
Anthracene	0.096	U	0.51	0.096	ug/L		08/15/15 13:28	08/18/15 14:30	1
Benzaldehyde	1.4	U	2.5	1.4	ug/L		08/15/15 13:28	08/18/15 14:30	1
Benzo[g,h,i]perylene	0.16	U	0.51	0.16	ug/L		08/15/15 13:28	08/18/15 14:30	1
Benzo[k]fluoranthene	0.093	U	0.51	0.093	ug/L		08/15/15 13:28	08/18/15 14:30	1
Bis(2-chloroethoxy)methane	0.78	U	2.5	0.78	ug/L		08/15/15 13:28	08/18/15 14:30	1
Bis(2-chloroethyl)ether	0.71	U	2.5	0.71	ug/L		08/15/15 13:28	08/18/15 14:30	1
Butyl benzyl phthalate	0.63	U	2.5	0.63	ug/L		08/15/15 13:28	08/18/15 14:30	1
Bis(2-ethylhexyl) phthalate	**1.7**	**J**	2.5	1.5	ug/L		08/15/15 13:28	08/18/15 14:30	1
Carbazole	0.71	U	2.5	0.71	ug/L		08/15/15 13:28	08/18/15 14:30	1
Caprolactam	0.61	U	2.5	0.61	ug/L		08/15/15 13:28	08/18/15 14:30	1
Chrysene	0.083	U	0.51	0.083	ug/L		08/15/15 13:28	08/18/15 14:30	1
Dibenz(a,h)anthracene	0.11	U	0.51	0.11	ug/L		08/15/15 13:28	08/18/15 14:30	1
Dibenzofuran	0.73	U	2.5	0.73	ug/L		08/15/15 13:28	08/18/15 14:30	1
Diethyl phthalate	0.76	U	2.5	0.76	ug/L		08/15/15 13:28	08/18/15 14:30	1
Dimethyl phthalate	0.78	U	2.5	0.78	ug/L		08/15/15 13:28	08/18/15 14:30	1
Di-n-butyl phthalate	0.63	U	2.5	0.63	ug/L		08/15/15 13:28	08/18/15 14:30	1
Fluoranthene	0.081	U	0.51	0.081	ug/L		08/15/15 13:28	08/18/15 14:30	1
Fluorene	0.081	U	0.51	0.081	ug/L		08/15/15 13:28	08/18/15 14:30	1
Hexachlorocyclopentadiene	0.45	U	2.5	0.45	ug/L		08/15/15 13:28	08/18/15 14:30	1
Hexachloroethane	0.48	U	2.5	0.48	ug/L		08/15/15 13:28	08/18/15 14:30	1
Indeno[1,2,3-cd]pyrene	0.10	U	0.51	0.10	ug/L		08/15/15 13:28	08/18/15 14:30	1
Isophorone	0.78	U	2.5	0.78	ug/L		08/15/15 13:28	08/18/15 14:30	1
Naphthalene	0.093	U	0.51	0.093	ug/L		08/15/15 13:28	08/18/15 14:30	1
Nitrobenzene	0.68	U	2.5	0.68	ug/L		08/15/15 13:28	08/18/15 14:30	1
N-Nitrosodi-n-propylamine	0.86	U	2.5	0.86	ug/L		08/15/15 13:28	08/18/15 14:30	1

Client Sample ID: FB-02-081115
Date Collected: 08/11/15 09:00
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	0.91	U	2.5	0.91	ug/L		08/15/15 13:28	08/18/15 14:30	1
Phenanthrene	0.11	U	0.51	0.11	ug/L		08/15/15 13:28	08/18/15 14:30	1
Phenol	0.38	U	2.5	0.38	ug/L		08/15/15 13:28	08/18/15 14:30	1
Pyrene	0.088	U	0.51	0.088	ug/L		08/15/15 13:28	08/18/15 14:30	1
Diphenyl	0.56	U	2.5	0.56	ug/L		08/15/15 13:28	08/18/15 14:30	1
Di-n-octyl phthalate	0.63	U	2.5	0.63	ug/L		08/15/15 13:28	08/18/15 14:30	1
2,2'-oxybis[1-chloropropane]	0.71	U	2.5	0.71	ug/L		08/15/15 13:28	08/18/15 14:30	1
Atrazine	0.73	U	2.5	0.73	ug/L		08/15/15 13:28	08/18/15 14:30	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/15/15 13:28*	*08/18/15 14:30*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*75*		*10 - 120*	*08/15/15 13:28*	*08/18/15 14:30*	*1*
2-Fluorobiphenyl (Surr)	*73*		*29 - 120*	*08/15/15 13:28*	*08/18/15 14:30*	*1*
2-Fluorophenol (Surr)	*40*		*10 - 120*	*08/15/15 13:28*	*08/18/15 14:30*	*1*
Nitrobenzene-d5 (Surr)	*67*		*27 - 120*	*08/15/15 13:28*	*08/18/15 14:30*	*1*
Phenol-d5 (Surr)	*25*		*10 - 120*	*08/15/15 13:28*	*08/18/15 14:30*	*1*
Terphenyl-d14 (Surr)	*74*		*13 - 120*	*08/15/15 13:28*	*08/18/15 14:30*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 21:30	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/24/15 10:53	08/24/15 21:30	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/24/15 10:53	08/24/15 21:30	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/24/15 10:53	08/24/15 21:30	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/24/15 10:53	08/24/15 21:30	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/24/15 10:53	08/24/15 21:30	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/24/15 10:53	08/24/15 21:30	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 21:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*108*		*10 - 150*	*08/24/15 10:53*	*08/24/15 21:30*	*1*
Tetrachloro-m-xylene	*103*		*10 - 150*	*08/24/15 10:53*	*08/24/15 21:30*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			08/21/15 23:06	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/21/15 23:06	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/13/15 10:37	08/14/15 23:48	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:48	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:48	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:48	1
Beryllium	0.00050	U ^	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:48	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/13/15 10:37	08/14/15 23:48	1
Calcium	0.13	U	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:48	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:48	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:48	1

Client Sample ID: FB-02-081115

Date Collected: 08/11/15 09:00
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-11

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	09/01/15 18:48	1
Iron	0.010	U	0.025	0.010	mg/L		08/13/15 10:37	08/14/15 23:48	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 23:48	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:48	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:48	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:48	1
Potassium	0.13	U	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:48	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/13/15 10:37	08/14/15 23:48	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 23:48	1
Sodium	0.13	U	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 23:48	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 23:48	1
Vanadium	**0.00093**	**J B**	0.0020	0.00010	mg/L		08/13/15 10:37	08/14/15 23:48	1
Zinc	0.010	U	0.025	0.010	mg/L		08/13/15 10:37	08/14/15 23:48	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/14/15 09:22	08/15/15 02:01	1
Antimony	**0.00097**	**J**	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 02:01	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 02:01	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 02:01	1
Beryllium	0.00050	U ^	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 02:01	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/14/15 09:22	08/15/15 02:01	1
Calcium	0.13	U	1.0	0.13	mg/L		08/14/15 09:22	08/15/15 02:01	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 02:01	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 02:01	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/17/15 17:50	1
Iron	0.010	U	0.025	0.010	mg/L		08/14/15 09:22	08/15/15 02:01	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 02:01	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/14/15 09:22	08/15/15 02:01	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 02:01	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/21/15 18:36	1
Potassium	0.13	U	1.0	0.13	mg/L		08/14/15 09:22	08/15/15 02:01	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/14/15 09:22	08/15/15 02:01	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 02:01	1
Sodium	0.13	U	1.0	0.13	mg/L		08/14/15 09:22	08/15/15 02:01	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 02:01	1
Vanadium	**0.00086**	**J B**	0.0020	0.00010	mg/L		08/14/15 09:22	08/15/15 02:01	1
Zinc	0.010	U	0.025	0.010	mg/L		08/14/15 09:22	08/21/15 18:36	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 18:20	08/19/15 14:37	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/14/15 08:28	08/18/15 21:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 16:13	08/21/15 11:56	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: FB-02-081115
Date Collected: 08/11/15 09:00
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-11
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/12/15 19:25	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/12/15 19:25	1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-273863/6
Matrix: Water
Analysis Batch: 273863

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/17/15 23:12	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/17/15 23:12	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/17/15 23:12	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/17/15 23:12	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/17/15 23:12	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/17/15 23:12	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/17/15 23:12	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/17/15 23:12	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/17/15 23:12	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/17/15 23:12	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/17/15 23:12	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/17/15 23:12	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/17/15 23:12	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/17/15 23:12	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/17/15 23:12	1
Acetone	2.7	U	25	2.7	ug/L			08/17/15 23:12	1
Benzene	0.20	U	1.0	0.20	ug/L			08/17/15 23:12	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/17/15 23:12	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/17/15 23:12	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/17/15 23:12	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/17/15 23:12	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/17/15 23:12	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/17/15 23:12	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/17/15 23:12	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/17/15 23:12	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/17/15 23:12	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/17/15 23:12	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/17/15 23:12	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/17/15 23:12	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/17/15 23:12	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/17/15 23:12	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/17/15 23:12	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/17/15 23:12	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/17/15 23:12	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/17/15 23:12	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/17/15 23:12	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/17/15 23:12	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/17/15 23:12	1
Styrene	0.28	U	1.0	0.28	ug/L			08/17/15 23:12	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/17/15 23:12	1
Toluene	0.17	U	1.0	0.17	ug/L			08/17/15 23:12	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/17/15 23:12	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/17/15 23:12	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/17/15 23:12	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/17/15 23:12	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/17/15 23:12	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/17/15 23:12	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/17/15 23:12	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/17/15 23:12	1
Total Alkanes TIC	None		ug/L					08/17/15 23:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130		08/17/15 23:12	1
Dibromofluoromethane (Surr)	96		70 - 130		08/17/15 23:12	1
Toluene-d8 (Surr)	109		70 - 130		08/17/15 23:12	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130		08/17/15 23:12	1

Lab Sample ID: LCS 490-273863/3
Matrix: Water
Analysis Batch: 273863

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	51.8		ug/L		104	78 - 135
Freon-113	50.0	52.6		ug/L		105	77 - 129
1,1,2,2-Tetrachloroethane	50.0	50.3		ug/L		101	69 - 131
1,1,2-Trichloroethane	50.0	54.6		ug/L		109	80 - 124
1,1-Dichloroethane	50.0	51.5		ug/L		103	78 - 125
1,1-Dichloroethene	50.0	54.0		ug/L		108	79 - 124
1,2,4-Trichlorobenzene	50.0	52.2		ug/L		104	63 - 133
1,2-Dibromo-3-Chloropropane	50.0	50.0		ug/L		100	54 - 125
1,2-Dichlorobenzene	50.0	53.5		ug/L		107	80 - 121
1,2-Dichloropropane	50.0	52.7		ug/L		105	75 - 120
1,3-Dichlorobenzene	50.0	54.2		ug/L		108	80 - 122
1,4-Dichlorobenzene	50.0	49.3		ug/L		99	80 - 120
2-Butanone (MEK)	250	264		ug/L		105	62 - 133
2-Hexanone	250	285		ug/L		114	60 - 142
4-Methyl-2-pentanone (MIBK)	250	266		ug/L		107	60 - 137
Acetone	250	249		ug/L		100	54 - 145
Benzene	50.0	52.6		ug/L		105	80 - 121
Bromoform	50.0	55.7		ug/L		111	46 - 145
Bromomethane	50.0	47.4		ug/L		95	41 - 150
Carbon disulfide	50.0	52.9		ug/L		106	77 - 126
Carbon tetrachloride	50.0	51.9		ug/L		104	64 - 147
Chlorobenzene	50.0	53.5		ug/L		107	80 - 120
Chlorodibromomethane	50.0	54.6		ug/L		109	69 - 133
Chloroethane	50.0	52.5		ug/L		105	72 - 120
Chloroform	50.0	53.3		ug/L		107	73 - 129
Chloromethane	50.0	45.6		ug/L		91	12 - 150
cis-1,2-Dichloroethene	50.0	51.6		ug/L		103	76 - 125
cis-1,3-Dichloropropene	50.0	54.5		ug/L		109	74 - 140
Cyclohexane	50.0	50.8		ug/L		102	73 - 122
Dichlorobromomethane	50.0	52.8		ug/L		106	75 - 129
Dichlorodifluoromethane	50.0	45.7		ug/L		91	37 - 127
Ethylbenzene	50.0	55.9		ug/L		112	80 - 130
1,2-Dibromoethane	50.0	55.3		ug/L		111	80 - 129
Isopropylbenzene	50.0	61.6		ug/L		123	80 - 141
Methyl acetate	250	264		ug/L		105	64 - 150
Methyl tert-butyl ether	50.0	51.5		ug/L		103	72 - 133
Methylcyclohexane	50.0	50.5		ug/L		101	71 - 129
Methylene Chloride	50.0	55.2		ug/L		110	79 - 123
Styrene	50.0	54.8		ug/L		110	80 - 127

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

Lab Sample ID: LCS 490-273863/3
Matrix: Water
Analysis Batch: 273863

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	50.0	51.5		ug/L		103	80 - 126
Toluene	50.0	54.5		ug/L		109	80 - 126
trans-1,2-Dichloroethene	50.0	51.3		ug/L		103	79 - 126
trans-1,3-Dichloropropene	50.0	54.6		ug/L		109	63 - 134
Trichloroethene	50.0	55.7		ug/L		111	80 - 123
Trichlorofluoromethane	50.0	49.4		ug/L		99	65 - 124
Vinyl chloride	50.0	49.6		ug/L		99	68 - 120
1,2-Dichloroethane	50.0	52.5		ug/L		105	77 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 273863

Client Sample ID: OB-5-081015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.19	U	50.0	56.9		ug/L		114	76 - 149
Freon-113	0.15	U	50.0	60.9		ug/L		122	72 - 148
1,1,2,2-Tetrachloroethane	0.19	U	50.0	55.1		ug/L		110	56 - 143
1,1,2-Trichloroethane	0.19	U	50.0	55.7		ug/L		111	74 - 134
1,1-Dichloroethane	0.37	J	50.0	58.4		ug/L		116	71 - 139
1,1-Dichloroethene	0.25	U	50.0	59.2		ug/L		118	70 - 142
1,2,4-Trichlorobenzene	0.20	U	50.0	58.3		ug/L		117	60 - 136
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	56.0		ug/L		112	52 - 126
1,2-Dichlorobenzene	0.19	U	50.0	57.6		ug/L		115	79 - 128
1,2-Dichloropropane	0.25	U	50.0	56.0		ug/L		112	67 - 131
1,3-Dichlorobenzene	0.18	U	50.0	57.7		ug/L		115	77 - 131
1,4-Dichlorobenzene	0.20	J	50.0	54.1		ug/L		108	78 - 126
2-Butanone (MEK)	2.6	U	250	292		ug/L		117	50 - 138
2-Hexanone	1.3	U	250	310		ug/L		124	50 - 150
4-Methyl-2-pentanone (MIBK)	0.81	U	250	287		ug/L		115	50 - 147
Acetone	2.7	U	250	270		ug/L		108	45 - 141
Benzene	0.20	U	50.0	56.4		ug/L		113	75 - 133
Bromoform	0.29	U	50.0	56.5		ug/L		113	42 - 147
Bromomethane	0.35	U	50.0	45.1		ug/L		90	16 - 163
Carbon disulfide	0.22	U	50.0	58.4		ug/L		117	48 - 152
Carbon tetrachloride	0.18	U	50.0	56.0		ug/L		112	62 - 164
Chlorobenzene	0.18	U	50.0	55.6		ug/L		111	80 - 129
Chlorodibromomethane	0.25	U	50.0	59.7		ug/L		119	66 - 140
Chloroethane	0.36	U	50.0	66.0		ug/L		132	58 - 137
Chloroform	0.23	U	50.0	55.7		ug/L		111	66 - 138
Chloromethane	0.36	U	50.0	48.3		ug/L		97	10 - 169
cis-1,2-Dichloroethene	0.21	U	50.0	57.1		ug/L		114	68 - 138
cis-1,3-Dichloropropene	0.17	U	50.0	57.4		ug/L		115	71 - 141

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

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 273863

Client Sample ID: OB-5-081015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	0.13	U	50.0	61.4		ug/L		123	58 - 144
Dichlorobromomethane	0.17	U	50.0	56.3		ug/L		113	70 - 140
Dichlorodifluoromethane	0.17	U	50.0	49.1		ug/L		98	40 - 127
Ethylbenzene	0.19	U	50.0	59.5		ug/L		119	79 - 139
1,2-Dibromoethane	0.21	U	50.0	56.5		ug/L		113	75 - 137
Isopropylbenzene	0.33	U	50.0	61.9		ug/L		124	80 - 153
Methyl acetate	0.58	U	250	286		ug/L		114	30 - 165
Methyl tert-butyl ether	0.27	J	50.0	56.0		ug/L		112	66 - 141
Methylcyclohexane	0.090	U	50.0	60.9		ug/L		122	59 - 151
Methylene Chloride	0.22	U	50.0	59.4		ug/L		119	64 - 139
Styrene	0.28	U	50.0	55.7		ug/L		111	61 - 148
Tetrachloroethene	0.14	U	50.0	61.0		ug/L		122	72 - 145
Toluene	0.17	U	50.0	56.6		ug/L		113	75 - 136
trans-1,2-Dichloroethene	0.23	U	50.0	58.6		ug/L		117	66 - 143
trans-1,3-Dichloropropene	0.17	U	50.0	56.6		ug/L		113	59 - 135
Trichloroethene	0.20	U	50.0	55.8		ug/L		112	73 - 144
Trichlorofluoromethane	0.21	U	50.0	57.6		ug/L		115	58 - 139
Vinyl chloride	0.18	U	50.0	56.2		ug/L		112	56 - 129
1,2-Dichloroethane	0.20	U	50.0	54.7		ug/L		109	64 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 273863

Client Sample ID: OB-5-081015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.19	U	50.0	55.7		ug/L		111	76 - 149	2	17
Freon-113	0.15	U	50.0	58.0		ug/L		116	72 - 148	5	18
1,1,2,2-Tetrachloroethane	0.19	U	50.0	53.1		ug/L		106	56 - 143	4	20
1,1,2-Trichloroethane	0.19	U	50.0	54.6		ug/L		109	74 - 134	2	15
1,1-Dichloroethane	0.37	J	50.0	53.6		ug/L		106	71 - 139	9	17
1,1-Dichloroethene	0.25	U	50.0	56.0		ug/L		112	70 - 142	5	17
1,2,4-Trichlorobenzene	0.20	U	50.0	56.5		ug/L		113	60 - 136	3	19
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	48.8		ug/L		98	52 - 126	14	24
1,2-Dichlorobenzene	0.19	U	50.0	57.1		ug/L		114	79 - 128	1	15
1,2-Dichloropropane	0.25	U	50.0	53.7		ug/L		107	67 - 131	4	17
1,3-Dichlorobenzene	0.18	U	50.0	55.8		ug/L		112	77 - 131	3	15
1,4-Dichlorobenzene	0.20	J	50.0	52.5		ug/L		105	78 - 126	3	15
2-Butanone (MEK)	2.6	U	250	272		ug/L		109	50 - 138	7	19
2-Hexanone	1.3	U	250	299		ug/L		119	50 - 150	4	15
4-Methyl-2-pentanone (MIBK)	0.81	U	250	278		ug/L		111	50 - 147	3	17
Acetone	2.7	U	250	251		ug/L		100	45 - 141	8	21
Benzene	0.20	U	50.0	53.9		ug/L		108	75 - 133	4	17

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

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 273863

Client Sample ID: OB-5-081015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	0.29	U	50.0	54.3		ug/L		109	42 - 147	4	16
Bromomethane	0.35	U	50.0	42.8		ug/L		86	16 - 163	5	50
Carbon disulfide	0.22	U	50.0	55.9		ug/L		112	48 - 152	4	21
Carbon tetrachloride	0.18	U	50.0	56.3		ug/L		113	62 - 164	1	19
Chlorobenzene	0.18	U	50.0	53.5		ug/L		107	80 - 129	4	14
Chlorodibromomethane	0.25	U	50.0	57.9		ug/L		116	66 - 140	3	15
Chloroethane	0.36	U	50.0	61.3		ug/L		123	58 - 137	7	20
Chloroform	0.23	U	50.0	52.9		ug/L		106	66 - 138	5	18
Chloromethane	0.36	U	50.0	44.9		ug/L		90	10 - 169	7	31
cis-1,2-Dichloroethene	0.21	U	50.0	54.3		ug/L		109	68 - 138	5	17
cis-1,3-Dichloropropene	0.17	U	50.0	55.3		ug/L		111	71 - 141	4	15
Cyclohexane	0.13	U	50.0	59.3		ug/L		119	58 - 144	3	16
Dichlorobromomethane	0.17	U	50.0	53.8		ug/L		108	70 - 140	5	18
Dichlorodifluoromethane	0.17	U	50.0	47.2		ug/L		94	40 - 127	4	18
Ethylbenzene	0.19	U	50.0	57.9		ug/L		116	79 - 139	3	15
1,2-Dibromoethane	0.21	U	50.0	54.3		ug/L		109	75 - 137	4	15
Isopropylbenzene	0.33	U	50.0	60.3		ug/L		121	80 - 153	3	16
Methyl acetate	0.58	U	250	255		ug/L		102	30 - 165	11	31
Methyl tert-butyl ether	0.27	J	50.0	51.0		ug/L		101	66 - 141	9	16
Methylcyclohexane	0.090	U	50.0	59.0		ug/L		118	59 - 151	3	19
Methylene Chloride	0.22	U	50.0	54.1		ug/L		108	64 - 139	9	17
Styrene	0.28	U	50.0	51.3		ug/L		103	61 - 148	8	24
Tetrachloroethene	0.14	U	50.0	59.1		ug/L		118	72 - 145	3	16
Toluene	0.17	U	50.0	55.3		ug/L		111	75 - 136	2	15
trans-1,2-Dichloroethene	0.23	U	50.0	53.9		ug/L		108	66 - 143	9	16
trans-1,3-Dichloropropene	0.17	U	50.0	54.8		ug/L		110	59 - 135	3	14
Trichloroethene	0.20	U	50.0	56.6		ug/L		113	73 - 144	1	17
Trichlorofluoromethane	0.21	U	50.0	55.4		ug/L		111	58 - 139	4	18
Vinyl chloride	0.18	U	50.0	53.3		ug/L		107	56 - 129	5	17
1,2-Dichloroethane	0.20	U	50.0	52.1		ug/L		104	64 - 136	5	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*

Lab Sample ID: MB 490-273958/7
Matrix: Water
Analysis Batch: 273958

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 13:55	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/18/15 13:55	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 13:55	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/18/15 13:55	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/18/15 13:55	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/18/15 13:55	1

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

Lab Sample ID: MB 490-273958/7
Matrix: Water
Analysis Batch: 273958

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/18/15 13:55	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/18/15 13:55	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/18/15 13:55	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/18/15 13:55	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 13:55	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/18/15 13:55	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/18/15 13:55	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/18/15 13:55	1
Acetone	2.7	U	25	2.7	ug/L			08/18/15 13:55	1
Benzene	0.20	U	1.0	0.20	ug/L			08/18/15 13:55	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/18/15 13:55	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/18/15 13:55	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/18/15 13:55	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/18/15 13:55	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/18/15 13:55	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/18/15 13:55	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/18/15 13:55	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/18/15 13:55	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/18/15 13:55	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/18/15 13:55	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/18/15 13:55	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/18/15 13:55	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/18/15 13:55	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/18/15 13:55	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/18/15 13:55	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/18/15 13:55	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/18/15 13:55	1
Styrene	0.28	U	1.0	0.28	ug/L			08/18/15 13:55	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/18/15 13:55	1
Toluene	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/18/15 13:55	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/18/15 13:55	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/18/15 13:55	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/18/15 13:55	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/18/15 13:55	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/18/15 13:55	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/18/15 13:55	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/15 13:55*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/18/15 13:55*	*1*

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

Lab Sample ID: MB 490-273958/7
Matrix: Water
Analysis Batch: 273958

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130		08/18/15 13:55	1
Dibromofluoromethane (Surr)	112		70 - 130		08/18/15 13:55	1
Toluene-d8 (Surr)	98		70 - 130		08/18/15 13:55	1
1,2-Dichloroethane-d4 (Surr)	113		70 - 130		08/18/15 13:55	1

Lab Sample ID: LCS 490-273958/3
Matrix: Water
Analysis Batch: 273958

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	50.2		ug/L		100	78 - 135
Freon-113	50.0	55.4		ug/L		111	77 - 129
1,1,2,2-Tetrachloroethane	50.0	54.8		ug/L		110	69 - 131
1,1,2-Trichloroethane	50.0	52.3		ug/L		105	80 - 124
1,1-Dichloroethane	50.0	50.0		ug/L		100	78 - 125
1,1-Dichloroethene	50.0	52.6		ug/L		105	79 - 124
1,2,4-Trichlorobenzene	50.0	51.6		ug/L		103	63 - 133
1,2-Dibromo-3-Chloropropane	50.0	54.0		ug/L		108	54 - 125
1,2-Dichlorobenzene	50.0	54.7		ug/L		109	80 - 121
1,2-Dichloropropane	50.0	51.4		ug/L		103	75 - 120
1,3-Dichlorobenzene	50.0	53.4		ug/L		107	80 - 122
1,4-Dichlorobenzene	50.0	53.1		ug/L		106	80 - 120
2-Butanone (MEK)	250	286		ug/L		114	62 - 133
2-Hexanone	250	271		ug/L		108	60 - 142
4-Methyl-2-pentanone (MIBK)	250	300		ug/L		120	60 - 137
Acetone	250	284		ug/L		114	54 - 145
Benzene	50.0	50.8		ug/L		102	80 - 121
Bromoform	50.0	54.3		ug/L		109	46 - 145
Bromomethane	50.0	43.1		ug/L		86	41 - 150
Carbon disulfide	50.0	54.4		ug/L		109	77 - 126
Carbon tetrachloride	50.0	52.6		ug/L		105	64 - 147
Chlorobenzene	50.0	50.2		ug/L		100	80 - 120
Chlorodibromomethane	50.0	55.2		ug/L		110	69 - 133
Chloroethane	50.0	49.1		ug/L		98	72 - 120
Chloroform	50.0	56.5		ug/L		113	73 - 129
Chloromethane	50.0	49.9		ug/L		100	12 - 150
cis-1,2-Dichloroethene	50.0	54.6		ug/L		109	76 - 125
cis-1,3-Dichloropropene	50.0	53.6		ug/L		107	74 - 140
Cyclohexane	50.0	54.4		ug/L		109	73 - 122
Dichlorobromomethane	50.0	52.4		ug/L		105	75 - 129
Dichlorodifluoromethane	50.0	57.0		ug/L		114	37 - 127
Ethylbenzene	50.0	51.7		ug/L		103	80 - 130
1,2-Dibromoethane	50.0	54.4		ug/L		109	80 - 129
Isopropylbenzene	50.0	53.0		ug/L		106	80 - 141
Methyl acetate	250	295		ug/L		118	64 - 150
Methyl tert-butyl ether	50.0	52.6		ug/L		105	72 - 133
Methylcyclohexane	50.0	50.1		ug/L		100	71 - 129
Methylene Chloride	50.0	53.1		ug/L		106	79 - 123

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

Lab Sample ID: LCS 490-273958/3
Matrix: Water
Analysis Batch: 273958

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Styrene			50.0	50.9		ug/L		102	80 - 127		
Tetrachloroethene			50.0	48.4		ug/L		97	80 - 126		
Toluene			50.0	49.0		ug/L		98	80 - 126		
trans-1,2-Dichloroethene			50.0	51.8		ug/L		104	79 - 126		
trans-1,3-Dichloropropene			50.0	55.1		ug/L		110	63 - 134		
Trichloroethene			50.0	49.8		ug/L		100	80 - 123		
Trichlorofluoromethane			50.0	50.4		ug/L		101	65 - 124		
Vinyl chloride			50.0	51.7		ug/L		103	68 - 120		
1,2-Dichloroethane			50.0	50.0		ug/L		100	77 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 490-273958/4
Matrix: Water
Analysis Batch: 273958

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			50.0	48.2		ug/L		96	78 - 135	4	17
Freon-113			50.0	53.3		ug/L		107	77 - 129	4	18
1,1,2,2-Tetrachloroethane			50.0	54.9		ug/L		110	69 - 131	0	20
1,1,2-Trichloroethane			50.0	52.6		ug/L		105	80 - 124	1	15
1,1-Dichloroethane			50.0	48.4		ug/L		97	78 - 125	3	17
1,1-Dichloroethene			50.0	50.5		ug/L		101	79 - 124	4	17
1,2,4-Trichlorobenzene			50.0	51.7		ug/L		103	63 - 133	0	19
1,2-Dibromo-3-Chloropropane			50.0	55.2		ug/L		110	54 - 125	2	24
1,2-Dichlorobenzene			50.0	53.6		ug/L		107	80 - 121	2	15
1,2-Dichloropropane			50.0	50.9		ug/L		102	75 - 120	1	17
1,3-Dichlorobenzene			50.0	52.2		ug/L		104	80 - 122	2	15
1,4-Dichlorobenzene			50.0	51.4		ug/L		103	80 - 120	3	15
2-Butanone (MEK)			250	263		ug/L		105	62 - 133	8	19
2-Hexanone			250	279		ug/L		112	60 - 142	3	15
4-Methyl-2-pentanone (MIBK)			250	308		ug/L		123	60 - 137	3	17
Acetone			250	288		ug/L		115	54 - 145	1	21
Benzene			50.0	49.4		ug/L		99	80 - 121	3	17
Bromoform			50.0	55.2		ug/L		110	46 - 145	2	16
Bromomethane			50.0	42.7		ug/L		85	41 - 150	1	50
Carbon disulfide			50.0	52.9		ug/L		106	77 - 126	3	21
Carbon tetrachloride			50.0	51.6		ug/L		103	64 - 147	2	19
Chlorobenzene			50.0	49.4		ug/L		99	80 - 120	2	14
Chlorodibromomethane			50.0	55.4		ug/L		111	69 - 133	0	15
Chloroethane			50.0	48.0		ug/L		96	72 - 120	2	20
Chloroform			50.0	54.9		ug/L		110	73 - 129	3	18
Chloromethane			50.0	49.0		ug/L		98	12 - 150	2	31
cis-1,2-Dichloroethene			50.0	49.2		ug/L		98	76 - 125	10	17

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

Lab Sample ID: LCSD 490-273958/4
Matrix: Water
Analysis Batch: 273958

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene			50.0	54.3		ug/L		109	74 - 140	1	15
Cyclohexane			50.0	53.1		ug/L		106	73 - 122	2	16
Dichlorobromomethane			50.0	51.6		ug/L		103	75 - 129	1	18
Dichlorodifluoromethane			50.0	55.0		ug/L		110	37 - 127	4	18
Ethylbenzene			50.0	50.5		ug/L		101	80 - 130	2	15
1,2-Dibromoethane			50.0	54.0		ug/L		108	80 - 129	1	15
Isopropylbenzene			50.0	51.9		ug/L		104	80 - 141	2	16
Methyl acetate			250	296		ug/L		119	64 - 150	1	31
Methyl tert-butyl ether			50.0	52.1		ug/L		104	72 - 133	1	16
Methylcyclohexane			50.0	48.1		ug/L		96	71 - 129	4	19
Methylene Chloride			50.0	51.6		ug/L		103	79 - 123	3	17
Styrene			50.0	50.2		ug/L		100	80 - 127	1	24
Tetrachloroethene			50.0	47.2		ug/L		94	80 - 126	2	16
Toluene			50.0	48.5		ug/L		97	80 - 126	1	15
trans-1,2-Dichloroethene			50.0	49.8		ug/L		100	79 - 126	4	16
trans-1,3-Dichloropropene			50.0	56.4		ug/L		113	63 - 134	2	14
Trichloroethene			50.0	49.9		ug/L		100	80 - 123	0	17
Trichlorofluoromethane			50.0	49.5		ug/L		99	65 - 124	2	18
Vinyl chloride			50.0	49.8		ug/L		100	68 - 120	4	17
1,2-Dichloroethane			50.0	49.8		ug/L		100	77 - 121	0	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 490-274966/9
Matrix: Water
Analysis Batch: 274966

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/20/15 18:01	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/20/15 18:01	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/20/15 18:01	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/20/15 18:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/20/15 18:01*	*1*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*08/20/15 18:01*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/20/15 18:01*	*1*
Toluene-d8 (Surr)	*111*		*70 - 130*		*08/20/15 18:01*	*1*

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

Lab Sample ID: LCS 490-274966/6
Matrix: Water
Analysis Batch: 274966

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.500	0.457		ug/L		91	70 - 131
1,2-Dibromo-3-Chloropropane	0.500	0.451		ug/L		90	40 - 160
1,4-Dioxane	10.0	9.98	J	ug/L		100	40 - 160
Ethylene Dibromide	0.500	0.430		ug/L		86	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*110*		*70 - 130*

Lab Sample ID: LCSD 490-274966/10
Matrix: Water
Analysis Batch: 274966

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.500	0.462		ug/L		92	70 - 131	1	19
1,2-Dibromo-3-Chloropropane	0.500	0.457		ug/L		91	40 - 160	1	20
1,4-Dioxane	10.0	12.1		ug/L		121	40 - 160	19	20
Ethylene Dibromide	0.500	0.426		ug/L		85	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*110*		*70 - 130*

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 274966

Client Sample ID: OB-5-081015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.010	U	0.500	0.408		ug/L		82	53 - 144
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.408		ug/L		82	40 - 160
1,4-Dioxane	5.7	J F1	10.0	7.27	J F1	ug/L		15	40 - 160
Ethylene Dibromide	0.010	U	0.500	0.404		ug/L		81	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 274966

Client Sample ID: OB-5-081015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.010	U	0.500	0.388		ug/L		78	53 - 144	5	19
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.392		ug/L		78	40 - 160	4	20
1,4-Dioxane	5.7	J F1	10.0	8.46	J F1	ug/L		27	40 - 160	15	20
Ethylene Dibromide	0.010	U	0.500	0.375		ug/L		75	70 - 130	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 490-275705/11
Matrix: Water
Analysis Batch: 275705

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/24/15 19:22	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/24/15 19:22	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/24/15 19:22	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/24/15 19:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/24/15 19:22*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*08/24/15 19:22*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/24/15 19:22*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/24/15 19:22*	*1*

Lab Sample ID: LCS 490-275705/12
Matrix: Water
Analysis Batch: 275705

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.500	0.525		ug/L		105	70 - 131
1,2-Dibromo-3-Chloropropane	0.500	0.527		ug/L		105	40 - 160
1,4-Dioxane	10.0	13.6		ug/L		136	40 - 160
Ethylene Dibromide	0.500	0.555		ug/L		111	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

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

Lab Sample ID: LCSD 490-275705/13
Matrix: Water
Analysis Batch: 275705

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.500	0.556		ug/L		111	70 - 131	6	19
1,2-Dibromo-3-Chloropropane			0.500	0.565		ug/L		113	40 - 160	7	20
1,4-Dioxane			10.0	13.3		ug/L		133	40 - 160	2	20
Ethylene Dibromide			0.500	0.544		ug/L		109	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*109*		*70 - 130*

Lab Sample ID: 490-85229-K-12 MS
Matrix: Water
Analysis Batch: 275705

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane	0.010	U	0.500	0.423		ug/L		85	53 - 144		
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.432		ug/L		86	40 - 160		
1,4-Dioxane	0.35	J	10.0	11.0		ug/L		106	40 - 160		
Ethylene Dibromide	0.010	U	0.500	0.423		ug/L		85	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: 490-85229-K-12 MSD
Matrix: Water
Analysis Batch: 275705

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.010	U	0.500	0.425		ug/L		85	53 - 144	0	19
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.410		ug/L		82	40 - 160	5	20
1,4-Dioxane	0.35	J	10.0	9.10	J	ug/L		87	40 - 160	19	20
Ethylene Dibromide	0.010	U	0.500	0.410		ug/L		82	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

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

Lab Sample ID: MB 490-273531/1-A
Matrix: Water
Analysis Batch: 273787

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 273531

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.080	U	0.50	0.080	ug/L		08/15/15 13:28	08/17/15 14:46	1
1,2,4,5-Tetrachlorobenzene	0.53	U	2.5	0.53	ug/L		08/15/15 13:28	08/17/15 14:46	1
2,3,4,6-Tetrachlorophenol	1.7	U	2.5	1.7	ug/L		08/15/15 13:28	08/17/15 14:46	1
2,4,5-Trichlorophenol	1.8	U	2.5	1.8	ug/L		08/15/15 13:28	08/17/15 14:46	1
2,4,6-Trichlorophenol	1.7	U	2.5	1.7	ug/L		08/15/15 13:28	08/17/15 14:46	1
2,4-Dichlorophenol	1.4	U	2.5	1.4	ug/L		08/15/15 13:28	08/17/15 14:46	1
2,4-Dimethylphenol	1.1	U	2.5	1.1	ug/L		08/15/15 13:28	08/17/15 14:46	1
2,4-Dinitrophenol	1.5	U	6.3	1.5	ug/L		08/15/15 13:28	08/17/15 14:46	1
2,4-Dinitrotoluene	0.80	U	2.5	0.80	ug/L		08/15/15 13:28	08/17/15 14:46	1
2,6-Dinitrotoluene	0.58	U	2.5	0.58	ug/L		08/15/15 13:28	08/17/15 14:46	1
2-Chloronaphthalene	0.70	U	2.5	0.70	ug/L		08/15/15 13:28	08/17/15 14:46	1
2-Chlorophenol	1.2	U	2.5	1.2	ug/L		08/15/15 13:28	08/17/15 14:46	1
2-Methylnaphthalene	0.10	U	0.50	0.10	ug/L		08/15/15 13:28	08/17/15 14:46	1
2-Methylphenol	0.58	U	2.5	0.58	ug/L		08/15/15 13:28	08/17/15 14:46	1
2-Nitroaniline	0.93	U	6.3	0.93	ug/L		08/15/15 13:28	08/17/15 14:46	1
2-Nitrophenol	1.3	U	2.5	1.3	ug/L		08/15/15 13:28	08/17/15 14:46	1
3,3'-Dichlorobenzidine	0.83	U	2.5	0.83	ug/L		08/15/15 13:28	08/17/15 14:46	1
3 & 4 Methylphenol	0.55	U	2.5	0.55	ug/L		08/15/15 13:28	08/17/15 14:46	1
3-Nitroaniline	0.68	U	6.3	0.68	ug/L		08/15/15 13:28	08/17/15 14:46	1
4,6-Dinitro-2-methylphenol	2.3	U	6.3	2.3	ug/L		08/15/15 13:28	08/17/15 14:46	1
4-Bromophenyl phenyl ether	0.68	U	2.5	0.68	ug/L		08/15/15 13:28	08/17/15 14:46	1
4-Chloro-3-methylphenol	1.1	U	2.5	1.1	ug/L		08/15/15 13:28	08/17/15 14:46	1
4-Chloroaniline	1.1	U	2.5	1.1	ug/L		08/15/15 13:28	08/17/15 14:46	1
4-Chlorophenyl phenyl ether	0.70	U	2.5	0.70	ug/L		08/15/15 13:28	08/17/15 14:46	1
4-Nitroaniline	0.78	U	6.3	0.78	ug/L		08/15/15 13:28	08/17/15 14:46	1
4-Nitrophenol	1.4	U	6.3	1.4	ug/L		08/15/15 13:28	08/17/15 14:46	1
Acenaphthylene	0.088	U	0.50	0.088	ug/L		08/15/15 13:28	08/17/15 14:46	1
Acetophenone	0.58	U	2.5	0.58	ug/L		08/15/15 13:28	08/17/15 14:46	1
Anthracene	0.095	U	0.50	0.095	ug/L		08/15/15 13:28	08/17/15 14:46	1
Benzaldehyde	1.4	U	2.5	1.4	ug/L		08/15/15 13:28	08/17/15 14:46	1
Benzo[g,h,i]perylene	0.16	U	0.50	0.16	ug/L		08/15/15 13:28	08/17/15 14:46	1
Benzo[k]fluoranthene	0.093	U	0.50	0.093	ug/L		08/15/15 13:28	08/17/15 14:46	1
Bis(2-chloroethoxy)methane	0.78	U	2.5	0.78	ug/L		08/15/15 13:28	08/17/15 14:46	1
Bis(2-chloroethyl)ether	0.70	U	2.5	0.70	ug/L		08/15/15 13:28	08/17/15 14:46	1
Butyl benzyl phthalate	0.63	U	2.5	0.63	ug/L		08/15/15 13:28	08/17/15 14:46	1
Bis(2-ethylhexyl) phthalate	1.5	U	2.5	1.5	ug/L		08/15/15 13:28	08/17/15 14:46	1
Carbazole	0.70	U	2.5	0.70	ug/L		08/15/15 13:28	08/17/15 14:46	1
Caprolactam	0.60	U	2.5	0.60	ug/L		08/15/15 13:28	08/17/15 14:46	1
Chrysene	0.083	U	0.50	0.083	ug/L		08/15/15 13:28	08/17/15 14:46	1
Dibenz(a,h)anthracene	0.11	U	0.50	0.11	ug/L		08/15/15 13:28	08/17/15 14:46	1
Dibenzofuran	0.73	U	2.5	0.73	ug/L		08/15/15 13:28	08/17/15 14:46	1
Diethyl phthalate	0.75	U	2.5	0.75	ug/L		08/15/15 13:28	08/17/15 14:46	1
Dimethyl phthalate	0.78	U	2.5	0.78	ug/L		08/15/15 13:28	08/17/15 14:46	1
Di-n-butyl phthalate	0.63	U	2.5	0.63	ug/L		08/15/15 13:28	08/17/15 14:46	1
Fluoranthene	0.080	U	0.50	0.080	ug/L		08/15/15 13:28	08/17/15 14:46	1
Fluorene	0.080	U	0.50	0.080	ug/L		08/15/15 13:28	08/17/15 14:46	1
Hexachlorocyclopentadiene	0.45	U	2.5	0.45	ug/L		08/15/15 13:28	08/17/15 14:46	1
Hexachloroethane	0.48	U	2.5	0.48	ug/L		08/15/15 13:28	08/17/15 14:46	1

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

Lab Sample ID: MB 490-273531/1-A
Matrix: Water
Analysis Batch: 273787

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 273531

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.10	U	0.50	0.10	ug/L		08/15/15 13:28	08/17/15 14:46	1
Isophorone	0.78	U	2.5	0.78	ug/L		08/15/15 13:28	08/17/15 14:46	1
Naphthalene	0.093	U	0.50	0.093	ug/L		08/15/15 13:28	08/17/15 14:46	1
Nitrobenzene	0.68	U	2.5	0.68	ug/L		08/15/15 13:28	08/17/15 14:46	1
N-Nitrosodi-n-propylamine	0.85	U	2.5	0.85	ug/L		08/15/15 13:28	08/17/15 14:46	1
N-Nitrosodiphenylamine	0.90	U	2.5	0.90	ug/L		08/15/15 13:28	08/17/15 14:46	1
Phenanthrene	0.11	U	0.50	0.11	ug/L		08/15/15 13:28	08/17/15 14:46	1
Phenol	0.38	U	2.5	0.38	ug/L		08/15/15 13:28	08/17/15 14:46	1
Pyrene	0.088	U	0.50	0.088	ug/L		08/15/15 13:28	08/17/15 14:46	1
Diphenyl	0.55	U	2.5	0.55	ug/L		08/15/15 13:28	08/17/15 14:46	1
Di-n-octyl phthalate	0.63	U	2.5	0.63	ug/L		08/15/15 13:28	08/17/15 14:46	1
2,2'-oxybis[1-chloropropane]	0.70	U	2.5	0.70	ug/L		08/15/15 13:28	08/17/15 14:46	1
Atrazine	0.73	U	2.5	0.73	ug/L		08/15/15 13:28	08/17/15 14:46	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/15/15 13:28*	*08/17/15 14:46*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*73*		*10 - 120*	*08/15/15 13:28*	*08/17/15 14:46*	*1*
2-Fluorobiphenyl (Surr)	*71*		*29 - 120*	*08/15/15 13:28*	*08/17/15 14:46*	*1*
2-Fluorophenol (Surr)	*40*		*10 - 120*	*08/15/15 13:28*	*08/17/15 14:46*	*1*
Nitrobenzene-d5 (Surr)	*67*		*27 - 120*	*08/15/15 13:28*	*08/17/15 14:46*	*1*
Phenol-d5 (Surr)	*26*		*10 - 120*	*08/15/15 13:28*	*08/17/15 14:46*	*1*
Terphenyl-d14 (Surr)	*81*		*13 - 120*	*08/15/15 13:28*	*08/17/15 14:46*	*1*

Lab Sample ID: LCS 490-273531/2-A
Matrix: Water
Analysis Batch: 273787

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 273531

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	50.0	44.6		ug/L		89	46 - 120
1,2,4,5-Tetrachlorobenzene	50.0	39.5		ug/L		79	25 - 120
2,3,4,6-Tetrachlorophenol	50.0	49.9		ug/L		100	31 - 148
2,4,5-Trichlorophenol	50.0	47.3		ug/L		95	40 - 129
2,4,6-Trichlorophenol	50.0	45.6		ug/L		91	39 - 135
2,4-Dichlorophenol	50.0	40.5		ug/L		81	38 - 120
2,4-Dimethylphenol	50.0	38.5		ug/L		77	21 - 126
2,4-Dinitrophenol	100	88.0		ug/L		88	20 - 150
2,4-Dinitrotoluene	50.0	52.7		ug/L		105	46 - 132
2,6-Dinitrotoluene	50.0	53.3		ug/L		107	54 - 128
2-Chloronaphthalene	50.0	42.6		ug/L		85	39 - 120
2-Chlorophenol	50.0	35.8		ug/L		72	40 - 120
2-Methylnaphthalene	50.0	39.2		ug/L		78	31 - 120
2-Methylphenol	50.0	33.9		ug/L		68	38 - 120
2-Nitroaniline	50.0	51.5		ug/L		103	46 - 131
2-Nitrophenol	50.0	46.2		ug/L		92	32 - 120
3,3'-Dichlorobenzidine	50.0	49.0		ug/L		98	46 - 129

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

Lab Sample ID: LCS 490-273531/2-A
Matrix: Water
Analysis Batch: 273787

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 273531

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3 & 4 Methylphenol	50.0	31.7		ug/L		63	33 - 120
3-Nitroaniline	50.0	49.6		ug/L		99	54 - 121
4,6-Dinitro-2-methylphenol	100	109		ug/L		109	19 - 150
4-Bromophenyl phenyl ether	50.0	45.1		ug/L		90	47 - 127
4-Chloro-3-methylphenol	50.0	43.0		ug/L		86	44 - 120
4-Chloroaniline	50.0	39.1		ug/L		78	44 - 120
4-Chlorophenyl phenyl ether	50.0	43.2		ug/L		86	50 - 120
4-Nitroaniline	50.0	55.2		ug/L		110	55 - 123
4-Nitrophenol	100	40.2		ug/L		40	10 - 120
Acenaphthylene	50.0	44.0		ug/L		88	48 - 120
Acetophenone	50.0	41.3		ug/L		83	52 - 133
Anthracene	50.0	48.0		ug/L		96	58 - 130
Benzaldehyde	50.0	55.5		ug/L		111	34 - 120
Benzo[g,h,i]perylene	50.0	48.1		ug/L		96	51 - 123
Benzo[k]fluoranthene	50.0	49.0		ug/L		98	51 - 120
Bis(2-chloroethoxy)methane	50.0	41.1		ug/L		82	44 - 120
Bis(2-chloroethyl)ether	50.0	37.1		ug/L		74	47 - 120
Butyl benzyl phthalate	50.0	48.9		ug/L		98	51 - 146
Bis(2-ethylhexyl) phthalate	50.0	52.1		ug/L		104	47 - 138
Carbazole	50.0	48.5		ug/L		97	54 - 123
Caprolactam	50.0	12.4		ug/L		25	10 - 120
Chrysene	50.0	46.2		ug/L		92	55 - 120
Dibenz(a,h)anthracene	50.0	48.2		ug/L		96	50 - 125
Dibenzofuran	50.0	44.4		ug/L		89	50 - 120
Diethyl phthalate	50.0	47.0		ug/L		94	54 - 128
Dimethyl phthalate	50.0	46.7		ug/L		93	53 - 127
Di-n-butyl phthalate	50.0	48.9		ug/L		98	54 - 140
Fluoranthene	50.0	47.2		ug/L		94	56 - 120
Fluorene	50.0	45.5		ug/L		91	52 - 120
Hexachlorocyclopentadiene	50.0	35.1		ug/L		70	17 - 120
Hexachloroethane	50.0	34.7		ug/L		69	30 - 120
Indeno[1,2,3-cd]pyrene	50.0	47.2		ug/L		94	54 - 125
Isophorone	50.0	43.1		ug/L		86	47 - 120
Naphthalene	50.0	37.5		ug/L		75	37 - 120
Nitrobenzene	50.0	41.9		ug/L		84	36 - 120
N-Nitrosodi-n-propylamine	50.0	43.6		ug/L		87	51 - 120
N-Nitrosodiphenylamine	100	93.1		ug/L		93	58 - 149
Phenanthrene	50.0	45.9		ug/L		92	56 - 120
Phenol	50.0	15.4		ug/L		31	14 - 120
Pyrene	50.0	46.2		ug/L		92	53 - 129
Diphenyl	50.0	42.5		ug/L		85	10 - 146
Di-n-octyl phthalate	50.0	46.7		ug/L		93	50 - 142
2,2'-oxybis[1-chloropropane]	50.0	39.6		ug/L		79	44 - 120
Atrazine	50.0	49.6		ug/L		99	24 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*94*		*10 - 120*
2-Fluorobiphenyl (Surr)	*85*		*29 - 120*

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

Lab Sample ID: LCS 490-273531/2-A
Matrix: Water
Analysis Batch: 273787

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 273531

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol (Surr)	*42*		*10 - 120*
Nitrobenzene-d5 (Surr)	*82*		*27 - 120*
Phenol-d5 (Surr)	*29*		*10 - 120*
Terphenyl-d14 (Surr)	*90*		*13 - 120*

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 273942

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 273531

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.082	U	51.5	39.6		ug/L		77	46 - 120
1,2,4,5-Tetrachlorobenzene	0.54	U	51.5	37.1		ug/L		72	10 - 200
2,3,4,6-Tetrachlorophenol	1.8	U	51.5	42.6		ug/L		83	10 - 200
2,4,5-Trichlorophenol	1.8	U	51.5	41.3		ug/L		80	40 - 129
2,4,6-Trichlorophenol	1.8	U	51.5	40.3		ug/L		78	39 - 135
2,4-Dichlorophenol	1.4	U	51.5	38.3		ug/L		74	38 - 120
2,4-Dimethylphenol	1.1	U	51.5	35.8		ug/L		69	11 - 130
2,4-Dinitrophenol	1.5	U	103	84.7		ug/L		82	10 - 176
2,4-Dinitrotoluene	0.82	U	51.5	44.8		ug/L		87	46 - 134
2,6-Dinitrotoluene	0.59	U	51.5	46.0		ug/L		89	54 - 128
2-Chloronaphthalene	0.72	U	51.5	38.2		ug/L		74	39 - 120
2-Chlorophenol	1.2	U	51.5	35.2		ug/L		68	40 - 120
2-Methylnaphthalene	0.10	U	51.5	36.9		ug/L		72	31 - 120
2-Methylphenol	0.59	U	51.5	32.0		ug/L		62	36 - 120
2-Nitroaniline	0.95	U	51.5	44.1		ug/L		86	46 - 131
2-Nitrophenol	1.4	U	51.5	44.0		ug/L		85	32 - 120
3,3'-Dichlorobenzidine	0.85	U	51.5	41.9		ug/L		81	10 - 130
3 & 4 Methylphenol	0.57	U	51.5	29.0		ug/L		56	32 - 120
3-Nitroaniline	0.70	U	51.5	42.1		ug/L		82	38 - 121
4,6-Dinitro-2-methylphenol	2.4	U	103	97.2		ug/L		94	10 - 157
4-Bromophenyl phenyl ether	0.70	U	51.5	39.3		ug/L		76	47 - 127
4-Chloro-3-methylphenol	1.2	U	51.5	37.9		ug/L		73	38 - 120
4-Chloroaniline	1.1	U	51.5	35.9		ug/L		70	35 - 120
4-Chlorophenyl phenyl ether	0.72	U	51.5	38.6		ug/L		75	50 - 120
4-Nitroaniline	0.80	U	51.5	47.8		ug/L		93	47 - 124
4-Nitrophenol	1.4	U	103	35.3		ug/L		34	10 - 120
Acenaphthylene	0.090	U	51.5	38.6		ug/L		75	48 - 120
Acetophenone	0.59	U	51.5	37.9		ug/L		73	10 - 200
Anthracene	0.098	U	51.5	41.3		ug/L		80	56 - 130
Benzaldehyde	1.5	U	51.5	52.0		ug/L		101	10 - 200
Benzo[g,h,i]perylene	0.16	U	51.5	40.3		ug/L		78	48 - 137
Benzo[k]fluoranthene	0.095	U	51.5	41.2		ug/L		80	44 - 134
Bis(2-chloroethoxy)methane	0.80	U	51.5	37.7		ug/L		73	41 - 120
Bis(2-chloroethyl)ether	0.72	U	51.5	36.3		ug/L		70	42 - 120
Butyl benzyl phthalate	0.64	U	51.5	43.3		ug/L		84	51 - 146
Bis(2-ethylhexyl) phthalate	2.2	J	51.5	44.2		ug/L		81	44 - 138
Carbazole	0.72	U	51.5	41.8		ug/L		81	53 - 123
Caprolactam	0.62	U	51.5	10.4		ug/L		20	10 - 200

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

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 273942

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 273531

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chrysene	0.085	U	51.5	41.4		ug/L		80	54 - 123
Dibenz(a,h)anthracene	0.12	U	51.5	40.9		ug/L		79	50 - 136
Dibenzofuran	0.75	U	51.5	38.9		ug/L		75	50 - 120
Diethyl phthalate	0.77	U	51.5	40.4		ug/L		78	53 - 128
Dimethyl phthalate	0.80	U	51.5	40.3		ug/L		78	53 - 127
Di-n-butyl phthalate	0.64	U	51.5	42.7		ug/L		83	54 - 140
Fluoranthene	0.082	U	51.5	41.3		ug/L		80	56 - 120
Fluorene	0.082	U	51.5	39.3		ug/L		76	52 - 120
Hexachlorocyclopentadiene	0.46	U	51.5	35.7		ug/L		69	10 - 120
Hexachloroethane	0.49	U	51.5	36.0		ug/L		70	26 - 120
Indeno[1,2,3-cd]pyrene	0.11	U	51.5	40.4		ug/L		78	50 - 136
Isophorone	0.80	U	51.5	38.5		ug/L		75	42 - 120
Naphthalene	0.095	U	51.5	36.7		ug/L		71	32 - 120
Nitrobenzene	0.70	U	51.5	39.6		ug/L		77	36 - 120
N-Nitrosodi-n-propylamine	0.88	U	51.5	38.1		ug/L		74	50 - 121
N-Nitrosodiphenylamine	0.93	U	103	80.2		ug/L		78	45 - 149
Phenanthrene	0.11	U	51.5	39.1		ug/L		76	53 - 120
Phenol	0.39	U	51.5	14.3		ug/L		28	10 - 120
Pyrene	0.090	U	51.5	40.8		ug/L		79	50 - 129
Diphenyl	0.57	U	51.5	38.5		ug/L		75	10 - 200
Di-n-octyl phthalate	0.64	U	51.5	41.0		ug/L		80	50 - 142
2,2'-oxybis[1-chloropropane]	0.72	U	51.5	37.5		ug/L		73	44 - 120
Atrazine	0.75	U	51.5	42.5		ug/L		82	10 - 200

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*80*		*10 - 120*
2-Fluorobiphenyl (Surr)	*73*		*29 - 120*
2-Fluorophenol (Surr)	*40*		*10 - 120*
Nitrobenzene-d5 (Surr)	*76*		*27 - 120*
Phenol-d5 (Surr)	*25*		*10 - 120*
Terphenyl-d14 (Surr)	*50*		*13 - 120*

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 273942

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 273531

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	0.082	U	51.3	39.1		ug/L		76	46 - 120	1	31
1,2,4,5-Tetrachlorobenzene	0.54	U	51.3	36.9		ug/L		72	10 - 200	0	50
2,3,4,6-Tetrachlorophenol	1.8	U	51.3	42.7		ug/L		83	10 - 200	0	50
2,4,5-Trichlorophenol	1.8	U	51.3	40.4		ug/L		79	40 - 129	2	34
2,4,6-Trichlorophenol	1.8	U	51.3	39.5		ug/L		77	39 - 135	2	40
2,4-Dichlorophenol	1.4	U	51.3	37.0		ug/L		72	38 - 120	3	30
2,4-Dimethylphenol	1.1	U	51.3	34.0		ug/L		66	11 - 130	5	48
2,4-Dinitrophenol	1.5	U	103	85.0		ug/L		83	10 - 176	0	31
2,4-Dinitrotoluene	0.82	U	51.3	45.5		ug/L		89	46 - 134	2	26
2,6-Dinitrotoluene	0.59	U	51.3	45.7		ug/L		89	54 - 128	1	29
2-Chloronaphthalene	0.72	U	51.3	38.0		ug/L		74	39 - 120	0	36

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

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 273942

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 273531

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chlorophenol	1.2	U	51.3	34.7		ug/L		68	40 - 120	1	46
2-Methylnaphthalene	0.10	U	51.3	36.2		ug/L		71	31 - 120	2	35
2-Methylphenol	0.59	U	51.3	31.6		ug/L		62	36 - 120	1	32
2-Nitroaniline	0.95	U	51.3	43.9		ug/L		86	46 - 131	1	24
2-Nitrophenol	1.4	U	51.3	43.9		ug/L		86	32 - 120	0	31
3,3'-Dichlorobenzidine	0.85	U	51.3	41.8		ug/L		82	10 - 130	0	30
3 & 4 Methylphenol	0.57	U	51.3	28.4		ug/L		55	32 - 120	2	34
3-Nitroaniline	0.70	U	51.3	42.8		ug/L		83	38 - 121	2	26
4,6-Dinitro-2-methylphenol	2.4	U	103	96.4		ug/L		94	10 - 157	1	34
4-Bromophenyl phenyl ether	0.70	U	51.3	38.9		ug/L		76	47 - 127	1	29
4-Chloro-3-methylphenol	1.2	U	51.3	37.9		ug/L		74	38 - 120	0	22
4-Chloroaniline	1.1	U	51.3	35.5		ug/L		69	35 - 120	1	26
4-Chlorophenyl phenyl ether	0.72	U	51.3	38.1		ug/L		74	50 - 120	1	29
4-Nitroaniline	0.80	U	51.3	48.4		ug/L		94	47 - 124	1	26
4-Nitrophenol	1.4	U	103	35.0		ug/L		34	10 - 120	1	38
Acenaphthylene	0.090	U	51.3	38.5		ug/L		75	48 - 120	0	31
Acetophenone	0.59	U	51.3	37.5		ug/L		73	10 - 200	1	50
Anthracene	0.098	U	51.3	40.9		ug/L		80	56 - 130	1	28
Benzaldehyde	1.5	U	51.3	50.9		ug/L		99	10 - 200	2	50
Benzo[g,h,i]perylene	0.16	U	51.3	40.3		ug/L		78	48 - 137	0	27
Benzo[k]fluoranthene	0.095	U	51.3	40.0		ug/L		78	44 - 134	3	32
Bis(2-chloroethoxy)methane	0.80	U	51.3	37.4		ug/L		73	41 - 120	1	31
Bis(2-chloroethyl)ether	0.72	U	51.3	35.4		ug/L		69	42 - 120	3	38
Butyl benzyl phthalate	0.64	U	51.3	42.3		ug/L		83	51 - 146	2	31
Bis(2-ethylhexyl) phthalate	2.2	J	51.3	44.3		ug/L		82	44 - 138	0	28
Carbazole	0.72	U	51.3	41.5		ug/L		81	53 - 123	1	29
Caprolactam	0.62	U	51.3	11.2		ug/L		22	10 - 200	7	50
Chrysene	0.085	U	51.3	40.5		ug/L		79	54 - 123	2	27
Dibenz(a,h)anthracene	0.12	U	51.3	40.8		ug/L		79	50 - 136	0	28
Dibenzofuran	0.75	U	51.3	38.8		ug/L		76	50 - 120	0	29
Diethyl phthalate	0.77	U	51.3	40.2		ug/L		78	53 - 128	0	28
Dimethyl phthalate	0.80	U	51.3	39.9		ug/L		78	53 - 127	1	27
Di-n-butyl phthalate	0.64	U	51.3	42.5		ug/L		83	54 - 140	1	27
Fluoranthene	0.082	U	51.3	41.1		ug/L		80	56 - 120	1	28
Fluorene	0.082	U	51.3	39.2		ug/L		76	52 - 120	0	28
Hexachlorocyclopentadiene	0.46	U	51.3	34.6		ug/L		68	10 - 120	3	43
Hexachloroethane	0.49	U	51.3	35.6		ug/L		69	26 - 120	1	45
Indeno[1,2,3-cd]pyrene	0.11	U	51.3	39.8		ug/L		78	50 - 136	2	27
Isophorone	0.80	U	51.3	38.1		ug/L		74	42 - 120	1	31
Naphthalene	0.095	U	51.3	36.3		ug/L		71	32 - 120	1	37
Nitrobenzene	0.70	U	51.3	39.1		ug/L		76	36 - 120	1	28
N-Nitrosodi-n-propylamine	0.88	U	51.3	38.2		ug/L		74	50 - 121	0	37
N-Nitrosodiphenylamine	0.93	U	103	79.4		ug/L		77	45 - 149	1	26
Phenanthrene	0.11	U	51.3	38.7		ug/L		75	53 - 120	1	26
Phenol	0.39	U	51.3	14.4		ug/L		28	10 - 120	1	42
Pyrene	0.090	U	51.3	39.9		ug/L		78	50 - 129	2	29
Diphenyl	0.57	U	51.3	38.1		ug/L		74	10 - 200	1	50
Di-n-octyl phthalate	0.64	U	51.3	40.1		ug/L		78	50 - 142	2	28

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

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 273942

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 273531

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,2'-oxybis[1-chloropropane]	0.72	U	51.3	36.8		ug/L		72	44 - 120	2	36
Atrazine	0.75	U	51.3	42.7		ug/L		83	10 - 200	0	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*81*		*10 - 120*
2-Fluorobiphenyl (Surr)	*71*		*29 - 120*
2-Fluorophenol (Surr)	*40*		*10 - 120*
Nitrobenzene-d5 (Surr)	*75*		*27 - 120*
Phenol-d5 (Surr)	*26*		*10 - 120*
Terphenyl-d14 (Surr)	*51*		*13 - 120*

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

Lab Sample ID: MB 490-272814/1-A
Matrix: Water
Analysis Batch: 272977

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272814

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 16:17	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 16:17	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/13/15 06:53	08/13/15 16:17	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/13/15 06:53	08/13/15 16:17	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/13/15 06:53	08/13/15 16:17	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/13/15 06:53	08/13/15 16:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*54*		*29 - 120*	*08/13/15 06:53*	*08/13/15 16:17*	*1*
Nitrobenzene-d5	*47*		*27 - 120*	*08/13/15 06:53*	*08/13/15 16:17*	*1*
Terphenyl-d14	*70*		*13 - 120*	*08/13/15 06:53*	*08/13/15 16:17*	*1*

Lab Sample ID: LCS 490-272814/2-A
Matrix: Water
Analysis Batch: 272977

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272814

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.533		ug/L		67	57 - 120
Benzo[a]pyrene	0.800	0.477		ug/L		60	57 - 124
Benzo[b]fluoranthene	0.800	0.502		ug/L		63	51 - 125
Hexachlorobenzene	0.800	0.461		ug/L		58	48 - 131
Hexachlorobutadiene	0.800	0.435		ug/L		54	28 - 120
N-Nitrosodimethylamine	0.800	0.306	J	ug/L		38	20 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*52*		*29 - 120*
Nitrobenzene-d5	*51*		*27 - 120*
Terphenyl-d14	*64*		*13 - 120*

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

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 272977

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 272814

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.025	U	0.800	0.605		ug/L		76	57 - 122
Benzo[a]pyrene	0.025	U	0.800	0.540		ug/L		68	46 - 138
Benzo[b]fluoranthene	0.025	U	0.800	0.552		ug/L		69	45 - 138
Hexachlorobenzene	0.014	U	0.800	0.514		ug/L		64	48 - 131
Hexachlorobutadiene	0.20	U	0.800	0.494		ug/L		62	28 - 120
N-Nitrosodimethylamine	0.20	U	0.800	0.345	J	ug/L		43	10 - 200

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*51*		*29 - 120*
Nitrobenzene-d5	*52*		*27 - 120*
Terphenyl-d14	*68*		*13 - 120*

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 272977

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 272814

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.025	U	0.800	0.598		ug/L		75	57 - 122	1	27
Benzo[a]pyrene	0.025	U	0.800	0.537		ug/L		67	46 - 138	1	27
Benzo[b]fluoranthene	0.025	U	0.800	0.570		ug/L		71	45 - 138	3	39
Hexachlorobenzene	0.014	U	0.800	0.495		ug/L		62	48 - 131	4	28
Hexachlorobutadiene	0.20	U	0.800	0.465		ug/L		58	28 - 120	6	30
N-Nitrosodimethylamine	0.20	U	0.800	0.306	J	ug/L		38	10 - 200	12	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*54*		*29 - 120*
Nitrobenzene-d5	*54*		*27 - 120*
Terphenyl-d14	*76*		*13 - 120*

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

Lab Sample ID: MB 490-273465/1-A
Matrix: Water
Analysis Batch: 274426

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 273465

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol - RE	0.10	U	0.30	0.10	ug/L		08/15/15 08:20	08/19/15 22:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol - RE	*55*		*10 - 120*	*08/15/15 08:20*	*08/19/15 22:04*	*1*
2-Fluorophenol - RE	*72*		*10 - 120*	*08/15/15 08:20*	*08/19/15 22:04*	*1*
Phenol-d5 - RE	*63*		*10 - 120*	*08/15/15 08:20*	*08/19/15 22:04*	*1*

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

Lab Sample ID: LCS 490-273465/2-A
Matrix: Water
Analysis Batch: 274426

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 273465

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Pentachlorophenol - RE			1.60	0.383		ug/L		24	21 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol - RE	*50*		*10 - 120*
2-Fluorophenol - RE	*36*		*10 - 120*
Phenol-d5 - RE	*28*		*10 - 120*

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 274426

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 273465

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Pentachlorophenol - RE	0.10	U	1.60	0.580		ug/L		36	21 - 159		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol - RE	*77*		*10 - 120*
2-Fluorophenol - RE	*44*		*10 - 120*
Phenol-d5 - RE	*34*		*10 - 120*

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 274426

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 273465

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pentachlorophenol - RE	0.10	U	1.60	0.743		ug/L		46	21 - 159	25	31

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol - RE	*77*		*10 - 120*
2-Fluorophenol - RE	*48*		*10 - 120*
Phenol-d5 - RE	*39*		*10 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-275700/1-A
Matrix: Water
Analysis Batch: 275701

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275700

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 18:07	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/24/15 10:53	08/24/15 18:07	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/24/15 10:53	08/24/15 18:07	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/24/15 10:53	08/24/15 18:07	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/24/15 10:53	08/24/15 18:07	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/24/15 10:53	08/24/15 18:07	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/24/15 10:53	08/24/15 18:07	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/24/15 10:53	08/24/15 18:07	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 490-275700/1-A
Matrix: Water
Analysis Batch: 275701

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275700

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	98		10 - 150	08/24/15 10:53	08/24/15 18:07	1
Tetrachloro-m-xylene	92		10 - 150	08/24/15 10:53	08/24/15 18:07	1

Lab Sample ID: LCS 490-275700/2-A
Matrix: Water
Analysis Batch: 275701

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275700

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	3.72		ug/L		93	23 - 139
PCB-1260	4.00	3.12		ug/L		78	36 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	94		10 - 150
Tetrachloro-m-xylene	94		10 - 150

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 275701

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 275700

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.43	U	4.00	3.05		ug/L		76	23 - 139
PCB-1260	0.18	U	4.00	2.87		ug/L		72	36 - 144

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	77		10 - 150
Tetrachloro-m-xylene	73		10 - 150

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 275701

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 275700

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.43	U	4.00	3.03		ug/L		76	23 - 139	1	50
PCB-1260	0.18	U	4.00	2.95		ug/L		74	36 - 144	3	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	93		10 - 150
Tetrachloro-m-xylene	78		10 - 150

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 490-275364/3
Matrix: Water
Analysis Batch: 275364

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			08/21/15 17:23	1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 490-275364/3
Matrix: Water
Analysis Batch: 275364

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.60	U	1.00	0.60	mg/L			08/21/15 17:23	1

Lab Sample ID: LCS 490-275364/4
Matrix: Water
Analysis Batch: 275364

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	94.48		mg/L		94	80 - 120
Sulfate	100	91.39		mg/L		91	80 - 120

Lab Sample ID: LCSD 490-275364/5
Matrix: Water
Analysis Batch: 275364

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	94.57		mg/L		95	80 - 120	0	20
Sulfate	100	91.34		mg/L		91	80 - 120	0	20

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 275364

Client Sample ID: OB-5-081015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	67.0		100	151.0		mg/L		84	80 - 120
Sulfate	4.49		100	94.87		mg/L		90	80 - 120

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 275364

Client Sample ID: OB-5-081015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	67.0		100	152.7		mg/L		86	80 - 120	1	20
Sulfate	4.49		100	96.47		mg/L		92	80 - 120	2	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 490-272910/1-A
Matrix: Water
Analysis Batch: 278731

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272910

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/13/15 10:37	08/14/15 21:53	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 21:53	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 21:53	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 21:53	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 21:53	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/13/15 10:37	08/14/15 21:53	1
Calcium	0.13	U	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 21:53	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 21:53	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 490-272910/1-A
Matrix: Water
Analysis Batch: 278731

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272910

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 21:53	1
Iron	0.010	U	0.025	0.010	mg/L		08/13/15 10:37	08/14/15 21:53	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 21:53	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 21:53	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 21:53	1
Potassium	0.13	U	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 21:53	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/13/15 10:37	08/14/15 21:53	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/14/15 21:53	1
Sodium	0.136	J	1.0	0.13	mg/L		08/13/15 10:37	08/14/15 21:53	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/13/15 10:37	08/14/15 21:53	1
Vanadium	0.000747	J	0.0020	0.00010	mg/L		08/13/15 10:37	08/14/15 21:53	1

Lab Sample ID: MB 490-272910/1-A
Matrix: Water
Analysis Batch: 274165

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272910

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/17/15 13:40	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/13/15 10:37	08/17/15 13:40	1
Zinc	0.010	U	0.025	0.010	mg/L		08/13/15 10:37	08/17/15 13:40	1

Lab Sample ID: LCS 490-272910/2-A
Matrix: Water
Analysis Batch: 278731

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.08		mg/L		108	80 - 120
Antimony	0.100	0.104		mg/L		104	80 - 120
Arsenic	0.100	0.0977		mg/L		98	80 - 120
Barium	0.100	0.105		mg/L		105	80 - 120
Beryllium	0.100	0.118		mg/L		118	80 - 120
Cadmium	0.100	0.102		mg/L		102	80 - 120
Calcium	10.0	10.47		mg/L		105	80 - 120
Chromium	0.100	0.106		mg/L		106	80 - 120
Cobalt	0.100	0.104		mg/L		104	80 - 120
Iron	1.00	1.07		mg/L		107	80 - 120
Lead	0.100	0.108		mg/L		108	80 - 120
Magnesium	10.0	10.89		mg/L		109	80 - 120
Manganese	0.100	0.104		mg/L		104	80 - 120
Potassium	10.0	11.05		mg/L		111	80 - 120
Selenium	0.100	0.0884		mg/L		88	80 - 120
Silver	0.100	0.107		mg/L		107	80 - 120
Sodium	10.0	10.76		mg/L		108	80 - 120
Thallium	0.100	0.106		mg/L		106	80 - 120
Vanadium	0.100	0.110		mg/L		110	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-272910/2-A
Matrix: Water
Analysis Batch: 274165

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.100	0.106		mg/L		106	80 - 120
Nickel	0.100	0.110		mg/L		110	80 - 120
Zinc	0.100	0.0910		mg/L		91	80 - 120

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 278731

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 272910

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0096	U	1.00	1.03		mg/L		103	75 - 125
Antimony	0.00050	U	0.100	0.101		mg/L		101	75 - 125
Arsenic	0.00050	U	0.100	0.0935		mg/L		94	75 - 125
Barium	0.026		0.100	0.128		mg/L		103	75 - 125
Beryllium	0.00050	U	0.100	0.113		mg/L		113	75 - 125
Cadmium	0.00040	U	0.100	0.105		mg/L		105	75 - 125
Calcium	82.0		10.0	91.12	4	mg/L		92	75 - 125
Chromium	0.00050	U	0.100	0.101		mg/L		101	75 - 125
Cobalt	0.0052		0.100	0.114		mg/L		108	75 - 125
Iron	31.3		1.00	34.40	4	mg/L		313	75 - 125
Lead	0.00020	U	0.100	0.103		mg/L		103	75 - 125
Magnesium	39.5		10.0	49.56		mg/L		100	75 - 125
Manganese	2.2		0.100	2.32	4	mg/L		83	75 - 125
Potassium	3.6		10.0	13.95		mg/L		104	75 - 125
Selenium	0.00060	U F1	0.100	0.0621	F1	mg/L		62	75 - 125
Silver	0.00050	U	0.100	0.108		mg/L		108	75 - 125
Sodium	32.1	B	10.0	42.26		mg/L		101	75 - 125
Thallium	0.00020	U	0.100	0.103		mg/L		103	75 - 125
Vanadium	0.0012	J B	0.100	0.106		mg/L		104	75 - 125

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 274165

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 272910

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.00050	U	0.100	0.102		mg/L		102	75 - 125
Nickel	0.0020		0.100	0.107		mg/L		105	75 - 125
Zinc	0.010	U	0.100	0.0879		mg/L		88	75 - 125

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 278731

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 272910

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0096	U	1.00	1.04		mg/L		104	75 - 125	1	20
Antimony	0.00050	U	0.100	0.0998		mg/L		100	75 - 125	1	20
Arsenic	0.00050	U	0.100	0.0945		mg/L		94	75 - 125	1	20
Barium	0.026		0.100	0.128		mg/L		103	75 - 125	0	20
Beryllium	0.00050	U	0.100	0.112		mg/L		112	75 - 125	1	20
Cadmium	0.00040	U	0.100	0.104		mg/L		104	75 - 125	1	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 278731

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 272910

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	82.0		10.0	95.40	4	mg/L		135	75 - 125	5	20
Chromium	0.00050	U	0.100	0.102		mg/L		102	75 - 125	1	20
Cobalt	0.0052		0.100	0.113		mg/L		108	75 - 125	1	20
Iron	31.3		1.00	35.72	4	mg/L		445	75 - 125	4	20
Lead	0.00020	U	0.100	0.103		mg/L		103	75 - 125	0	20
Magnesium	39.5		10.0	51.91		mg/L		124	75 - 125	5	20
Manganese	2.2		0.100	2.45	4	mg/L		209	75 - 125	5	20
Potassium	3.6		10.0	14.37		mg/L		108	75 - 125	3	20
Selenium	0.00060	U F1	0.100	0.0579	F1	mg/L		58	75 - 125	7	20
Silver	0.00050	U	0.100	0.107		mg/L		107	75 - 125	1	20
Sodium	32.1	B	10.0	43.80		mg/L		117	75 - 125	4	20
Thallium	0.00020	U	0.100	0.103		mg/L		103	75 - 125	0	20
Vanadium	0.0012	J B	0.100	0.107		mg/L		106	75 - 125	2	20

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 274165

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 272910

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	0.00050	U	0.100	0.0948		mg/L		95	75 - 125	7	20
Nickel	0.0020		0.100	0.102		mg/L		100	75 - 125	5	20
Zinc	0.010	U	0.100	0.0818		mg/L		82	75 - 125	7	20

Lab Sample ID: MB 490-273171/1-B
Matrix: Water
Analysis Batch: 278731

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 273172

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/14/15 09:22	08/15/15 00:23	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:23	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:23	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:23	1
Beryllium	0.00050	U ^	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:23	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/14/15 09:22	08/15/15 00:23	1
Calcium	0.13	U	1.0	0.13	mg/L		08/14/15 09:22	08/15/15 00:23	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:23	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:23	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:23	1
Iron	0.010	U	0.025	0.010	mg/L		08/14/15 09:22	08/15/15 00:23	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 00:23	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/14/15 09:22	08/15/15 00:23	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:23	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:23	1
Potassium	0.13	U	1.0	0.13	mg/L		08/14/15 09:22	08/15/15 00:23	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/14/15 09:22	08/15/15 00:23	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/14/15 09:22	08/15/15 00:23	1
Sodium	0.13	U	1.0	0.13	mg/L		08/14/15 09:22	08/15/15 00:23	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/14/15 09:22	08/15/15 00:23	1
Vanadium	0.000721	J	0.0020	0.00010	mg/L		08/14/15 09:22	08/15/15 00:23	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 490-273171/1-B
Matrix: Water
Analysis Batch: 278731

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 273172

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	0.010	U	0.025	0.010	mg/L		08/14/15 09:22	08/15/15 00:23	1

Lab Sample ID: LCS 490-273171/2-B
Matrix: Water
Analysis Batch: 278731

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 273172

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.03		mg/L		103	80 - 120
Antimony	0.100	0.103		mg/L		103	80 - 120
Arsenic	0.100	0.101		mg/L		101	80 - 120
Barium	0.100	0.102		mg/L		102	80 - 120
Beryllium	0.100	0.116	^	mg/L		116	80 - 120
Cadmium	0.100	0.102		mg/L		102	80 - 120
Calcium	10.0	10.37		mg/L		104	80 - 120
Chromium	0.100	0.102		mg/L		102	80 - 120
Cobalt	0.100	0.101		mg/L		101	80 - 120
Copper	0.100	0.0950		mg/L		95	80 - 120
Iron	1.00	1.04		mg/L		104	80 - 120
Lead	0.100	0.106		mg/L		106	80 - 120
Magnesium	10.0	10.44		mg/L		104	80 - 120
Manganese	0.100	0.101		mg/L		101	80 - 120
Nickel	0.100	0.0984		mg/L		98	80 - 120
Potassium	10.0	10.60		mg/L		106	80 - 120
Selenium	0.100	0.0970		mg/L		97	80 - 120
Silver	0.100	0.104		mg/L		104	80 - 120
Sodium	10.0	10.45		mg/L		105	80 - 120
Thallium	0.100	0.105		mg/L		105	80 - 120
Vanadium	0.100	0.106		mg/L		106	80 - 120
Zinc	0.100	0.0908		mg/L		91	80 - 120

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 278731

Client Sample ID: OB-5-081015
Prep Type: Dissolved
Prep Batch: 273172

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0096	U	1.00	1.01		mg/L		101	75 - 125
Antimony	0.00050	U	0.100	0.101		mg/L		101	75 - 125
Arsenic	0.00050	U	0.100	0.0961		mg/L		96	75 - 125
Barium	0.015		0.100	0.115		mg/L		100	75 - 125
Beryllium	0.00050	U ^	0.100	0.112	^	mg/L		112	75 - 125
Calcium	82.6		10.0	89.70	4	mg/L		71	75 - 125
Chromium	0.00050	U	0.100	0.0995		mg/L		100	75 - 125
Copper	0.00050	U	0.100	0.0903		mg/L		90	75 - 125
Lead	0.00020	U	0.100	0.102		mg/L		102	75 - 125
Magnesium	40.4		10.0	49.43	4	mg/L		91	75 - 125
Manganese	2.3		0.100	2.29	4	mg/L		40	75 - 125
Nickel	0.0015	J	0.100	0.0932		mg/L		92	75 - 125
Potassium	3.7		10.0	14.07		mg/L		104	75 - 125
Selenium	0.00060	U	0.100	0.0871		mg/L		87	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 278731

Client Sample ID: OB-5-081015
Prep Type: Dissolved
Prep Batch: 273172

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	32.7		10.0	42.06		mg/L		93	75 - 125
Thallium	0.00020	U	0.100	0.101		mg/L		101	75 - 125
Vanadium	0.00084	J B	0.100	0.105		mg/L		104	75 - 125
Zinc	0.010	U	0.100	0.0839		mg/L		84	75 - 125

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 279689

Client Sample ID: OB-5-081015
Prep Type: Dissolved
Prep Batch: 273172

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.00040	U	0.100	0.104		mg/L		104	75 - 125
Cobalt	0.0045		0.100	0.0982		mg/L		94	75 - 125
Iron	8.4		1.00	10.37	4	mg/L		194	75 - 125
Silver	0.00050	U	0.100	0.109		mg/L		109	75 - 125

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 278731

Client Sample ID: OB-5-081015
Prep Type: Dissolved
Prep Batch: 273172

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0096	U	1.00	1.00		mg/L		100	75 - 125	0	20
Antimony	0.00050	U	0.100	0.0989		mg/L		99	75 - 125	2	20
Arsenic	0.00050	U	0.100	0.0944		mg/L		94	75 - 125	2	20
Barium	0.015		0.100	0.114		mg/L		99	75 - 125	1	20
Beryllium	0.00050	U ^	0.100	0.110	^	mg/L		110	75 - 125	2	20
Calcium	82.6		10.0	89.50	4	mg/L		69	75 - 125	0	20
Chromium	0.00050	U	0.100	0.0984		mg/L		98	75 - 125	1	20
Copper	0.00050	U	0.100	0.0880		mg/L		88	75 - 125	3	20
Lead	0.00020	U	0.100	0.0997		mg/L		100	75 - 125	2	20
Magnesium	40.4		10.0	49.57	4	mg/L		92	75 - 125	0	20
Manganese	2.3		0.100	2.31	4	mg/L		61	75 - 125	1	20
Nickel	0.0015	J	0.100	0.0914		mg/L		90	75 - 125	2	20
Potassium	3.7		10.0	14.02		mg/L		103	75 - 125	0	20
Selenium	0.00060	U	0.100	0.0865		mg/L		86	75 - 125	1	20
Sodium	32.7		10.0	41.68		mg/L		90	75 - 125	1	20
Thallium	0.00020	U	0.100	0.100		mg/L		100	75 - 125	0	20
Vanadium	0.00084	J B	0.100	0.104		mg/L		103	75 - 125	1	20
Zinc	0.010	U	0.100	0.0829		mg/L		83	75 - 125	1	20

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 279689

Client Sample ID: OB-5-081015
Prep Type: Dissolved
Prep Batch: 273172

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	0.00040	U	0.100	0.101		mg/L		101	75 - 125	3	20
Cobalt	0.0045		0.100	0.0973		mg/L		93	75 - 125	1	20
Iron	8.4		1.00	12.08	4	mg/L		365	75 - 125	15	20
Silver	0.00050	U	0.100	0.108		mg/L		108	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 490-274298/1-A
Matrix: Water
Analysis Batch: 274628

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274298

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 18:16	08/19/15 13:02	1

Lab Sample ID: LCS 490-274298/2-A
Matrix: Water
Analysis Batch: 274628

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274298

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000851		mg/L		85	80 - 120

Lab Sample ID: LCSD 490-274298/3-A
Matrix: Water
Analysis Batch: 274628

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 274298

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00100	0.000906		mg/L		91	80 - 120	6	20

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 274628

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 274298

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000942		mg/L		94	75 - 125

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 274628

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 274298

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000968		mg/L		97	75 - 125	3	20

Lab Sample ID: MB 490-274299/1-A
Matrix: Water
Analysis Batch: 274628

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274299

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 18:20	08/19/15 14:17	1

Lab Sample ID: LCS 490-274299/2-A
Matrix: Water
Analysis Batch: 274628

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274299

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000984		mg/L		98	80 - 120

Lab Sample ID: LCSD 490-274299/3-A
Matrix: Water
Analysis Batch: 274628

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 274299

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00100	0.00102		mg/L		102	80 - 120	3	20

Lab Sample ID: 490-84924-8 MS
Matrix: Water
Analysis Batch: 274628

Client Sample ID: RW-3DD (175-180)-081015
Prep Type: Total/NA
Prep Batch: 274299

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000862		mg/L		86	75 - 125

Lab Sample ID: 490-84924-8 MSD
Matrix: Water
Analysis Batch: 274628

Client Sample ID: RW-3DD (175-180)-081015
Prep Type: Total/NA
Prep Batch: 274299

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000891		mg/L		89	75 - 125	3	20

Lab Sample ID: MB 490-273143/1-B
Matrix: Water
Analysis Batch: 274353

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 274200

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/14/15 08:28	08/18/15 20:33	1

Lab Sample ID: LCS 490-273143/2-B
Matrix: Water
Analysis Batch: 274353

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 274200

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000963		mg/L		96	80 - 120

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 274353

Client Sample ID: OB-5-081015
Prep Type: Dissolved
Prep Batch: 274200

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000926		mg/L		93	75 - 125

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 274353

Client Sample ID: OB-5-081015
Prep Type: Dissolved
Prep Batch: 274200

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000920		mg/L		92	75 - 125	1	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 490-273064/1-A
Matrix: Water
Analysis Batch: 274101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 273064

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/13/15 15:34	08/14/15 12:26	1

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: LCS 490-273064/2-A
Matrix: Water
Analysis Batch: 274101

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 273064

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0947		mg/L		95	90 - 110

Lab Sample ID: 490-84924-5 MS
Matrix: Water
Analysis Batch: 274101

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 273064

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1	0.100	0.0672	F1	mg/L		67	70 - 130

Lab Sample ID: 490-84924-5 MSD
Matrix: Water
Analysis Batch: 274101

Client Sample ID: OB-5-081015
Prep Type: Total/NA
Prep Batch: 273064

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1	0.100	0.0671	F1	mg/L		67	70 - 130	0	46

Lab Sample ID: 490-84924-11 DU
Matrix: Water
Analysis Batch: 274101

Client Sample ID: FB-02-081115
Prep Type: Total/NA
Prep Batch: 273064

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.011		0.0070	U	mg/L		NC	20

Lab Sample ID: MB 490-274647/1-A
Matrix: Water
Analysis Batch: 275204

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274647

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 16:13	08/21/15 11:48	1

Lab Sample ID: LCS 490-274647/2-A
Matrix: Water
Analysis Batch: 275204

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274647

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.102		mg/L		102	90 - 110

Lab Sample ID: 490-85437-F-1-B MS
Matrix: Water
Analysis Batch: 275204

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 274647

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1	0.100	0.0509	F1	mg/L		51	70 - 130

Lab Sample ID: 490-85437-F-1-C MSD
Matrix: Water
Analysis Batch: 275204

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 274647

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1	0.100	0.0536	F1	mg/L		54	70 - 130	5	46

Lab Sample ID: 490-85437-F-6-B DU
Matrix: Water
Analysis Batch: 275204

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 274647

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Cyanide, Total	0.0070	U		0.0070	U	mg/L				NC	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 490-273071/5
Matrix: Water
Analysis Batch: 273071

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/12/15 17:28	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/12/15 17:28	1

Lab Sample ID: LCS 490-273071/6
Matrix: Water
Analysis Batch: 273071

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity as CaCO3			100	93.15		mg/L		93	90 - 110		

Lab Sample ID: 490-84924-5 DU
Matrix: Water
Analysis Batch: 273071

Client Sample ID: OB-5-081015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	318			318.7		mg/L				0.3	20
Total Alkalinity as CaCO3	318			318.7		mg/L				0.3	20

GC/MS VOA

Analysis Batch: 273863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Total/NA	Water	8260C	
490-84924-2	OB-3-081015	Total/NA	Water	8260C	
490-84924-3	Dup-02-081015	Total/NA	Water	8260C	
490-84924-4	OB-12-081015	Total/NA	Water	8260C	
490-84924-5	OB-5-081015	Total/NA	Water	8260C	
490-84924-5 MS	OB-5-081015	Total/NA	Water	8260C	
490-84924-5 MSD	OB-5-081015	Total/NA	Water	8260C	
490-84924-6	OB-4-081015	Total/NA	Water	8260C	
490-84924-7	TB-05-081115	Total/NA	Water	8260C	
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	8260C	
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	8260C	
490-84924-11	FB-02-081115	Total/NA	Water	8260C	
LCS 490-273863/3	Lab Control Sample	Total/NA	Water	8260C	
MB 490-273863/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 273958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	8260C	
LCS 490-273958/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-273958/4	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 490-273958/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 274966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Total/NA	Water	8260C SIM	
490-84924-2	OB-3-081015	Total/NA	Water	8260C SIM	
490-84924-3	Dup-02-081015	Total/NA	Water	8260C SIM	
490-84924-4	OB-12-081015	Total/NA	Water	8260C SIM	
490-84924-5	OB-5-081015	Total/NA	Water	8260C SIM	
490-84924-5 MS	OB-5-081015	Total/NA	Water	8260C SIM	
490-84924-5 MSD	OB-5-081015	Total/NA	Water	8260C SIM	
490-84924-6	OB-4-081015	Total/NA	Water	8260C SIM	
490-84924-7	TB-05-081115	Total/NA	Water	8260C SIM	
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	8260C SIM	
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	8260C SIM	
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	8260C SIM	
490-84924-11	FB-02-081115	Total/NA	Water	8260C SIM	
LCS 490-274966/6	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-274966/10	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-274966/9	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 275705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1 - RA	OB-13-081015	Total/NA	Water	8260C SIM	
490-84924-2 - RA	OB-3-081015	Total/NA	Water	8260C SIM	
490-84924-5 - RA	OB-5-081015	Total/NA	Water	8260C SIM	
490-84924-9 - RA	RW-4 (393-403)-081015	Total/NA	Water	8260C SIM	
490-84924-10 - RA	RW-4A (62-72)-081015	Total/NA	Water	8260C SIM	
490-85229-K-12 MS	Matrix Spike	Total/NA	Water	8260C SIM	
490-85229-K-12 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C SIM	
LCS 490-275705/12	Lab Control Sample	Total/NA	Water	8260C SIM	

GC/MS VOA (Continued)

Analysis Batch: 275705 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 490-275705/13	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-275705/11	Method Blank	Total/NA	Water	8260C SIM	

GC/MS Semi VOA

Prep Batch: 272814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Total/NA	Water	3510C	
490-84924-2	OB-3-081015	Total/NA	Water	3510C	
490-84924-3	Dup-02-081015	Total/NA	Water	3510C	
490-84924-4	OB-12-081015	Total/NA	Water	3510C	
490-84924-5	OB-5-081015	Total/NA	Water	3510C	
490-84924-5 MS	OB-5-081015	Total/NA	Water	3510C	
490-84924-5 MSD	OB-5-081015	Total/NA	Water	3510C	
490-84924-6	OB-4-081015	Total/NA	Water	3510C	
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	3510C	
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	3510C	
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	3510C	
490-84924-11	FB-02-081115	Total/NA	Water	3510C	
LCS 490-272814/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-272814/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 272977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Total/NA	Water	8270D SIM	272814
490-84924-2	OB-3-081015	Total/NA	Water	8270D SIM	272814
490-84924-3	Dup-02-081015	Total/NA	Water	8270D SIM	272814
490-84924-4	OB-12-081015	Total/NA	Water	8270D SIM	272814
490-84924-5	OB-5-081015	Total/NA	Water	8270D SIM	272814
490-84924-5 MS	OB-5-081015	Total/NA	Water	8270D SIM	272814
490-84924-5 MSD	OB-5-081015	Total/NA	Water	8270D SIM	272814
490-84924-6	OB-4-081015	Total/NA	Water	8270D SIM	272814
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	8270D SIM	272814
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	8270D SIM	272814
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	8270D SIM	272814
490-84924-11	FB-02-081115	Total/NA	Water	8270D SIM	272814
LCS 490-272814/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	272814
MB 490-272814/1-A	Method Blank	Total/NA	Water	8270D SIM	272814

Prep Batch: 273465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1 - RE	OB-13-081015	Total/NA	Water	3510C	
490-84924-2 - RE	OB-3-081015	Total/NA	Water	3510C	
490-84924-3 - RE	Dup-02-081015	Total/NA	Water	3510C	
490-84924-4 - RE	OB-12-081015	Total/NA	Water	3510C	
490-84924-5 - RE	OB-5-081015	Total/NA	Water	3510C	
490-84924-5 MS - RE	OB-5-081015	Total/NA	Water	3510C	
490-84924-5 MSD - RE	OB-5-081015	Total/NA	Water	3510C	
490-84924-6 - RE	OB-4-081015	Total/NA	Water	3510C	
490-84924-8 - RE	RW-3DD (175-180)-081015	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 273465 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-9 - RE	RW-4 (393-403)-081015	Total/NA	Water	3510C	
490-84924-10 - RE	RW-4A (62-72)-081015	Total/NA	Water	3510C	
490-84924-11 - RE	FB-02-081115	Total/NA	Water	3510C	
LCS 490-273465/2-A - RE	Lab Control Sample	Total/NA	Water	3510C	
MB 490-273465/1-A - RE	Method Blank	Total/NA	Water	3510C	

Prep Batch: 273531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Total/NA	Water	3510C	
490-84924-2	OB-3-081015	Total/NA	Water	3510C	
490-84924-3	Dup-02-081015	Total/NA	Water	3510C	
490-84924-4	OB-12-081015	Total/NA	Water	3510C	
490-84924-5	OB-5-081015	Total/NA	Water	3510C	
490-84924-5 MS	OB-5-081015	Total/NA	Water	3510C	
490-84924-5 MSD	OB-5-081015	Total/NA	Water	3510C	
490-84924-6	OB-4-081015	Total/NA	Water	3510C	
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	3510C	
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	3510C	
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	3510C	
490-84924-11	FB-02-081115	Total/NA	Water	3510C	
LCS 490-273531/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-273531/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 273787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Total/NA	Water	8270D	273531
490-84924-2	OB-3-081015	Total/NA	Water	8270D	273531
490-84924-3	Dup-02-081015	Total/NA	Water	8270D	273531
LCS 490-273531/2-A	Lab Control Sample	Total/NA	Water	8270D	273531
MB 490-273531/1-A	Method Blank	Total/NA	Water	8270D	273531

Analysis Batch: 273942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-4	OB-12-081015	Total/NA	Water	8270D	273531
490-84924-5	OB-5-081015	Total/NA	Water	8270D	273531
490-84924-5 MS	OB-5-081015	Total/NA	Water	8270D	273531
490-84924-5 MSD	OB-5-081015	Total/NA	Water	8270D	273531
490-84924-6	OB-4-081015	Total/NA	Water	8270D	273531
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	8270D	273531
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	8270D	273531
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	8270D	273531
490-84924-11	FB-02-081115	Total/NA	Water	8270D	273531

Analysis Batch: 274426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1 - RE	OB-13-081015	Total/NA	Water	8270D SIM	273465
490-84924-2 - RE	OB-3-081015	Total/NA	Water	8270D SIM	273465
490-84924-3 - RE	Dup-02-081015	Total/NA	Water	8270D SIM	273465
490-84924-4 - RE	OB-12-081015	Total/NA	Water	8270D SIM	273465
490-84924-5 - RE	OB-5-081015	Total/NA	Water	8270D SIM	273465
490-84924-5 MS - RE	OB-5-081015	Total/NA	Water	8270D SIM	273465

GC/MS Semi VOA (Continued)

Analysis Batch: 274426 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-5 MSD - RE	OB-5-081015	Total/NA	Water	8270D SIM	273465
490-84924-6 - RE	OB-4-081015	Total/NA	Water	8270D SIM	273465
490-84924-8 - RE	RW-3DD (175-180)-081015	Total/NA	Water	8270D SIM	273465
490-84924-9 - RE	RW-4 (393-403)-081015	Total/NA	Water	8270D SIM	273465
490-84924-10 - RE	RW-4A (62-72)-081015	Total/NA	Water	8270D SIM	273465
490-84924-11 - RE	FB-02-081115	Total/NA	Water	8270D SIM	273465
LCS 490-273465/2-A - RE	Lab Control Sample	Total/NA	Water	8270D SIM	273465
MB 490-273465/1-A - RE	Method Blank	Total/NA	Water	8270D SIM	273465

GC Semi VOA

Prep Batch: 275700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Total/NA	Water	3510C	
490-84924-2	OB-3-081015	Total/NA	Water	3510C	
490-84924-3	Dup-02-081015	Total/NA	Water	3510C	
490-84924-4	OB-12-081015	Total/NA	Water	3510C	
490-84924-5	OB-5-081015	Total/NA	Water	3510C	
490-84924-5 MS	OB-5-081015	Total/NA	Water	3510C	
490-84924-5 MSD	OB-5-081015	Total/NA	Water	3510C	
490-84924-6	OB-4-081015	Total/NA	Water	3510C	
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	3510C	
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	3510C	
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	3510C	
490-84924-11	FB-02-081115	Total/NA	Water	3510C	
LCS 490-275700/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-275700/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 275701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Total/NA	Water	8082A	275700
490-84924-2	OB-3-081015	Total/NA	Water	8082A	275700
490-84924-3	Dup-02-081015	Total/NA	Water	8082A	275700
490-84924-4	OB-12-081015	Total/NA	Water	8082A	275700
490-84924-5	OB-5-081015	Total/NA	Water	8082A	275700
490-84924-5 MS	OB-5-081015	Total/NA	Water	8082A	275700
490-84924-5 MSD	OB-5-081015	Total/NA	Water	8082A	275700
490-84924-6	OB-4-081015	Total/NA	Water	8082A	275700
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	8082A	275700
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	8082A	275700
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	8082A	275700
490-84924-11	FB-02-081115	Total/NA	Water	8082A	275700
LCS 490-275700/2-A	Lab Control Sample	Total/NA	Water	8082A	275700
MB 490-275700/1-A	Method Blank	Total/NA	Water	8082A	275700

HPLC/IC

Analysis Batch: 275364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 275364 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-2	OB-3-081015	Total/NA	Water	9056A	
490-84924-3	Dup-02-081015	Total/NA	Water	9056A	
490-84924-4	OB-12-081015	Total/NA	Water	9056A	
490-84924-5	OB-5-081015	Total/NA	Water	9056A	
490-84924-5 MS	OB-5-081015	Total/NA	Water	9056A	
490-84924-5 MSD	OB-5-081015	Total/NA	Water	9056A	
490-84924-6	OB-4-081015	Total/NA	Water	9056A	
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	9056A	
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	9056A	
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	9056A	
490-84924-11	FB-02-081115	Total/NA	Water	9056A	
LCS 490-275364/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-275364/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-275364/3	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 272910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Total/NA	Water	3010A	
490-84924-2	OB-3-081015	Total/NA	Water	3010A	
490-84924-3	Dup-02-081015	Total/NA	Water	3010A	
490-84924-4	OB-12-081015	Total/NA	Water	3010A	
490-84924-5	OB-5-081015	Total/NA	Water	3010A	
490-84924-5 MS	OB-5-081015	Total/NA	Water	3010A	
490-84924-5 MSD	OB-5-081015	Total/NA	Water	3010A	
490-84924-6	OB-4-081015	Total/NA	Water	3010A	
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	3010A	
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	3010A	
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	3010A	
490-84924-11	FB-02-081115	Total/NA	Water	3010A	
LCS 490-272910/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-272910/1-A	Method Blank	Total/NA	Water	3010A	

Filtration Batch: 273143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Dissolved	Water	Filtration	
490-84924-2	OB-3-081015	Dissolved	Water	Filtration	
490-84924-3	Dup-02-081015	Dissolved	Water	Filtration	
490-84924-4	OB-12-081015	Dissolved	Water	Filtration	
490-84924-5	OB-5-081015	Dissolved	Water	Filtration	
490-84924-5 MS	OB-5-081015	Dissolved	Water	Filtration	
490-84924-5 MSD	OB-5-081015	Dissolved	Water	Filtration	
490-84924-6	OB-4-081015	Dissolved	Water	Filtration	
490-84924-8	RW-3DD (175-180)-081015	Dissolved	Water	Filtration	
490-84924-9	RW-4 (393-403)-081015	Dissolved	Water	Filtration	
490-84924-10	RW-4A (62-72)-081015	Dissolved	Water	Filtration	
490-84924-11	FB-02-081115	Dissolved	Water	Filtration	
LCS 490-273143/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-273143/1-B	Method Blank	Dissolved	Water	Filtration	

Metals (Continued)

Filtration Batch: 273171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Dissolved	Water	Filtration	
490-84924-2	OB-3-081015	Dissolved	Water	Filtration	
490-84924-3	Dup-02-081015	Dissolved	Water	Filtration	
490-84924-4	OB-12-081015	Dissolved	Water	Filtration	
490-84924-5	OB-5-081015	Dissolved	Water	Filtration	
490-84924-5 MS	OB-5-081015	Dissolved	Water	Filtration	
490-84924-5 MSD	OB-5-081015	Dissolved	Water	Filtration	
490-84924-6	OB-4-081015	Dissolved	Water	Filtration	
490-84924-8	RW-3DD (175-180)-081015	Dissolved	Water	Filtration	
490-84924-9	RW-4 (393-403)-081015	Dissolved	Water	Filtration	
490-84924-10	RW-4A (62-72)-081015	Dissolved	Water	Filtration	
490-84924-11	FB-02-081115	Dissolved	Water	Filtration	
LCS 490-273171/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-273171/1-B	Method Blank	Dissolved	Water	Filtration	

Prep Batch: 273172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Dissolved	Water	3005A	273171
490-84924-2	OB-3-081015	Dissolved	Water	3005A	273171
490-84924-3	Dup-02-081015	Dissolved	Water	3005A	273171
490-84924-4	OB-12-081015	Dissolved	Water	3005A	273171
490-84924-5	OB-5-081015	Dissolved	Water	3005A	273171
490-84924-5 MS	OB-5-081015	Dissolved	Water	3005A	273171
490-84924-5 MSD	OB-5-081015	Dissolved	Water	3005A	273171
490-84924-6	OB-4-081015	Dissolved	Water	3005A	273171
490-84924-8	RW-3DD (175-180)-081015	Dissolved	Water	3005A	273171
490-84924-9	RW-4 (393-403)-081015	Dissolved	Water	3005A	273171
490-84924-10	RW-4A (62-72)-081015	Dissolved	Water	3005A	273171
490-84924-11	FB-02-081115	Dissolved	Water	3005A	273171
LCS 490-273171/2-B	Lab Control Sample	Dissolved	Water	3005A	273171
MB 490-273171/1-B	Method Blank	Dissolved	Water	3005A	273171

Analysis Batch: 274165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-2	OB-3-081015	Total/NA	Water	6020A	272910
490-84924-3	Dup-02-081015	Total/NA	Water	6020A	272910
490-84924-4	OB-12-081015	Total/NA	Water	6020A	272910
490-84924-5	OB-5-081015	Total/NA	Water	6020A	272910
490-84924-5 MS	OB-5-081015	Total/NA	Water	6020A	272910
490-84924-5 MSD	OB-5-081015	Total/NA	Water	6020A	272910
LCS 490-272910/2-A	Lab Control Sample	Total/NA	Water	6020A	272910
MB 490-272910/1-A	Method Blank	Total/NA	Water	6020A	272910

Analysis Batch: 274183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-3	Dup-02-081015	Dissolved	Water	6020A	273172
490-84924-4	OB-12-081015	Dissolved	Water	6020A	273172
490-84924-6	OB-4-081015	Dissolved	Water	6020A	273172
490-84924-6	OB-4-081015	Dissolved	Water	6020A	273172
490-84924-8	RW-3DD (175-180)-081015	Dissolved	Water	6020A	273172
490-84924-9	RW-4 (393-403)-081015	Dissolved	Water	6020A	273172

Metals (Continued)

Analysis Batch: 274183 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-10	RW-4A (62-72)-081015	Dissolved	Water	6020A	273172
490-84924-11	FB-02-081115	Dissolved	Water	6020A	273172

Prep Batch: 274200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Dissolved	Water	7470A	273143
490-84924-2	OB-3-081015	Dissolved	Water	7470A	273143
490-84924-3	Dup-02-081015	Dissolved	Water	7470A	273143
490-84924-4	OB-12-081015	Dissolved	Water	7470A	273143
490-84924-5	OB-5-081015	Dissolved	Water	7470A	273143
490-84924-5 MS	OB-5-081015	Dissolved	Water	7470A	273143
490-84924-5 MSD	OB-5-081015	Dissolved	Water	7470A	273143
490-84924-6	OB-4-081015	Dissolved	Water	7470A	273143
490-84924-8	RW-3DD (175-180)-081015	Dissolved	Water	7470A	273143
490-84924-9	RW-4 (393-403)-081015	Dissolved	Water	7470A	273143
490-84924-10	RW-4A (62-72)-081015	Dissolved	Water	7470A	273143
490-84924-11	FB-02-081115	Dissolved	Water	7470A	273143
LCS 490-273143/2-B	Lab Control Sample	Dissolved	Water	7470A	273143
MB 490-273143/1-B	Method Blank	Dissolved	Water	7470A	273143

Prep Batch: 274298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Total/NA	Water	7470A	
490-84924-2	OB-3-081015	Total/NA	Water	7470A	
490-84924-3	Dup-02-081015	Total/NA	Water	7470A	
490-84924-4	OB-12-081015	Total/NA	Water	7470A	
490-84924-5	OB-5-081015	Total/NA	Water	7470A	
490-84924-5 MS	OB-5-081015	Total/NA	Water	7470A	
490-84924-5 MSD	OB-5-081015	Total/NA	Water	7470A	
490-84924-6	OB-4-081015	Total/NA	Water	7470A	
LCS 490-274298/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 490-274298/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 490-274298/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 274299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	7470A	
490-84924-8 MS	RW-3DD (175-180)-081015	Total/NA	Water	7470A	
490-84924-8 MSD	RW-3DD (175-180)-081015	Total/NA	Water	7470A	
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	7470A	
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	7470A	
490-84924-11	FB-02-081115	Total/NA	Water	7470A	
LCS 490-274299/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 490-274299/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 490-274299/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 274353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Dissolved	Water	7470A	274200
490-84924-2	OB-3-081015	Dissolved	Water	7470A	274200
490-84924-3	Dup-02-081015	Dissolved	Water	7470A	274200

Metals (Continued)

Analysis Batch: 274353 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-4	OB-12-081015	Dissolved	Water	7470A	274200
490-84924-5	OB-5-081015	Dissolved	Water	7470A	274200
490-84924-5 MS	OB-5-081015	Dissolved	Water	7470A	274200
490-84924-5 MSD	OB-5-081015	Dissolved	Water	7470A	274200
490-84924-6	OB-4-081015	Dissolved	Water	7470A	274200
490-84924-8	RW-3DD (175-180)-081015	Dissolved	Water	7470A	274200
490-84924-9	RW-4 (393-403)-081015	Dissolved	Water	7470A	274200
490-84924-10	RW-4A (62-72)-081015	Dissolved	Water	7470A	274200
490-84924-11	FB-02-081115	Dissolved	Water	7470A	274200
LCS 490-273143/2-B	Lab Control Sample	Dissolved	Water	7470A	274200
MB 490-273143/1-B	Method Blank	Dissolved	Water	7470A	274200

Analysis Batch: 274628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Total/NA	Water	7470A	274298
490-84924-2	OB-3-081015	Total/NA	Water	7470A	274298
490-84924-3	Dup-02-081015	Total/NA	Water	7470A	274298
490-84924-4	OB-12-081015	Total/NA	Water	7470A	274298
490-84924-5	OB-5-081015	Total/NA	Water	7470A	274298
490-84924-5 MS	OB-5-081015	Total/NA	Water	7470A	274298
490-84924-5 MSD	OB-5-081015	Total/NA	Water	7470A	274298
490-84924-6	OB-4-081015	Total/NA	Water	7470A	274298
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	7470A	274299
490-84924-8 MS	RW-3DD (175-180)-081015	Total/NA	Water	7470A	274299
490-84924-8 MSD	RW-3DD (175-180)-081015	Total/NA	Water	7470A	274299
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	7470A	274299
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	7470A	274299
490-84924-11	FB-02-081115	Total/NA	Water	7470A	274299
LCS 490-274298/2-A	Lab Control Sample	Total/NA	Water	7470A	274298
LCS 490-274299/2-A	Lab Control Sample	Total/NA	Water	7470A	274299
LCSD 490-274298/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	274298
LCSD 490-274299/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	274299
MB 490-274298/1-A	Method Blank	Total/NA	Water	7470A	274298
MB 490-274299/1-A	Method Blank	Total/NA	Water	7470A	274299

Analysis Batch: 274758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Total/NA	Water	6020A	272910
490-84924-6	OB-4-081015	Total/NA	Water	6020A	272910
490-84924-6	OB-4-081015	Total/NA	Water	6020A	272910
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	6020A	272910
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	6020A	272910
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	6020A	272910

Analysis Batch: 275699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-3	Dup-02-081015	Dissolved	Water	6020A	273172
490-84924-4	OB-12-081015	Dissolved	Water	6020A	273172
490-84924-6	OB-4-081015	Dissolved	Water	6020A	273172
490-84924-6	OB-4-081015	Dissolved	Water	6020A	273172
490-84924-8	RW-3DD (175-180)-081015	Dissolved	Water	6020A	273172

Metals (Continued)

Analysis Batch: 275699 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-9	RW-4 (393-403)-081015	Dissolved	Water	6020A	273172
490-84924-10	RW-4A (62-72)-081015	Dissolved	Water	6020A	273172
490-84924-11	FB-02-081115	Dissolved	Water	6020A	273172

Analysis Batch: 278563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-11	FB-02-081115	Total/NA	Water	6020A	272910

Analysis Batch: 278731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Dissolved	Water	6020A	273172
490-84924-1	OB-13-081015	Total/NA	Water	6020A	272910
490-84924-2	OB-3-081015	Dissolved	Water	6020A	273172
490-84924-2	OB-3-081015	Total/NA	Water	6020A	272910
490-84924-3	Dup-02-081015	Dissolved	Water	6020A	273172
490-84924-3	Dup-02-081015	Total/NA	Water	6020A	272910
490-84924-4	OB-12-081015	Dissolved	Water	6020A	273172
490-84924-4	OB-12-081015	Total/NA	Water	6020A	272910
490-84924-5	OB-5-081015	Dissolved	Water	6020A	273172
490-84924-5	OB-5-081015	Total/NA	Water	6020A	272910
490-84924-5 MS	OB-5-081015	Dissolved	Water	6020A	273172
490-84924-5 MS	OB-5-081015	Total/NA	Water	6020A	272910
490-84924-5 MSD	OB-5-081015	Dissolved	Water	6020A	273172
490-84924-5 MSD	OB-5-081015	Total/NA	Water	6020A	272910
490-84924-6	OB-4-081015	Dissolved	Water	6020A	273172
490-84924-6	OB-4-081015	Total/NA	Water	6020A	272910
490-84924-8	RW-3DD (175-180)-081015	Dissolved	Water	6020A	273172
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	6020A	272910
490-84924-9	RW-4 (393-403)-081015	Dissolved	Water	6020A	273172
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	6020A	272910
490-84924-10	RW-4A (62-72)-081015	Dissolved	Water	6020A	273172
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	6020A	272910
490-84924-11	FB-02-081115	Dissolved	Water	6020A	273172
490-84924-11	FB-02-081115	Total/NA	Water	6020A	272910
LCS 490-272910/2-A	Lab Control Sample	Total/NA	Water	6020A	272910
LCS 490-273171/2-B	Lab Control Sample	Dissolved	Water	6020A	273172
MB 490-272910/1-A	Method Blank	Total/NA	Water	6020A	272910
MB 490-273171/1-B	Method Blank	Dissolved	Water	6020A	273172

Analysis Batch: 279689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-5	OB-5-081015	Dissolved	Water	6020A	273172
490-84924-5 MS	OB-5-081015	Dissolved	Water	6020A	273172
490-84924-5 MSD	OB-5-081015	Dissolved	Water	6020A	273172

General Chemistry

Prep Batch: 273064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Total/NA	Water	9012B	

General Chemistry (Continued)

Prep Batch: 273064 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-2	OB-3-081015	Total/NA	Water	9012B	
490-84924-3	Dup-02-081015	Total/NA	Water	9012B	
490-84924-4	OB-12-081015	Total/NA	Water	9012B	
490-84924-5	OB-5-081015	Total/NA	Water	9012B	
490-84924-5 MS	OB-5-081015	Total/NA	Water	9012B	
490-84924-5 MSD	OB-5-081015	Total/NA	Water	9012B	
490-84924-6	OB-4-081015	Total/NA	Water	9012B	
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	9012B	
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	9012B	
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	9012B	
490-84924-11 DU	FB-02-081115	Total/NA	Water	9012B	
LCS 490-273064/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 490-273064/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 273071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Total/NA	Water	SM 2320B	
490-84924-2	OB-3-081015	Total/NA	Water	SM 2320B	
490-84924-3	Dup-02-081015	Total/NA	Water	SM 2320B	
490-84924-4	OB-12-081015	Total/NA	Water	SM 2320B	
490-84924-5	OB-5-081015	Total/NA	Water	SM 2320B	
490-84924-5 DU	OB-5-081015	Total/NA	Water	SM 2320B	
490-84924-6	OB-4-081015	Total/NA	Water	SM 2320B	
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	SM 2320B	
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	SM 2320B	
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	SM 2320B	
490-84924-11	FB-02-081115	Total/NA	Water	SM 2320B	
LCS 490-273071/6	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 490-273071/5	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 274101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-1	OB-13-081015	Total/NA	Water	9012B	273064
490-84924-2	OB-3-081015	Total/NA	Water	9012B	273064
490-84924-3	Dup-02-081015	Total/NA	Water	9012B	273064
490-84924-4	OB-12-081015	Total/NA	Water	9012B	273064
490-84924-5	OB-5-081015	Total/NA	Water	9012B	273064
490-84924-5 MS	OB-5-081015	Total/NA	Water	9012B	273064
490-84924-5 MSD	OB-5-081015	Total/NA	Water	9012B	273064
490-84924-6	OB-4-081015	Total/NA	Water	9012B	273064
490-84924-8	RW-3DD (175-180)-081015	Total/NA	Water	9012B	273064
490-84924-9	RW-4 (393-403)-081015	Total/NA	Water	9012B	273064
490-84924-10	RW-4A (62-72)-081015	Total/NA	Water	9012B	273064
490-84924-11 DU	FB-02-081115	Total/NA	Water	9012B	273064
LCS 490-273064/2-A	Lab Control Sample	Total/NA	Water	9012B	273064
MB 490-273064/1-A	Method Blank	Total/NA	Water	9012B	273064

Prep Batch: 274647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-11	FB-02-081115	Total/NA	Water	9012B	
490-85437-F-1-B MS	Matrix Spike	Total/NA	Water	9012B	

General Chemistry (Continued)

Prep Batch: 274647 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-F-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	
490-85437-F-6-B DU	Duplicate	Total/NA	Water	9012B	
LCS 490-274647/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 490-274647/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 275204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84924-11	FB-02-081115	Total/NA	Water	9012B	274647
490-85437-F-1-B MS	Matrix Spike	Total/NA	Water	9012B	274647
490-85437-F-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	274647
490-85437-F-6-B DU	Duplicate	Total/NA	Water	9012B	274647
LCS 490-274647/2-A	Lab Control Sample	Total/NA	Water	9012B	274647
MB 490-274647/1-A	Method Blank	Total/NA	Water	9012B	274647

Client Sample ID: OB-13-081015

Date Collected: 08/10/15 09:45
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273863	08/18/15 02:41	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	274966	08/20/15 20:23	MJH	TAL NSH
Total/NA	Analysis	8260C SIM	RA	1	10 mL	10 mL	275705	08/24/15 20:19	MJH	TAL NSH
Total/NA	Prep	3510C			990 mL	1 mL	273531	08/15/15 13:28	MDW	TAL NSH
Total/NA	Analysis	8270D		1	990 mL	1 mL	273787	08/17/15 15:34	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272814	08/13/15 06:53	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272977	08/13/15 18:08	BES	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	273465	08/15/15 08:20	MLT	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	274426	08/19/15 22:58	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275700	08/24/15 10:53	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	275701	08/24/15 18:38	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		275364	08/21/15 18:58	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/15/15 01:03	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 23:02	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274758	08/19/15 12:40	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	274200	08/14/15 08:28	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	273143	08/14/15 08:28	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	274353	08/18/15 20:50	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	274298	08/18/15 18:16	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	274628	08/19/15 13:53	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	273064	08/13/15 15:34	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	274101	08/14/15 12:31	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	273071	08/12/15 18:21	SMB	TAL NSH

Client Sample ID: OB-3-081015

Date Collected: 08/10/15 11:50
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273863	08/18/15 03:07	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	274966	08/20/15 20:52	MJH	TAL NSH
Total/NA	Analysis	8260C SIM	RA	1	10 mL	10 mL	275705	08/24/15 20:48	MJH	TAL NSH
Total/NA	Prep	3510C			980 mL	1 mL	273531	08/15/15 13:28	MDW	TAL NSH
Total/NA	Analysis	8270D		1	980 mL	1 mL	273787	08/17/15 16:13	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272814	08/13/15 06:53	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272977	08/13/15 18:36	BES	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	273465	08/15/15 08:20	MLT	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	274426	08/19/15 23:25	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275700	08/24/15 10:53	ET	TAL NSH

Client Sample ID: OB-3-081015

Lab Sample ID: 490-84924-2

Date Collected: 08/10/15 11:50

Matrix: Water

Date Received: 08/12/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082A		1	250 mL	1 mL	275701	08/24/15 18:54	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		275364	08/21/15 19:17	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/15/15 01:09	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 22:56	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274165	08/17/15 14:40	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	274200	08/14/15 08:28	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	273143	08/14/15 08:28	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	274353	08/18/15 20:52	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	274298	08/18/15 18:16	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	274628	08/19/15 13:56	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	273064	08/13/15 15:34	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	274101	08/14/15 12:31	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	273071	08/12/15 18:26	SMB	TAL NSH

Client Sample ID: Dup-02-081015

Lab Sample ID: 490-84924-3

Date Collected: 08/10/15 12:00

Matrix: Water

Date Received: 08/12/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273863	08/18/15 03:33	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	274966	08/20/15 21:21	MJH	TAL NSH
Total/NA	Prep	3510C			950 mL	1 mL	273531	08/15/15 13:28	MDW	TAL NSH
Total/NA	Analysis	8270D		1	950 mL	1 mL	273787	08/17/15 16:36	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272814	08/13/15 06:53	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272977	08/13/15 19:03	BES	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	273465	08/15/15 08:20	MLT	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	274426	08/19/15 23:53	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275700	08/24/15 10:53	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	275701	08/24/15 19:10	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		275364	08/21/15 19:36	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/15/15 01:26	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274183	08/17/15 17:21	LEG	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 17:59	CME	TAL NSH

Client Sample ID: Dup-02-081015

Lab Sample ID: 490-84924-3

Date Collected: 08/10/15 12:00

Matrix: Water

Date Received: 08/12/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 22:51	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274165	08/17/15 14:34	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	274200	08/14/15 08:28	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	273143	08/14/15 08:28	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	274353	08/18/15 20:54	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	274298	08/18/15 18:16	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	274628	08/19/15 13:58	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	273064	08/13/15 15:34	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	274101	08/14/15 12:32	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	273071	08/12/15 18:31	SMB	TAL NSH

Client Sample ID: OB-12-081015

Lab Sample ID: 490-84924-4

Date Collected: 08/10/15 14:45

Matrix: Water

Date Received: 08/12/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273863	08/18/15 03:59	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	274966	08/20/15 21:49	MJH	TAL NSH
Total/NA	Prep	3510C			980 mL	1 mL	273531	08/15/15 13:28	MDW	TAL NSH
Total/NA	Analysis	8270D		1	980 mL	1 mL	273942	08/18/15 11:17	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272814	08/13/15 06:53	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272977	08/13/15 19:31	BES	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	273465	08/15/15 08:20	MLT	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	274426	08/20/15 00:20	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275700	08/24/15 10:53	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	275701	08/24/15 19:25	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		275364	08/21/15 19:55	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/15/15 01:32	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274183	08/17/15 17:26	LEG	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 18:04	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 22:45	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274165	08/17/15 14:29	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	274200	08/14/15 08:28	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	273143	08/14/15 08:28	RDF	TAL NSH

Client Sample ID: OB-12-081015

Lab Sample ID: 490-84924-4

Date Collected: 08/10/15 14:45

Matrix: Water

Date Received: 08/12/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1	30 mL	30 mL	274353	08/18/15 20:57	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	274298	08/18/15 18:16	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	274628	08/19/15 14:00	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	273064	08/13/15 15:34	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	274101	08/14/15 12:33	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	273071	08/12/15 18:35	SMB	TAL NSH

Client Sample ID: OB-5-081015

Lab Sample ID: 490-84924-5

Date Collected: 08/10/15 10:25

Matrix: Water

Date Received: 08/12/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273863	08/18/15 02:15	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	274966	08/20/15 19:55	MJH	TAL NSH
Total/NA	Analysis	8260C SIM	RA	1	10 mL	10 mL	275705	08/24/15 21:16	MJH	TAL NSH
Total/NA	Prep	3510C			970 mL	1 mL	273531	08/15/15 13:28	MDW	TAL NSH
Total/NA	Analysis	8270D		1	970 mL	1 mL	273942	08/18/15 11:41	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272814	08/13/15 06:53	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272977	08/13/15 19:59	BES	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	273465	08/15/15 08:20	MLT	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	274426	08/20/15 00:47	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275700	08/24/15 10:53	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	275701	08/24/15 19:41	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		275364	08/21/15 20:15	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/15/15 00:34	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 17:08	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 22:05	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274165	08/17/15 13:59	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	274200	08/14/15 08:28	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	273143	08/14/15 08:28	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	274353	08/18/15 20:37	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	274298	08/18/15 18:16	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	274628	08/19/15 13:10	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	273064	08/13/15 15:34	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	274101	08/14/15 12:28	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	273071	08/12/15 18:53	SMB	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: OB-4-081015

Date Collected: 08/10/15 14:30
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273863	08/18/15 04:25	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	274966	08/20/15 22:18	MJH	TAL NSH
Total/NA	Prep	3510C			975 mL	1 mL	273531	08/15/15 13:28	MDW	TAL NSH
Total/NA	Analysis	8270D		1	975 mL	1 mL	273942	08/18/15 12:53	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272814	08/13/15 06:53	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272977	08/13/15 21:22	BES	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	273465	08/15/15 08:20	MLT	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	274426	08/20/15 02:08	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275700	08/24/15 10:53	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	275701	08/24/15 20:28	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		275364	08/21/15 21:12	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/15/15 01:37	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274183	08/17/15 17:55	LEG	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		10	50 mL	50 mL	274183	08/17/15 18:01	LEG	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 18:10	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		10	50 mL	50 mL	275699	08/21/15 18:15	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 23:14	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274758	08/19/15 12:51	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		10	50 mL	50 mL	274758	08/19/15 12:57	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	274200	08/14/15 08:28	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	273143	08/14/15 08:28	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	274353	08/18/15 20:59	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	274298	08/18/15 18:16	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	274628	08/19/15 14:03	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	273064	08/13/15 15:34	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	274101	08/14/15 12:34	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	273071	08/12/15 19:03	SMB	TAL NSH

Client Sample ID: TB-05-081115

Lab Sample ID: 490-84924-7

Date Collected: 08/11/15 00:01

Matrix: Water

Date Received: 08/12/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273863	08/18/15 00:31	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	274966	08/20/15 18:29	MJH	TAL NSH

Client Sample ID: RW-3DD (175-180)-081015

Lab Sample ID: 490-84924-8

Date Collected: 08/10/15 14:25

Matrix: Water

Date Received: 08/12/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273863	08/18/15 04:51	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	274966	08/20/15 22:46	MJH	TAL NSH
Total/NA	Prep	3510C			950 mL	1 mL	273531	08/15/15 13:28	MDW	TAL NSH
Total/NA	Analysis	8270D		1	950 mL	1 mL	273942	08/18/15 13:17	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272814	08/13/15 06:53	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272977	08/13/15 21:49	BES	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	273465	08/15/15 08:20	MLT	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	274426	08/20/15 02:35	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275700	08/24/15 10:53	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	275701	08/24/15 20:43	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		275364	08/21/15 21:31	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/15/15 01:43	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274183	08/17/15 17:32	LEG	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 18:20	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 23:19	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274758	08/19/15 13:03	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	274200	08/14/15 08:28	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	273143	08/14/15 08:28	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	274353	08/18/15 21:02	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	274299	08/18/15 18:20	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	274628	08/19/15 14:25	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	273064	08/13/15 15:34	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	274101	08/14/15 12:34	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	273071	08/12/15 19:10	SMB	TAL NSH

Client Sample ID: RW-4 (393-403)-081015

Date Collected: 08/10/15 09:40
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273863	08/18/15 05:17	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	274966	08/20/15 23:15	MJH	TAL NSH
Total/NA	Analysis	8260C SIM	RA	1	10 mL	10 mL	275705	08/24/15 21:45	MJH	TAL NSH
Total/NA	Prep	3510C			1000 mL	1 mL	273531	08/15/15 13:28	MDW	TAL NSH
Total/NA	Analysis	8270D		1	1000 mL	1 mL	273942	08/18/15 13:41	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272814	08/13/15 06:53	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272977	08/13/15 22:17	BES	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	273465	08/15/15 08:20	MLT	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	274426	08/20/15 03:02	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275700	08/24/15 10:53	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	275701	08/24/15 20:59	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		275364	08/21/15 21:50	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/15/15 01:49	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274183	08/17/15 17:38	LEG	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 18:25	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 23:25	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274758	08/19/15 13:10	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	274200	08/14/15 08:28	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	273143	08/14/15 08:28	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	274353	08/18/15 21:04	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	274299	08/18/15 18:20	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	274628	08/19/15 14:32	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	273064	08/13/15 15:34	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	274101	08/14/15 12:35	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	273071	08/12/15 19:16	SMB	TAL NSH

Client Sample ID: RW-4A (62-72)-081015

Date Collected: 08/10/15 12:15
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273958	08/18/15 22:12	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	274966	08/20/15 23:43	MJH	TAL NSH
Total/NA	Analysis	8260C SIM	RA	1	10 mL	10 mL	275705	08/24/15 22:13	MJH	TAL NSH
Total/NA	Prep	3510C			960 mL	1 mL	273531	08/15/15 13:28	MDW	TAL NSH

Client Sample ID: RW-4A (62-72)-081015

Lab Sample ID: 490-84924-10

Date Collected: 08/10/15 12:15

Matrix: Water

Date Received: 08/12/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D		1	960 mL	1 mL	273942	08/18/15 14:05	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272814	08/13/15 06:53	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272977	08/13/15 22:44	BES	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	273465	08/15/15 08:20	MLT	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	274426	08/20/15 03:29	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275700	08/24/15 10:53	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	275701	08/24/15 21:15	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		275364	08/21/15 22:47	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/15/15 01:55	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274183	08/17/15 17:44	LEG	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 18:31	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 23:31	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274758	08/19/15 13:16	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	274200	08/14/15 08:28	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	273143	08/14/15 08:28	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	274353	08/18/15 21:06	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	274299	08/18/15 18:20	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	274628	08/19/15 14:34	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	273064	08/13/15 15:34	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	274101	08/14/15 12:36	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	273071	08/12/15 19:21	SMB	TAL NSH

Client Sample ID: FB-02-081115

Lab Sample ID: 490-84924-11

Date Collected: 08/11/15 09:00

Matrix: Water

Date Received: 08/12/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	273863	08/18/15 00:57	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	274966	08/21/15 00:12	MJH	TAL NSH
Total/NA	Prep	3510C			990 mL	1 mL	273531	08/15/15 13:28	MDW	TAL NSH
Total/NA	Analysis	8270D		1	990 mL	1 mL	273942	08/18/15 14:30	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	272814	08/13/15 06:53	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	272977	08/13/15 23:11	BES	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	273465	08/15/15 08:20	MLT	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	274426	08/20/15 03:56	BES	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Client Sample ID: FB-02-081115

Date Collected: 08/11/15 09:00
Date Received: 08/12/15 09:45

Lab Sample ID: 490-84924-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	275700	08/24/15 10:53	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	275701	08/24/15 21:30	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		275364	08/21/15 23:06	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278731	08/15/15 02:01	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274183	08/17/15 17:50	LEG	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	273172	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	273171	08/14/15 09:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 18:36	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278731	08/14/15 23:48	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	272910	08/13/15 10:37	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278563	09/01/15 18:48	CME	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	274200	08/14/15 08:28	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	273143	08/14/15 08:28	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	274353	08/18/15 21:09	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	274299	08/18/15 18:20	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	274628	08/19/15 14:37	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274647	08/19/15 16:13	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	275204	08/21/15 11:56	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	273071	08/12/15 19:25	SMB	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
9056A	Anions, Ion Chromatography	SW846	TAL NSH
6020A	Metals (ICP/MS)	SW846	TAL NSH
7470A	Mercury (CVAA)	SW846	TAL NSH
9012B	Cyanide, Total andor Amenable	SW846	TAL NSH
SM 2320B	Alkalinity	SM	TAL NSH

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-84924-1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	TN965	09-30-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total
8260C		Water	Dichlorobromomethane
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	1,4-Dioxane
8260C SIM		Water	Ethylene Dibromide
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3

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COOLER RECEIPT FOI

490-84924 Chain of Custody

Cooler Received/Opened On: 8/12/2015 @0945

1. Tracking # 2243 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 0.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where: 0

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? (YES)..NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) +

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. *Cooling process:* (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? YES..(NO)..NA

b. Was there any observable headspace present in any VOA vial? YES...NO..(NA)

14. Was there a Trip Blank in this cooler? YES..(NO)..NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA

16. Was residual chlorine present? YES...NO..(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

BIS = Broken in shipment

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Loc: 490
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COOLER RECEIPT FORM

Cooler Received/Opened On: 8/12/2015 @0945

1. Tracking # 2313 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 2.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO. (NA)

4. Were custody seals on outside of cooler? YES...(NO)..NA

If yes, how many and where: 0

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? YES..(NO)..NA

I certify that I opened the cooler and answered questions 1-6 (intial) ⊕

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? YES..(NO)..NA

b. Was there any observable headspace present in any VOA vial? YES...NO..(NA)

14. Was there a Trip Blank in this cooler? YES..(NO)..NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA

16. Was residual chlorine present? YES...NO..(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. *Did you sign the custody papers in the appropriate place?* (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

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Loc: 490
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COOLER RECEIPT FORM

C

Cooler Received/Opened On 8/12/2015 @ 0945

1. Tracking # NO Air Bill (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 0.7 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where:

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial)

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA DA8-1275

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#

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COOLER RECEIPT FORM

Cooler Received/Opened On 8/12/2015 @ 945

1. Tracking # 2276 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960358

2. Temperature of rep. sample or temp blank when opened: 2.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? YES..(NO)..NA

I certify that I opened the cooler and answered questions 1-6 (intial) EZA

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? YES..(NO)..NA

b. Was there any observable headspace present in any VOA vial? YES...NO..(NA)

14. Was there a Trip Blank in this cooler? YES..(NO)..NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA

16. Was residual chlorine present? YES...NO..(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES..(NO) Was a PIPE generated? YES..(NO)..#_____

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Cooler Receipt Form.doc

LF-1
End of Form

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COOLER RECEIPT FORM

Loc: 490
84924

Cooler Received/Opened On 8/12/2015 @ 945

1. Tracking # 2298 (last 4 digits, FedEx) C

Courier: Fed-ex IR Gun ID 17960358

2. Temperature of rep. sample or temp blank when opened: 1.5 *Degrees Celsius*

3. *If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?* YES NO (NA)

4. Were custody seals on outside of cooler? YES (NO) NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? YES (NO) NA

I certify that I opened the cooler and answered questions 1-6 (intial) EA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other (None)

9. Cooling process: (Ice) Ice-pack (Ice (direct contact)) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? YES (NO) NA

b. Was there any observable headspace present in any VOA vial? YES...NO (NA)

14. Was there a Trip Blank in this cooler? YES (NO) NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO (NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA

16. Was residual chlorine present? YES...NO (NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES (NO) Was a PIPE generated? YES (NO) #_____

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Nashville, TN

Loc: 490
84924

COOLER RECEIPT FORM

Cooler Received/Opened On 8/12/2015 @ 0945

1. Tracking # 2287 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 2-8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES NO NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA

12. Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA

b. Was there any observable headspace present in any VOA vial? YES NO NA

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES NO NA

18. Did you sign the custody papers in the appropriate place? YES NO NA

19. Were correct containers used for the analysis requested? YES NO NA

20. Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO #_____

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Loc: 490
84924

Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 8/12/2015 @ 945

1. Tracking # 2254 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960358

2. Temperature of rep. sample or temp blank when opened: 1.0 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? YES..(NO)..NA

I certify that I opened the cooler and answered questions 1-6 (intial) ECA

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? YES..(NO)..NA

b. Was there any observable headspace present in any VOA vial? YES...NO..(NA)

14. Was there a Trip Blank in this cooler? YES..(NO)..NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA

16. Was residual chlorine present? YES...NO..(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES..(NO) Was a PIPE generated? YES..(NO)..#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 490
84924

COOLER RECEIPT FORM

Cooler Received/Opened On 8/12/2015 @0945

1. Tracking # 2302 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 97310166

2. Temperature of rep. sample or temp blank when opened: 1.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? YES..(NO)...NA

I certify that I opened the cooler and answered questions 1-6 (intial) HLG

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? YES..(NO)..NA

b. Was there any observable headspace present in any VOA vial? YES...NO..(NA)

14. Was there a Trip Blank in this cooler? YES..(NO)..NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA

16. Was residual chlorine present? YES...NO..(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 490
84924

COOLER RECEIPT FORM

C

Cooler Received/Opened On 8/12/2015 @ 0945

1. Tracking # 2324 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 94660220

2. Temperature of rep. sample or temp blank when opened: 0.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES..NO..(NA)

6. Were custody papers inside cooler? (YES)..NO..NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other (None)

9. Cooling process: (Ice) Ice-pack (Ice (direct contact)) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? (YES)..NO..NA DA 8-12-15

b. Was there any observable headspace present in any VOA vial? YES..(NO)..(NA) DA 8-12-15

14. Was there a Trip Blank in this cooler? (YES)..(NO)..NA DA 8-12-15 If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? (YES)..NO..(NA) DA 8-12-15 ~~DA 8-15~~

b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA

16. Was residual chlorine present? YES..(NO)..(NA) DA 8-12-15

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
84924

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

9/17/2015

Client Information	Sampler: Robert Lowtenberry	Lab PM: Brown, Shali	Carr	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD		**Analysis Requested**		Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			**Preservation Codes:** A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate			Total Number of containers	Special Instructions/Note:
				Preservation Code:																	
1	OB-13-081015	8/10/15	09:45	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
2	OB-3-081015	8/10/15	11:50	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
3	Dup-02-081015	8/10/15	12:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
4	OB-12-081015	8/10/15	14:45	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
5	OB-5-081015 MS/MSD	8/10/15	10:25	G	Water	N	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
6	OB-4-081015	8/10/15	14:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
7	TB-05-081115	8/11/15	-	-	Water	N	N	✓	✓												
8	RW-3DD(175-180)-081015	8/10/15	14:25	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
9	RW-4(393-403)-081015	8/10/15	09:40	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
10	RW-4A(62-72)-081015	8/10/15	12:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
11	FB-02-081115	8/11/15	09:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1					8/11/15 1200	TA
2		8/11 1350	TA		8-12-15 0945	TAN
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.2, 2.8, 0.7, 2.1, 1.5, 2.8, 1.0, 1.8, 0.2

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 490-84924-1

Login Number: 84924
List Number: 1
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.2, 2.8, 0.7, 2.1, 1.5, 2.8, 1.0, 1.8, 0.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-85153-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Tim Roeper

Authorized for release by:
9/17/2015 6:47:30 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-85153-1	PM AirShaft-50-081215	Water	08/12/15 10:05	08/14/15 09:55
490-85153-2	OB-25-081215	Water	08/12/15 09:50	08/14/15 09:55
490-85153-3	OB-2-081215	Water	08/12/15 12:55	08/14/15 09:55
490-85153-4	SC-2-081215	Water	08/12/15 14:25	08/14/15 09:55
490-85153-5	RW-13(150-170)-081215	Water	08/12/15 11:10	08/14/15 09:55
490-85153-6	OB-29-081215	Water	08/12/15 15:30	08/14/15 09:55
490-85153-7	RW-12(130-140)-081215	Water	08/12/15 14:50	08/14/15 09:55
490-85153-8	TB-06-081315	Water	08/13/15 01:00	08/14/15 09:55

Job ID: 490-85153-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 490-85153-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 8/14/2015 9:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.1º C, 2.1º C, 2.8º C and 4.1º C.
Another cooler was received on 8/15/2015 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the cooler at receipt time were 1.3º C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples PM AirShaft-50-081215 (490-85153-1), OB-25-081215 (490-85153-2), OB-2-081215 (490-85153-3), SC-2-081215 (490-85153-4), RW-13(150-170)-081215 (490-85153-5), OB-29-081215 (490-85153-6), RW-12(130-140)-081215 (490-85153-7) and TB-06-081315 (490-85153-8) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/23/2015.

cis-1,2-Dichloroethene failed the recovery criteria high for LCS 490-275550/3. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

VOLATILE ORGANIC COMPOUNDS (GC-MS SIM)

Job ID: 490-85153-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

Samples PM AirShaft-50-081215 (490-85153-1), OB-25-081215 (490-85153-2), OB-2-081215 (490-85153-3), SC-2-081215 (490-85153-4), RW-13(150-170)-081215 (490-85153-5), OB-29-081215 (490-85153-6), RW-12(130-140)-081215 (490-85153-7) and TB-06-081315 (490-85153-8) were analyzed for volatile organic compounds (GC-MS SIM) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/21/2015.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GC MS)

Samples PM AirShaft-50-081215 (490-85153-1), OB-25-081215 (490-85153-2), OB-2-081215 (490-85153-3), SC-2-081215 (490-85153-4), RW-13(150-170)-081215 (490-85153-5), OB-29-081215 (490-85153-6) and RW-12(130-140)-081215 (490-85153-7) were analyzed for semivolatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/19/2015 and analyzed on 08/21/2015.

Benzo[g,h,i]perylene, Dibenz(a,h)anthracene and Indeno[1,2,3-cd]pyrene were detected in method blank MB 490-274686/1-A at levels exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. The target analyte concentration in the samples was less than the reporting limit (RL); therefore, re-extraction of samples was not performed.

Benzaldehyde failed the recovery criteria high for LCS 490-274686/2-A. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-274686 and analytical batch 490-274915.

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

POLYCHLORINATED BIPHENYLS (PCBS)

Samples PM AirShaft-50-081215 (490-85153-1), OB-25-081215 (490-85153-2), OB-2-081215 (490-85153-3), SC-2-081215 (490-85153-4), RW-13(150-170)-081215 (490-85153-5), OB-29-081215 (490-85153-6) and RW-12(130-140)-081215 (490-85153-7) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 08/31/2015 and analyzed on 09/01/2015.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-277885.

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

POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

Samples PM AirShaft-50-081215 (490-85153-1), OB-25-081215 (490-85153-2), OB-2-081215 (490-85153-3), SC-2-081215 (490-85153-4), RW-13(150-170)-081215 (490-85153-5), OB-29-081215 (490-85153-6) and RW-12(130-140)-081215 (490-85153-7) were analyzed for polycyclic aromatic hydrocarbons (PAHs) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/19/2015 and analyzed on 08/26/2015.

Pentachlorophenol exceeded the RPD limit for LCSD 490-274580/3-A. Refer to the QC report for details.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-274580 and analytical batch 490-276355.

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

DISSOLVED METALS (ICPMS)

Samples PM AirShaft-50-081215 (490-85153-1), OB-25-081215 (490-85153-2), OB-2-081215 (490-85153-3), SC-2-081215 (490-85153-4), RW-13(150-170)-081215 (490-85153-5), OB-29-081215 (490-85153-6) and RW-12(130-140)-081215 (490-85153-7) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/19/2015 and analyzed on 08/20/2015 and 08/21/2015.

Job ID: 490-85153-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

Vanadium was detected in method blank MB 490-274351/1-B at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Vanadium was detected in method blank MB 490-274351/1-B at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Samples SC-2-081215 (490-85153-4)[50X], RW-13(150-170)-081215 (490-85153-5)[100X] and OB-29-081215 (490-85153-6)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

METALS (ICPMS)

Samples PM AirShaft-50-081215 (490-85153-1), OB-25-081215 (490-85153-2), OB-2-081215 (490-85153-3), SC-2-081215 (490-85153-4), RW-13(150-170)-081215 (490-85153-5), OB-29-081215 (490-85153-6) and RW-12(130-140)-081215 (490-85153-7) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/18/2015 and 08/26/2015 and analyzed on 08/19/2015, 08/24/2015, 08/25/2015 and 08/26/2015.

Vanadium, Antimony, Arsenic and Manganese were detected in method blank MB 490-273945/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Aluminum was detected in method blank MB 490-275991/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Samples PM AirShaft-50-081215 (490-85153-1)[5X] and RW-12(130-140)-081215 (490-85153-7)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

DISSOLVED MERCURY (CVAA)

Samples PM AirShaft-50-081215 (490-85153-1), OB-25-081215 (490-85153-2), OB-2-081215 (490-85153-3), SC-2-081215 (490-85153-4), RW-13(150-170)-081215 (490-85153-5), OB-29-081215 (490-85153-6) and RW-12(130-140)-081215 (490-85153-7) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/18/2015 and 08/24/2015 and analyzed on 08/19/2015 and 08/25/2015.

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

TOTAL MERCURY

Samples PM AirShaft-50-081215 (490-85153-1), OB-25-081215 (490-85153-2), OB-2-081215 (490-85153-3), SC-2-081215 (490-85153-4), RW-13(150-170)-081215 (490-85153-5), OB-29-081215 (490-85153-6) and RW-12(130-140)-081215 (490-85153-7) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 08/25/2015.

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

ALKALINITY

Samples PM AirShaft-50-081215 (490-85153-1), OB-25-081215 (490-85153-2), OB-2-081215 (490-85153-3), SC-2-081215 (490-85153-4), RW-13(150-170)-081215 (490-85153-5), OB-29-081215 (490-85153-6) and RW-12(130-140)-081215 (490-85153-7) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/15/2015.

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

TOTAL CYANIDE

Job ID: 490-85153-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

Samples PM AirShaft-50-081215 (490-85153-1), OB-25-081215 (490-85153-2), OB-2-081215 (490-85153-3), SC-2-081215 (490-85153-4), RW-13(150-170)-081215 (490-85153-5), OB-29-081215 (490-85153-6) and RW-12(130-140)-081215 (490-85153-7) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared on 08/15/2015 and 08/18/2015 and analyzed on 08/17/2015 and 08/19/2015.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

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

ANIONS

Samples PM AirShaft-50-081215 (490-85153-1), OB-25-081215 (490-85153-2), OB-2-081215 (490-85153-3), SC-2-081215 (490-85153-4), RW-13(150-170)-081215 (490-85153-5), OB-29-081215 (490-85153-6) and RW-12(130-140)-081215 (490-85153-7) were analyzed for anions in accordance with SW-846 Method 9056. The samples were analyzed on 08/25/2015.

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

ORGANIC PREP

The following sample was improperly preserved in the field: RW-12(130-140)-081215 (490-85153-7). Received sample at pH of 10 instead of 7. The preservative used is not compatible with the analytes requested.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: PM AirShaft-50-081215
Date Collected: 08/12/15 10:05
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/21/15 16:41	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/21/15 16:41	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/21/15 16:41	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/21/15 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*08/21/15 16:41*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/21/15 16:41*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/21/15 16:41*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/21/15 16:41*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 10:26	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/23/15 10:26	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 10:26	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 10:26	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/23/15 10:26	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/23/15 10:26	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/23/15 10:26	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/23/15 10:26	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/23/15 10:26	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/23/15 10:26	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 10:26	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/23/15 10:26	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/23/15 10:26	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/23/15 10:26	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/23/15 10:26	1
Acetone	2.7	U	25	2.7	ug/L			08/23/15 10:26	1
Benzene	0.20	U	1.0	0.20	ug/L			08/23/15 10:26	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/23/15 10:26	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/23/15 10:26	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/23/15 10:26	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/23/15 10:26	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 10:26	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/23/15 10:26	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/23/15 10:26	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/23/15 10:26	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/23/15 10:26	1
cis-1,2-Dichloroethene	0.21	U *	1.0	0.21	ug/L			08/23/15 10:26	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 10:26	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/23/15 10:26	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/23/15 10:26	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/23/15 10:26	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/23/15 10:26	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/23/15 10:26	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/23/15 10:26	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/23/15 10:26	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/23/15 10:26	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/23/15 10:26	1

Client Sample ID: PM AirShaft-50-081215
Date Collected: 08/12/15 10:05
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/23/15 10:26	1
Styrene	0.28	U	1.0	0.28	ug/L			08/23/15 10:26	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/23/15 10:26	1
Toluene	0.17	U	1.0	0.17	ug/L			08/23/15 10:26	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/23/15 10:26	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 10:26	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/23/15 10:26	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/23/15 10:26	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/23/15 10:26	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/23/15 10:26	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/23/15 10:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/23/15 10:26*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/23/15 10:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/23/15 10:26*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/23/15 10:26*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/23/15 10:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*08/23/15 10:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 17:55	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 17:55	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 17:55	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/19/15 14:30	08/26/15 17:55	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/19/15 14:30	08/26/15 17:55	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/19/15 14:30	08/26/15 17:55	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		08/19/15 14:30	08/26/15 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*68*		*10 - 120*	*08/19/15 14:30*	*08/26/15 17:55*	*1*
2-Fluorobiphenyl (Surr)	*55*		*29 - 120*	*08/19/15 14:30*	*08/26/15 17:55*	*1*
Nitrobenzene-d5	*46*		*27 - 120*	*08/19/15 14:30*	*08/26/15 17:55*	*1*
Terphenyl-d14	*81*		*13 - 120*	*08/19/15 14:30*	*08/26/15 17:55*	*1*
2-Fluorophenol	*35*		*10 - 120*	*08/19/15 14:30*	*08/26/15 17:55*	*1*
Phenol-d5	*27*		*10 - 120*	*08/19/15 14:30*	*08/26/15 17:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 01:24	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/19/15 17:49	08/21/15 01:24	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/19/15 17:49	08/21/15 01:24	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/19/15 17:49	08/21/15 01:24	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/19/15 17:49	08/21/15 01:24	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/19/15 17:49	08/21/15 01:24	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/19/15 17:49	08/21/15 01:24	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/19/15 17:49	08/21/15 01:24	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/19/15 17:49	08/21/15 01:24	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: PM AirShaft-50-081215
Date Collected: 08/12/15 10:05
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 01:24	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 01:24	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/19/15 17:49	08/21/15 01:24	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/19/15 17:49	08/21/15 01:24	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 01:24	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/19/15 17:49	08/21/15 01:24	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/19/15 17:49	08/21/15 01:24	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/19/15 17:49	08/21/15 01:24	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/19/15 17:49	08/21/15 01:24	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/19/15 17:49	08/21/15 01:24	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/19/15 17:49	08/21/15 01:24	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/19/15 17:49	08/21/15 01:24	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/19/15 17:49	08/21/15 01:24	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/19/15 17:49	08/21/15 01:24	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 01:24	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/19/15 17:49	08/21/15 01:24	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/19/15 17:49	08/21/15 01:24	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/19/15 17:49	08/21/15 01:24	1
Acetophenone	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 01:24	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/19/15 17:49	08/21/15 01:24	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/19/15 17:49	08/21/15 01:24	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/19/15 17:49	08/21/15 01:24	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/19/15 17:49	08/21/15 01:24	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 01:24	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 01:24	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 01:24	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/19/15 17:49	08/21/15 01:24	1
Carbazole	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 01:24	1
Caprolactam	2.4	U	10	2.4	ug/L		08/19/15 17:49	08/21/15 01:24	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/19/15 17:49	08/21/15 01:24	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/19/15 17:49	08/21/15 01:24	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/19/15 17:49	08/21/15 01:24	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/19/15 17:49	08/21/15 01:24	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 01:24	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 01:24	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 01:24	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 01:24	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/19/15 17:49	08/21/15 01:24	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/19/15 17:49	08/21/15 01:24	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/19/15 17:49	08/21/15 01:24	1
Isophorone	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 01:24	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/19/15 17:49	08/21/15 01:24	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/19/15 17:49	08/21/15 01:24	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/19/15 17:49	08/21/15 01:24	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/19/15 17:49	08/21/15 01:24	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/19/15 17:49	08/21/15 01:24	1
Phenol	1.5	U	10	1.5	ug/L		08/19/15 17:49	08/21/15 01:24	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/19/15 17:49	08/21/15 01:24	1
Diphenyl	2.2	U	10	2.2	ug/L		08/19/15 17:49	08/21/15 01:24	1

Client Sample ID: PM AirShaft-50-081215
Date Collected: 08/12/15 10:05
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 01:24	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 01:24	1
Atrazine	2.9	U	10	2.9	ug/L		08/19/15 17:49	08/21/15 01:24	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tetradecanoic acid	*3.7*	*J N*	*ug/L*		*7.95*	*544-63-8*	*08/19/15 17:49*	*08/21/15 01:24*	*1*
Hexadecane	*4.0*	*J N*	*ug/L*		*10.07*	*544-76-3*	*08/19/15 17:49*	*08/21/15 01:24*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*105*		*10 - 120*	*08/19/15 17:49*	*08/21/15 01:24*	*1*
2-Fluorobiphenyl (Surr)	*86*		*29 - 120*	*08/19/15 17:49*	*08/21/15 01:24*	*1*
2-Fluorophenol (Surr)	*45*		*10 - 120*	*08/19/15 17:49*	*08/21/15 01:24*	*1*
Nitrobenzene-d5 (Surr)	*78*		*27 - 120*	*08/19/15 17:49*	*08/21/15 01:24*	*1*
Phenol-d5 (Surr)	*29*		*10 - 120*	*08/19/15 17:49*	*08/21/15 01:24*	*1*
Terphenyl-d14 (Surr)	*83*		*13 - 120*	*08/19/15 17:49*	*08/21/15 01:24*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 15:22	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 16:18	09/01/15 15:22	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 16:18	09/01/15 15:22	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 16:18	09/01/15 15:22	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 16:18	09/01/15 15:22	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 16:18	09/01/15 15:22	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 16:18	09/01/15 15:22	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*50*		*10 - 150*	*08/31/15 16:18*	*09/01/15 15:22*	*1*
Tetrachloro-m-xylene	*35*		*10 - 150*	*08/31/15 16:18*	*09/01/15 15:22*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.13**		1.00	0.70	mg/L			08/25/15 17:03	1
Sulfate	**4.35**		1.00	0.60	mg/L			08/25/15 17:03	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.050**	**B**	0.020	0.0096	mg/L		08/26/15 09:10	08/26/15 16:43	1
Antimony	**0.00061**	**J B**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:22	1
Arsenic	**0.0013**	**J B**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:22	1
Barium	**0.0093**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:22	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:22	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/18/15 09:34	08/24/15 17:22	1
Calcium	**6.4**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 17:22	1
Chromium	**0.00076**	**J**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:22	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:22	1
Copper	**0.0024**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:22	1
Iron	**0.47**		0.025	0.010	mg/L		08/18/15 09:34	08/24/15 17:22	1
Lead	**0.0045**		0.0020	0.00020	mg/L		08/18/15 09:34	08/24/15 17:22	1
Magnesium	**1.8**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 17:22	1

Client Sample ID: PM AirShaft-50-081215

Date Collected: 08/12/15 10:05
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-1

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.017**	**B**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:22	1
Nickel	**0.0088**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:22	1
Potassium	**0.51**	**J**	1.0	0.13	mg/L		08/18/15 09:34	08/19/15 14:59	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/18/15 09:34	08/24/15 17:22	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/19/15 14:59	1
Sodium	**2.8**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 17:22	1
Thallium	**0.00067**	**J**	0.0020	0.00020	mg/L		08/18/15 09:34	08/24/15 17:22	1
Vanadium	**0.0016**	**J B**	0.0020	0.00010	mg/L		08/18/15 09:34	08/19/15 14:59	1
Zinc	**1.6**		0.13	0.050	mg/L		08/18/15 09:34	08/24/15 17:27	5

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.016**	**J**	0.020	0.0096	mg/L		08/19/15 08:39	08/20/15 01:37	1
Antimony	**0.00053**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:37	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:37	1
Barium	**0.0094**		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 19:40	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 19:40	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:39	08/20/15 01:37	1
Calcium	**6.1**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 13:17	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:37	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 13:17	1
Copper	**0.0017**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:37	1
Iron	**0.14**		0.025	0.010	mg/L		08/19/15 08:39	08/20/15 01:37	1
Lead	**0.00082**	**J**	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:37	1
Magnesium	**1.8**		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 19:40	1
Manganese	**0.0094**		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:37	1
Nickel	**0.0078**		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:37	1
Potassium	**0.47**	**J**	1.0	0.13	mg/L		08/19/15 08:39	08/20/15 01:37	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/20/15 19:40	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:37	1
Sodium	**2.7**		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 19:40	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:37	1
Vanadium	**0.0017**	**J B**	0.0020	0.00010	mg/L		08/19/15 08:39	08/20/15 01:37	1
Zinc	**1.6**		0.025	0.010	mg/L		08/19/15 08:39	08/20/15 19:40	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/25/15 12:34	08/25/15 19:15	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 16:30	08/19/15 21:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/18/15 19:20	08/19/15 09:40	1
Bicarbonate Alkalinity as CaCO3	**24.0**		10.0	5.0	mg/L			08/15/15 16:11	1
Total Alkalinity as CaCO3	**24.0**		10.0	5.0	mg/L			08/15/15 16:11	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: OB-25-081215
Date Collected: 08/12/15 09:50
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/21/15 17:10	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/21/15 17:10	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/21/15 17:10	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/21/15 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/21/15 17:10*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/21/15 17:10*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/21/15 17:10*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/21/15 17:10*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 10:53	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/23/15 10:53	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 10:53	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 10:53	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/23/15 10:53	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/23/15 10:53	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/23/15 10:53	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/23/15 10:53	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/23/15 10:53	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/23/15 10:53	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 10:53	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/23/15 10:53	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/23/15 10:53	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/23/15 10:53	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/23/15 10:53	1
Acetone	2.7	U	25	2.7	ug/L			08/23/15 10:53	1
Benzene	0.20	U	1.0	0.20	ug/L			08/23/15 10:53	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/23/15 10:53	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/23/15 10:53	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/23/15 10:53	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/23/15 10:53	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 10:53	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/23/15 10:53	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/23/15 10:53	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/23/15 10:53	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/23/15 10:53	1
cis-1,2-Dichloroethene	0.21	U *	1.0	0.21	ug/L			08/23/15 10:53	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 10:53	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/23/15 10:53	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/23/15 10:53	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/23/15 10:53	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/23/15 10:53	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/23/15 10:53	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/23/15 10:53	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/23/15 10:53	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/23/15 10:53	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/23/15 10:53	1

Client Sample ID: OB-25-081215
Date Collected: 08/12/15 09:50
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/23/15 10:53	1
Styrene	0.28	U	1.0	0.28	ug/L			08/23/15 10:53	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/23/15 10:53	1
Toluene	0.17	U	1.0	0.17	ug/L			08/23/15 10:53	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/23/15 10:53	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 10:53	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/23/15 10:53	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/23/15 10:53	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/23/15 10:53	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/23/15 10:53	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/23/15 10:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Silanol, dimethyl(1,1,2-trimethylpropyl)	*3.2*	*J N*	*ug/L*		*2.89*	*55644-10-5*		*08/23/15 10:53*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/23/15 10:53*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*08/23/15 10:53*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/23/15 10:53*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/23/15 10:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*08/23/15 10:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 18:22	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 18:22	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 18:22	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/19/15 14:30	08/26/15 18:22	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/19/15 14:30	08/26/15 18:22	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/19/15 14:30	08/26/15 18:22	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		08/19/15 14:30	08/26/15 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*75*		*10 - 120*	*08/19/15 14:30*	*08/26/15 18:22*	*1*
2-Fluorobiphenyl (Surr)	*67*		*29 - 120*	*08/19/15 14:30*	*08/26/15 18:22*	*1*
Nitrobenzene-d5	*63*		*27 - 120*	*08/19/15 14:30*	*08/26/15 18:22*	*1*
Terphenyl-d14	*87*		*13 - 120*	*08/19/15 14:30*	*08/26/15 18:22*	*1*
2-Fluorophenol	*47*		*10 - 120*	*08/19/15 14:30*	*08/26/15 18:22*	*1*
Phenol-d5	*35*		*10 - 120*	*08/19/15 14:30*	*08/26/15 18:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 01:01	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/19/15 17:49	08/21/15 01:01	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/19/15 17:49	08/21/15 01:01	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/19/15 17:49	08/21/15 01:01	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/19/15 17:49	08/21/15 01:01	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/19/15 17:49	08/21/15 01:01	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/19/15 17:49	08/21/15 01:01	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/19/15 17:49	08/21/15 01:01	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: OB-25-081215
Date Collected: 08/12/15 09:50
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/19/15 17:49	08/21/15 01:01	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 01:01	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 01:01	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/19/15 17:49	08/21/15 01:01	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/19/15 17:49	08/21/15 01:01	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 01:01	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/19/15 17:49	08/21/15 01:01	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/19/15 17:49	08/21/15 01:01	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/19/15 17:49	08/21/15 01:01	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/19/15 17:49	08/21/15 01:01	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/19/15 17:49	08/21/15 01:01	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/19/15 17:49	08/21/15 01:01	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/19/15 17:49	08/21/15 01:01	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/19/15 17:49	08/21/15 01:01	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/19/15 17:49	08/21/15 01:01	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 01:01	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/19/15 17:49	08/21/15 01:01	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/19/15 17:49	08/21/15 01:01	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/19/15 17:49	08/21/15 01:01	1
Acetophenone	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 01:01	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/19/15 17:49	08/21/15 01:01	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/19/15 17:49	08/21/15 01:01	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/19/15 17:49	08/21/15 01:01	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/19/15 17:49	08/21/15 01:01	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 01:01	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 01:01	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 01:01	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/19/15 17:49	08/21/15 01:01	1
Carbazole	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 01:01	1
Caprolactam	2.4	U	10	2.4	ug/L		08/19/15 17:49	08/21/15 01:01	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/19/15 17:49	08/21/15 01:01	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/19/15 17:49	08/21/15 01:01	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/19/15 17:49	08/21/15 01:01	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/19/15 17:49	08/21/15 01:01	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 01:01	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 01:01	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 01:01	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 01:01	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/19/15 17:49	08/21/15 01:01	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/19/15 17:49	08/21/15 01:01	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/19/15 17:49	08/21/15 01:01	1
Isophorone	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 01:01	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/19/15 17:49	08/21/15 01:01	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/19/15 17:49	08/21/15 01:01	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/19/15 17:49	08/21/15 01:01	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/19/15 17:49	08/21/15 01:01	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/19/15 17:49	08/21/15 01:01	1
Phenol	1.5	U	10	1.5	ug/L		08/19/15 17:49	08/21/15 01:01	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/19/15 17:49	08/21/15 01:01	1

Client Sample ID: OB-25-081215
Date Collected: 08/12/15 09:50
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diphenyl	2.2	U	10	2.2	ug/L		08/19/15 17:49	08/21/15 01:01	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 01:01	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 01:01	1
Atrazine	2.9	U	10	2.9	ug/L		08/19/15 17:49	08/21/15 01:01	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tridecanoic acid	*3.6*	*J N*	*ug/L*		*7.95*	*638-53-9*	*08/19/15 17:49*	*08/21/15 01:01*	*1*
Tetradecane	*4.8*	*J N*	*ug/L*		*10.07*	*629-59-4*	*08/19/15 17:49*	*08/21/15 01:01*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*96*		*10 - 120*	*08/19/15 17:49*	*08/21/15 01:01*	*1*
2-Fluorobiphenyl (Surr)	*70*		*29 - 120*	*08/19/15 17:49*	*08/21/15 01:01*	*1*
2-Fluorophenol (Surr)	*38*		*10 - 120*	*08/19/15 17:49*	*08/21/15 01:01*	*1*
Nitrobenzene-d5 (Surr)	*64*		*27 - 120*	*08/19/15 17:49*	*08/21/15 01:01*	*1*
Phenol-d5 (Surr)	*25*		*10 - 120*	*08/19/15 17:49*	*08/21/15 01:01*	*1*
Terphenyl-d14 (Surr)	*68*		*13 - 120*	*08/19/15 17:49*	*08/21/15 01:01*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 15:38	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 16:18	09/01/15 15:38	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 16:18	09/01/15 15:38	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 16:18	09/01/15 15:38	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 16:18	09/01/15 15:38	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 16:18	09/01/15 15:38	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 16:18	09/01/15 15:38	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*20*	*p*	*10 - 150*	*08/31/15 16:18*	*09/01/15 15:38*	*1*
Tetrachloro-m-xylene	*39*	*p*	*10 - 150*	*08/31/15 16:18*	*09/01/15 15:38*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**91.7**		1.00	0.70	mg/L			08/25/15 17:22	1
Sulfate	**9.24**		1.00	0.60	mg/L			08/25/15 17:22	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**12.8**	**B**	0.020	0.0096	mg/L		08/26/15 09:10	08/26/15 16:48	1
Antimony	**0.00083**	**J B**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:33	1
Arsenic	**0.0041**	**B**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:33	1
Barium	**0.076**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:33	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:33	1
Cadmium	**0.0018**		0.0010	0.00040	mg/L		08/18/15 09:34	08/24/15 17:33	1
Calcium	**43.4**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 17:33	1
Chromium	**0.0063**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:33	1
Cobalt	**0.0053**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:33	1
Copper	**0.031**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:33	1
Iron	**8.1**		0.025	0.010	mg/L		08/18/15 09:34	08/24/15 17:33	1
Lead	**0.011**		0.0020	0.00020	mg/L		08/18/15 09:34	08/24/15 17:33	1

Client Sample ID: OB-25-081215
Date Collected: 08/12/15 09:50
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-2
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	9.8		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 17:33	1
Manganese	0.34	B	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:33	1
Nickel	0.010		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:33	1
Potassium	7.7		1.0	0.13	mg/L		08/18/15 09:34	08/19/15 15:05	1
Selenium	0.0017	J	0.0020	0.00060	mg/L		08/18/15 09:34	08/24/15 17:33	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/19/15 15:05	1
Sodium	69.9		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 17:33	1
Thallium	0.00021	J	0.0020	0.00020	mg/L		08/18/15 09:34	08/24/15 17:33	1
Vanadium	0.011	B	0.0020	0.00010	mg/L		08/18/15 09:34	08/19/15 15:05	1
Zinc	0.052		0.025	0.010	mg/L		08/18/15 09:34	08/24/15 17:33	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1.8		0.020	0.0096	mg/L		08/19/15 08:39	08/20/15 01:43	1
Antimony	0.0013	J	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:43	1
Arsenic	0.0010	J	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:43	1
Barium	0.036		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 19:45	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 19:45	1
Cadmium	0.00064	J	0.0010	0.00040	mg/L		08/19/15 08:39	08/20/15 01:43	1
Calcium	39.5		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 13:22	1
Chromium	0.0020		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:43	1
Cobalt	0.00082	J	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 13:22	1
Copper	0.0082		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:43	1
Iron	1.6		0.025	0.010	mg/L		08/19/15 08:39	08/20/15 01:43	1
Lead	0.0010	J	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:43	1
Magnesium	7.8		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 19:45	1
Manganese	0.051		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:43	1
Nickel	0.0024		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:43	1
Potassium	7.3		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 01:43	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/20/15 19:45	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:43	1
Sodium	67.7		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 19:45	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:43	1
Vanadium	0.0050	B	0.0020	0.00010	mg/L		08/19/15 08:39	08/20/15 01:43	1
Zinc	0.013	J	0.025	0.010	mg/L		08/19/15 08:39	08/20/15 19:45	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/25/15 12:34	08/25/15 19:17	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 16:30	08/19/15 21:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/15/15 14:59	08/17/15 11:40	1
Bicarbonate Alkalinity as CaCO3	124		10.0	5.0	mg/L			08/15/15 16:28	1
Total Alkalinity as CaCO3	124		10.0	5.0	mg/L			08/15/15 16:28	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: OB-2-081215
Date Collected: 08/12/15 12:55
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/21/15 17:39	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/21/15 17:39	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/21/15 17:39	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/21/15 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/21/15 17:39*	*1*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*08/21/15 17:39*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/21/15 17:39*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/21/15 17:39*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 11:21	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/23/15 11:21	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 11:21	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 11:21	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/23/15 11:21	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/23/15 11:21	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/23/15 11:21	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/23/15 11:21	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/23/15 11:21	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/23/15 11:21	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 11:21	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/23/15 11:21	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/23/15 11:21	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/23/15 11:21	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/23/15 11:21	1
Acetone	2.7	U	25	2.7	ug/L			08/23/15 11:21	1
Benzene	0.20	U	1.0	0.20	ug/L			08/23/15 11:21	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/23/15 11:21	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/23/15 11:21	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/23/15 11:21	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/23/15 11:21	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 11:21	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/23/15 11:21	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/23/15 11:21	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/23/15 11:21	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/23/15 11:21	1
cis-1,2-Dichloroethene	0.21	U *	1.0	0.21	ug/L			08/23/15 11:21	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 11:21	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/23/15 11:21	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/23/15 11:21	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/23/15 11:21	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/23/15 11:21	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/23/15 11:21	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/23/15 11:21	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/23/15 11:21	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/23/15 11:21	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/23/15 11:21	1

Client Sample ID: OB-2-081215

Date Collected: 08/12/15 12:55
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	**0.22**	**J**	5.0	0.22	ug/L			08/23/15 11:21	1
Styrene	0.28	U	1.0	0.28	ug/L			08/23/15 11:21	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/23/15 11:21	1
Toluene	0.17	U	1.0	0.17	ug/L			08/23/15 11:21	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/23/15 11:21	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 11:21	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/23/15 11:21	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/23/15 11:21	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/23/15 11:21	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/23/15 11:21	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/23/15 11:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/23/15 11:21*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/23/15 11:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*08/23/15 11:21*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/23/15 11:21*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/23/15 11:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*		*08/23/15 11:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 18:49	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 18:49	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 18:49	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/19/15 14:30	08/26/15 18:49	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/19/15 14:30	08/26/15 18:49	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/19/15 14:30	08/26/15 18:49	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		08/19/15 14:30	08/26/15 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*73*		*10 - 120*	*08/19/15 14:30*	*08/26/15 18:49*	*1*
2-Fluorobiphenyl (Surr)	*56*		*29 - 120*	*08/19/15 14:30*	*08/26/15 18:49*	*1*
Nitrobenzene-d5	*53*		*27 - 120*	*08/19/15 14:30*	*08/26/15 18:49*	*1*
Terphenyl-d14	*89*		*13 - 120*	*08/19/15 14:30*	*08/26/15 18:49*	*1*
2-Fluorophenol	*42*		*10 - 120*	*08/19/15 14:30*	*08/26/15 18:49*	*1*
Phenol-d5	*31*		*10 - 120*	*08/19/15 14:30*	*08/26/15 18:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 00:37	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/19/15 17:49	08/21/15 00:37	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/19/15 17:49	08/21/15 00:37	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/19/15 17:49	08/21/15 00:37	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/19/15 17:49	08/21/15 00:37	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/19/15 17:49	08/21/15 00:37	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/19/15 17:49	08/21/15 00:37	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/19/15 17:49	08/21/15 00:37	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/19/15 17:49	08/21/15 00:37	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: OB-2-081215
Date Collected: 08/12/15 12:55
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 00:37	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 00:37	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/19/15 17:49	08/21/15 00:37	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/19/15 17:49	08/21/15 00:37	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 00:37	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/19/15 17:49	08/21/15 00:37	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/19/15 17:49	08/21/15 00:37	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/19/15 17:49	08/21/15 00:37	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/19/15 17:49	08/21/15 00:37	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/19/15 17:49	08/21/15 00:37	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/19/15 17:49	08/21/15 00:37	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/19/15 17:49	08/21/15 00:37	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/19/15 17:49	08/21/15 00:37	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/19/15 17:49	08/21/15 00:37	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 00:37	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/19/15 17:49	08/21/15 00:37	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/19/15 17:49	08/21/15 00:37	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/19/15 17:49	08/21/15 00:37	1
Acetophenone	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 00:37	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/19/15 17:49	08/21/15 00:37	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/19/15 17:49	08/21/15 00:37	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/19/15 17:49	08/21/15 00:37	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/19/15 17:49	08/21/15 00:37	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 00:37	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 00:37	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 00:37	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/19/15 17:49	08/21/15 00:37	1
Carbazole	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 00:37	1
Caprolactam	2.4	U	10	2.4	ug/L		08/19/15 17:49	08/21/15 00:37	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/19/15 17:49	08/21/15 00:37	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/19/15 17:49	08/21/15 00:37	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/19/15 17:49	08/21/15 00:37	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/19/15 17:49	08/21/15 00:37	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 00:37	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 00:37	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 00:37	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 00:37	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/19/15 17:49	08/21/15 00:37	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/19/15 17:49	08/21/15 00:37	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/19/15 17:49	08/21/15 00:37	1
Isophorone	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 00:37	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/19/15 17:49	08/21/15 00:37	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/19/15 17:49	08/21/15 00:37	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/19/15 17:49	08/21/15 00:37	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/19/15 17:49	08/21/15 00:37	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/19/15 17:49	08/21/15 00:37	1
Phenol	1.5	U	10	1.5	ug/L		08/19/15 17:49	08/21/15 00:37	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/19/15 17:49	08/21/15 00:37	1
Diphenyl	2.2	U	10	2.2	ug/L		08/19/15 17:49	08/21/15 00:37	1

Client Sample ID: OB-2-081215
Date Collected: 08/12/15 12:55
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 00:37	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 00:37	1
Atrazine	2.9	U	10	2.9	ug/L		08/19/15 17:49	08/21/15 00:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
n-Hexadecanoic acid	*6.8*	*J N*	*ug/L*		*7.95*	*57-10-3*	*08/19/15 17:49*	*08/21/15 00:37*	*1*
Octadecanoic acid	*5.5*	*J N*	*ug/L*		*8.59*	*57-11-4*	*08/19/15 17:49*	*08/21/15 00:37*	*1*
Hexagol	*16*	*J N*	*ug/L*		*11.16*	*2615-15-8*	*08/19/15 17:49*	*08/21/15 00:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*105*		*10 - 120*	*08/19/15 17:49*	*08/21/15 00:37*	*1*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*	*08/19/15 17:49*	*08/21/15 00:37*	*1*
2-Fluorophenol (Surr)	*42*		*10 - 120*	*08/19/15 17:49*	*08/21/15 00:37*	*1*
Nitrobenzene-d5 (Surr)	*73*		*27 - 120*	*08/19/15 17:49*	*08/21/15 00:37*	*1*
Phenol-d5 (Surr)	*27*		*10 - 120*	*08/19/15 17:49*	*08/21/15 00:37*	*1*
Terphenyl-d14 (Surr)	*85*		*13 - 120*	*08/19/15 17:49*	*08/21/15 00:37*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 15:54	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 16:18	09/01/15 15:54	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 16:18	09/01/15 15:54	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 16:18	09/01/15 15:54	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 16:18	09/01/15 15:54	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 16:18	09/01/15 15:54	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 16:18	09/01/15 15:54	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*55*		*10 - 150*	*08/31/15 16:18*	*09/01/15 15:54*	*1*
Tetrachloro-m-xylene	*37*		*10 - 150*	*08/31/15 16:18*	*09/01/15 15:54*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.18**		1.00	0.70	mg/L			08/25/15 17:41	1
Sulfate	**10.1**		1.00	0.60	mg/L			08/25/15 17:41	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.046**	**B**	0.020	0.0096	mg/L		08/26/15 09:10	08/26/15 16:54	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:48	1
Arsenic	**0.0012**	**J B**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:48	1
Barium	**0.0052**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:48	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:48	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/18/15 09:34	08/24/15 17:48	1
Calcium	**12.1**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 17:48	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:48	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:48	1
Copper	**0.0020**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:48	1
Iron	**0.12**		0.025	0.010	mg/L		08/18/15 09:34	08/24/15 17:48	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/18/15 09:34	08/24/15 17:48	1

Client Sample ID: OB-2-081215

Date Collected: 08/12/15 12:55
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-3

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	**4.5**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 17:48	1
Manganese	**0.0054**	**B**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:48	1
Nickel	**0.00070**	**J**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:48	1
Potassium	**1.2**		1.0	0.13	mg/L		08/18/15 09:34	08/19/15 15:11	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/18/15 09:34	08/24/15 17:48	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/19/15 15:11	1
Sodium	**3.6**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 17:48	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/18/15 09:34	08/24/15 17:48	1
Vanadium	**0.0015**	**J B**	0.0020	0.00010	mg/L		08/18/15 09:34	08/19/15 15:11	1
Zinc	0.010	U	0.025	0.010	mg/L		08/18/15 09:34	08/24/15 17:48	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/19/15 08:39	08/20/15 01:49	1
Antimony	**0.00064**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:49	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:49	1
Barium	**0.0054**		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 19:50	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 19:50	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:39	08/20/15 01:49	1
Calcium	**12.8**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 13:27	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:49	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 13:27	1
Copper	**0.0013**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:49	1
Iron	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/20/15 01:49	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:49	1
Magnesium	**4.6**		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 19:50	1
Manganese	**0.00081**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:49	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:49	1
Potassium	**1.3**		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 01:49	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/20/15 19:50	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:49	1
Sodium	**3.9**		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 19:50	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:49	1
Vanadium	**0.0018**	**J B**	0.0020	0.00010	mg/L		08/19/15 08:39	08/20/15 01:49	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/20/15 19:50	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/25/15 12:34	08/25/15 19:20	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 16:30	08/19/15 21:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/15/15 14:59	08/17/15 11:40	1
Bicarbonate Alkalinity as CaCO3	**37.6**		10.0	5.0	mg/L			08/15/15 16:33	1
Total Alkalinity as CaCO3	**37.6**		10.0	5.0	mg/L			08/15/15 16:33	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: SC-2-081215
Date Collected: 08/12/15 14:25
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/21/15 18:07	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/21/15 18:07	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/21/15 18:07	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/21/15 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/21/15 18:07*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*08/21/15 18:07*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/21/15 18:07*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/21/15 18:07*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 11:48	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/23/15 11:48	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 11:48	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 11:48	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/23/15 11:48	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/23/15 11:48	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/23/15 11:48	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/23/15 11:48	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/23/15 11:48	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/23/15 11:48	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 11:48	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/23/15 11:48	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/23/15 11:48	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/23/15 11:48	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/23/15 11:48	1
Acetone	2.7	U	25	2.7	ug/L			08/23/15 11:48	1
Benzene	0.20	U	1.0	0.20	ug/L			08/23/15 11:48	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/23/15 11:48	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/23/15 11:48	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/23/15 11:48	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/23/15 11:48	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 11:48	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/23/15 11:48	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/23/15 11:48	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/23/15 11:48	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/23/15 11:48	1
cis-1,2-Dichloroethene	0.21	U *	1.0	0.21	ug/L			08/23/15 11:48	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 11:48	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/23/15 11:48	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/23/15 11:48	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/23/15 11:48	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/23/15 11:48	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/23/15 11:48	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/23/15 11:48	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/23/15 11:48	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/23/15 11:48	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/23/15 11:48	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: SC-2-081215
Date Collected: 08/12/15 14:25
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.23	J	5.0	0.22	ug/L			08/23/15 11:48	1
Styrene	0.28	U	1.0	0.28	ug/L			08/23/15 11:48	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/23/15 11:48	1
Toluene	0.17	U	1.0	0.17	ug/L			08/23/15 11:48	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/23/15 11:48	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 11:48	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/23/15 11:48	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/23/15 11:48	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/23/15 11:48	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/23/15 11:48	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/23/15 11:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/23/15 11:48*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/23/15 11:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/23/15 11:48*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/23/15 11:48*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/23/15 11:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*08/23/15 11:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 19:15	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 19:15	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 19:15	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/19/15 14:30	08/26/15 19:15	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/19/15 14:30	08/26/15 19:15	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/19/15 14:30	08/26/15 19:15	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		08/19/15 14:30	08/26/15 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*78*		*10 - 120*	*08/19/15 14:30*	*08/26/15 19:15*	*1*
2-Fluorobiphenyl (Surr)	*68*		*29 - 120*	*08/19/15 14:30*	*08/26/15 19:15*	*1*
Nitrobenzene-d5	*64*		*27 - 120*	*08/19/15 14:30*	*08/26/15 19:15*	*1*
Terphenyl-d14	*88*		*13 - 120*	*08/19/15 14:30*	*08/26/15 19:15*	*1*
2-Fluorophenol	*50*		*10 - 120*	*08/19/15 14:30*	*08/26/15 19:15*	*1*
Phenol-d5	*35*		*10 - 120*	*08/19/15 14:30*	*08/26/15 19:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 00:14	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/19/15 17:49	08/21/15 00:14	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/19/15 17:49	08/21/15 00:14	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/19/15 17:49	08/21/15 00:14	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/19/15 17:49	08/21/15 00:14	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/19/15 17:49	08/21/15 00:14	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/19/15 17:49	08/21/15 00:14	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/19/15 17:49	08/21/15 00:14	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/19/15 17:49	08/21/15 00:14	1

Client Sample ID: SC-2-081215
Date Collected: 08/12/15 14:25
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 00:14	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 00:14	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/19/15 17:49	08/21/15 00:14	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/19/15 17:49	08/21/15 00:14	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 00:14	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/19/15 17:49	08/21/15 00:14	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/19/15 17:49	08/21/15 00:14	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/19/15 17:49	08/21/15 00:14	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/19/15 17:49	08/21/15 00:14	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/19/15 17:49	08/21/15 00:14	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/19/15 17:49	08/21/15 00:14	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/19/15 17:49	08/21/15 00:14	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/19/15 17:49	08/21/15 00:14	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/19/15 17:49	08/21/15 00:14	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 00:14	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/19/15 17:49	08/21/15 00:14	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/19/15 17:49	08/21/15 00:14	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/19/15 17:49	08/21/15 00:14	1
Acetophenone	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 00:14	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/19/15 17:49	08/21/15 00:14	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/19/15 17:49	08/21/15 00:14	1
Benzo[g,h,i]perylene	**0.81**	**J B**	2.0	0.62	ug/L		08/19/15 17:49	08/21/15 00:14	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/19/15 17:49	08/21/15 00:14	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 00:14	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 00:14	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 00:14	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/19/15 17:49	08/21/15 00:14	1
Carbazole	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 00:14	1
Caprolactam	2.4	U	10	2.4	ug/L		08/19/15 17:49	08/21/15 00:14	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/19/15 17:49	08/21/15 00:14	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/19/15 17:49	08/21/15 00:14	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/19/15 17:49	08/21/15 00:14	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/19/15 17:49	08/21/15 00:14	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 00:14	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 00:14	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 00:14	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 00:14	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/19/15 17:49	08/21/15 00:14	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/19/15 17:49	08/21/15 00:14	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/19/15 17:49	08/21/15 00:14	1
Isophorone	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 00:14	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/19/15 17:49	08/21/15 00:14	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/19/15 17:49	08/21/15 00:14	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/19/15 17:49	08/21/15 00:14	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/19/15 17:49	08/21/15 00:14	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/19/15 17:49	08/21/15 00:14	1
Phenol	**3.1**	**J**	10	1.5	ug/L		08/19/15 17:49	08/21/15 00:14	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/19/15 17:49	08/21/15 00:14	1
Diphenyl	2.2	U	10	2.2	ug/L		08/19/15 17:49	08/21/15 00:14	1

Client Sample ID: SC-2-081215

Date Collected: 08/12/15 14:25
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 00:14	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 00:14	1
Atrazine	2.9	U	10	2.9	ug/L		08/19/15 17:49	08/21/15 00:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzocycloheptatriene	*3.6*	*J N*	*ug/L*		*5.60*	*264-09-5*	*08/19/15 17:49*	*08/21/15 00:14*	*1*
4-Methoxybenzhydrazide	*5.6*	*J N*	*ug/L*		*7.30*	*3290-99-1*	*08/19/15 17:49*	*08/21/15 00:14*	*1*
n-Hexadecanoic acid	*4.8*	*J N*	*ug/L*		*7.95*	*57-10-3*	*08/19/15 17:49*	*08/21/15 00:14*	*1*
Octadec-9-enoic acid	*4.6*	*J N*	*ug/L*		*8.52*	*1000190-13-7*	*08/19/15 17:49*	*08/21/15 00:14*	*1*
Octadecanoic acid	*4.3*	*J N*	*ug/L*		*8.59*	*57-11-4*	*08/19/15 17:49*	*08/21/15 00:14*	*1*
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'-	*8.5*	*J N*	*ug/L*		*9.25*	*366-29-0*	*08/19/15 17:49*	*08/21/15 00:14*	*1*
Benzo[b]triphenylene	*25*	*J N*	*ug/L*		*11.80*	*215-58-7*	*08/19/15 17:49*	*08/21/15 00:14*	*1*
15-Crown-5	*62*	*J N*	*ug/L*		*13.44*	*33100-27-5*	*08/19/15 17:49*	*08/21/15 00:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*99*		*10 - 120*	*08/19/15 17:49*	*08/21/15 00:14*	*1*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*	*08/19/15 17:49*	*08/21/15 00:14*	*1*
2-Fluorophenol (Surr)	*48*		*10 - 120*	*08/19/15 17:49*	*08/21/15 00:14*	*1*
Nitrobenzene-d5 (Surr)	*74*		*27 - 120*	*08/19/15 17:49*	*08/21/15 00:14*	*1*
Phenol-d5 (Surr)	*32*		*10 - 120*	*08/19/15 17:49*	*08/21/15 00:14*	*1*
Terphenyl-d14 (Surr)	*74*		*13 - 120*	*08/19/15 17:49*	*08/21/15 00:14*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 16:10	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 16:18	09/01/15 16:10	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 16:18	09/01/15 16:10	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 16:18	09/01/15 16:10	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 16:18	09/01/15 16:10	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 16:18	09/01/15 16:10	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 16:18	09/01/15 16:10	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*53*	*p*	*10 - 150*	*08/31/15 16:18*	*09/01/15 16:10*	*1*
Tetrachloro-m-xylene	*37*		*10 - 150*	*08/31/15 16:18*	*09/01/15 16:10*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.93**		1.00	0.70	mg/L			08/25/15 18:38	1
Sulfate	**27.4**		1.00	0.60	mg/L			08/25/15 18:38	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.088**	**B**	0.020	0.0096	mg/L		08/26/15 09:10	08/26/15 16:59	1
Antimony	**0.00077**	**J B**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:53	1
Arsenic	**0.0021**	**B**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:53	1
Barium	**0.032**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:53	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:53	1

Client Sample ID: SC-2-081215

Date Collected: 08/12/15 14:25
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-4

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/18/15 09:34	08/24/15 17:53	1
Calcium	**65.7**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 17:53	1
Chromium	**0.00052**	**J**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:53	1
Cobalt	**0.0019**	**J**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:53	1
Copper	**0.0030**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:53	1
Iron	**0.30**		0.025	0.010	mg/L		08/18/15 09:34	08/24/15 17:53	1
Lead	**0.00058**	**J**	0.0020	0.00020	mg/L		08/18/15 09:34	08/24/15 17:53	1
Magnesium	**15.2**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 17:53	1
Manganese	**0.21**	**B**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:53	1
Nickel	**0.0030**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:53	1
Potassium	**2.7**		1.0	0.13	mg/L		08/18/15 09:34	08/19/15 15:17	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/18/15 09:34	08/24/15 17:53	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/19/15 15:17	1
Sodium	**7.3**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 17:53	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/18/15 09:34	08/24/15 17:53	1
Vanadium	**0.0015**	**J B**	0.0020	0.00010	mg/L		08/18/15 09:34	08/19/15 15:17	1
Zinc	**0.030**		0.025	0.010	mg/L		08/18/15 09:34	08/24/15 17:53	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/19/15 08:39	08/20/15 02:06	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 02:06	1
Arsenic	**0.0046**		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 02:06	1
Barium	**0.040**		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 20:06	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 13:43	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:39	08/20/15 02:06	1
Calcium	**452**		50.0	6.3	mg/L		08/19/15 08:39	08/21/15 15:28	50
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 02:06	1
Cobalt	**0.00083**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 13:43	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 02:06	1
Iron	**13.3**		0.025	0.010	mg/L		08/19/15 08:39	08/20/15 02:06	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 02:06	1
Magnesium	**123**		50.0	6.3	mg/L		08/19/15 08:39	08/21/15 15:28	50
Manganese	**1.1**		0.10	0.025	mg/L		08/19/15 08:39	08/21/15 15:28	50
Nickel	**0.00067**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 02:06	1
Potassium	**6.9**		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 02:06	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/20/15 20:06	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 02:06	1
Sodium	**64.1**		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 20:06	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 02:06	1
Vanadium	**0.0016**	**J B**	0.0020	0.00010	mg/L		08/19/15 08:39	08/20/15 02:06	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/20/15 20:06	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/25/15 12:34	08/25/15 19:39	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 16:30	08/19/15 21:41	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: SC-2-081215
Date Collected: 08/12/15 14:25
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/15/15 14:59	08/17/15 11:41	1
Bicarbonate Alkalinity as CaCO3	**208**		10.0	5.0	mg/L			08/15/15 16:38	1
Total Alkalinity as CaCO3	**208**		10.0	5.0	mg/L			08/15/15 16:38	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: RW-13(150-170)-081215
Date Collected: 08/12/15 11:10
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/21/15 18:36	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/21/15 18:36	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/21/15 18:36	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/21/15 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*08/21/15 18:36*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*08/21/15 18:36*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*08/21/15 18:36*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/21/15 18:36*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 12:15	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/23/15 12:15	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 12:15	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 12:15	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/23/15 12:15	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/23/15 12:15	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/23/15 12:15	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/23/15 12:15	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/23/15 12:15	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/23/15 12:15	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 12:15	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/23/15 12:15	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/23/15 12:15	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/23/15 12:15	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/23/15 12:15	1
Acetone	2.7	U	25	2.7	ug/L			08/23/15 12:15	1
Benzene	0.20	U	1.0	0.20	ug/L			08/23/15 12:15	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/23/15 12:15	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/23/15 12:15	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/23/15 12:15	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/23/15 12:15	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 12:15	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/23/15 12:15	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/23/15 12:15	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/23/15 12:15	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/23/15 12:15	1
cis-1,2-Dichloroethene	0.21	U *	1.0	0.21	ug/L			08/23/15 12:15	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 12:15	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/23/15 12:15	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/23/15 12:15	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/23/15 12:15	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/23/15 12:15	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/23/15 12:15	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/23/15 12:15	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/23/15 12:15	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/23/15 12:15	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/23/15 12:15	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: RW-13(150-170)-081215
Date Collected: 08/12/15 11:10
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.34	J	5.0	0.22	ug/L			08/23/15 12:15	1
Styrene	0.28	U	1.0	0.28	ug/L			08/23/15 12:15	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/23/15 12:15	1
Toluene	0.17	U	1.0	0.17	ug/L			08/23/15 12:15	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/23/15 12:15	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 12:15	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/23/15 12:15	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/23/15 12:15	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/23/15 12:15	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/23/15 12:15	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/23/15 12:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/23/15 12:15*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/23/15 12:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/23/15 12:15*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/23/15 12:15*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/23/15 12:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*08/23/15 12:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 19:42	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 19:42	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 19:42	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/19/15 14:30	08/26/15 19:42	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/19/15 14:30	08/26/15 19:42	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/19/15 14:30	08/26/15 19:42	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		08/19/15 14:30	08/26/15 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*71*		*10 - 120*	*08/19/15 14:30*	*08/26/15 19:42*	*1*
2-Fluorobiphenyl (Surr)	*69*		*29 - 120*	*08/19/15 14:30*	*08/26/15 19:42*	*1*
Nitrobenzene-d5	*60*		*27 - 120*	*08/19/15 14:30*	*08/26/15 19:42*	*1*
Terphenyl-d14	*84*		*13 - 120*	*08/19/15 14:30*	*08/26/15 19:42*	*1*
2-Fluorophenol	*48*		*10 - 120*	*08/19/15 14:30*	*08/26/15 19:42*	*1*
Phenol-d5	*34*		*10 - 120*	*08/19/15 14:30*	*08/26/15 19:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 15:20	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/19/15 17:49	08/21/15 15:20	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/19/15 17:49	08/21/15 15:20	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/19/15 17:49	08/21/15 15:20	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/19/15 17:49	08/21/15 15:20	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/19/15 17:49	08/21/15 15:20	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/19/15 17:49	08/21/15 15:20	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/19/15 17:49	08/21/15 15:20	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/19/15 17:49	08/21/15 15:20	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: RW-13(150-170)-081215
Date Collected: 08/12/15 11:10
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 15:20	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 15:20	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/19/15 17:49	08/21/15 15:20	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/19/15 17:49	08/21/15 15:20	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 15:20	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/19/15 17:49	08/21/15 15:20	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/19/15 17:49	08/21/15 15:20	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/19/15 17:49	08/21/15 15:20	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/19/15 17:49	08/21/15 15:20	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/19/15 17:49	08/21/15 15:20	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/19/15 17:49	08/21/15 15:20	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/19/15 17:49	08/21/15 15:20	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/19/15 17:49	08/21/15 15:20	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/19/15 17:49	08/21/15 15:20	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 15:20	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/19/15 17:49	08/21/15 15:20	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/19/15 17:49	08/21/15 15:20	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/19/15 17:49	08/21/15 15:20	1
Acetophenone	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 15:20	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/19/15 17:49	08/21/15 15:20	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/19/15 17:49	08/21/15 15:20	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/19/15 17:49	08/21/15 15:20	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/19/15 17:49	08/21/15 15:20	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 15:20	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 15:20	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 15:20	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/19/15 17:49	08/21/15 15:20	1
Carbazole	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 15:20	1
Caprolactam	2.4	U	10	2.4	ug/L		08/19/15 17:49	08/21/15 15:20	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/19/15 17:49	08/21/15 15:20	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/19/15 17:49	08/21/15 15:20	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/19/15 17:49	08/21/15 15:20	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/19/15 17:49	08/21/15 15:20	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 15:20	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 15:20	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 15:20	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 15:20	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/19/15 17:49	08/21/15 15:20	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/19/15 17:49	08/21/15 15:20	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/19/15 17:49	08/21/15 15:20	1
Isophorone	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 15:20	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/19/15 17:49	08/21/15 15:20	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/19/15 17:49	08/21/15 15:20	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/19/15 17:49	08/21/15 15:20	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/19/15 17:49	08/21/15 15:20	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/19/15 17:49	08/21/15 15:20	1
Phenol	1.5	U	10	1.5	ug/L		08/19/15 17:49	08/21/15 15:20	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/19/15 17:49	08/21/15 15:20	1
Diphenyl	2.2	U	10	2.2	ug/L		08/19/15 17:49	08/21/15 15:20	1

Client Sample ID: RW-13(150-170)-081215
Date Collected: 08/12/15 11:10
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 15:20	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 15:20	1
Atrazine	2.9	U	10	2.9	ug/L		08/19/15 17:49	08/21/15 15:20	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/19/15 17:49*	*08/21/15 15:20*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*107*		*10 - 120*	*08/19/15 17:49*	*08/21/15 15:20*	*1*
2-Fluorobiphenyl (Surr)	*84*		*29 - 120*	*08/19/15 17:49*	*08/21/15 15:20*	*1*
2-Fluorophenol (Surr)	*46*		*10 - 120*	*08/19/15 17:49*	*08/21/15 15:20*	*1*
Nitrobenzene-d5 (Surr)	*77*		*27 - 120*	*08/19/15 17:49*	*08/21/15 15:20*	*1*
Phenol-d5 (Surr)	*30*		*10 - 120*	*08/19/15 17:49*	*08/21/15 15:20*	*1*
Terphenyl-d14 (Surr)	*85*		*13 - 120*	*08/19/15 17:49*	*08/21/15 15:20*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 16:25	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 16:18	09/01/15 16:25	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 16:18	09/01/15 16:25	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 16:18	09/01/15 16:25	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 16:18	09/01/15 16:25	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 16:18	09/01/15 16:25	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 16:18	09/01/15 16:25	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*55*		*10 - 150*	*08/31/15 16:18*	*09/01/15 16:25*	*1*
Tetrachloro-m-xylene	*36*		*10 - 150*	*08/31/15 16:18*	*09/01/15 16:25*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.66**		1.00	0.70	mg/L			08/25/15 19:36	1
Sulfate	**16.5**		1.00	0.60	mg/L			08/25/15 19:36	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.53**	**B**	0.020	0.0096	mg/L		08/26/15 09:10	08/26/15 17:14	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:59	1
Arsenic	**0.0046**	**B**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:59	1
Barium	**0.031**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:59	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:59	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/18/15 09:34	08/24/15 17:59	1
Calcium	**31.9**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 17:59	1
Chromium	**0.00090**	**J**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:59	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:59	1
Copper	**0.00074**	**J**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:59	1
Iron	**0.65**		0.025	0.010	mg/L		08/18/15 09:34	08/24/15 17:59	1
Lead	**0.00033**	**J**	0.0020	0.00020	mg/L		08/18/15 09:34	08/24/15 17:59	1
Magnesium	**6.8**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 17:59	1
Manganese	**0.092**	**B**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:59	1

Client Sample ID: RW-13(150-170)-081215
Date Collected: 08/12/15 11:10
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-5
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0084**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 17:59	1
Potassium	**1.8**		1.0	0.13	mg/L		08/18/15 09:34	08/19/15 15:23	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/18/15 09:34	08/24/15 17:59	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/19/15 15:23	1
Sodium	**9.9**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 17:59	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/18/15 09:34	08/24/15 17:59	1
Vanadium	**0.0020**	**B**	0.0020	0.00010	mg/L		08/18/15 09:34	08/19/15 15:23	1
Zinc	0.010	U	0.025	0.010	mg/L		08/18/15 09:34	08/24/15 17:59	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/19/15 08:39	08/20/15 02:12	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 02:12	1
Arsenic	**0.0020**		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 02:12	1
Barium	**0.36**		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 20:11	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 20:11	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:39	08/20/15 02:12	1
Calcium	**92.9**	**J**	100	12.5	mg/L		08/19/15 08:39	08/21/15 15:34	100
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 02:12	1
Cobalt	0.050	U	0.20	0.050	mg/L		08/19/15 08:39	08/21/15 15:34	100
Copper	**0.00084**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 02:12	1
Iron	**2.7**		0.025	0.010	mg/L		08/19/15 08:39	08/20/15 02:12	1
Lead	**0.00031**	**J**	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 02:12	1
Magnesium	**24.5**	**J**	100	12.5	mg/L		08/19/15 08:39	08/21/15 15:34	100
Manganese	**0.22**		0.20	0.050	mg/L		08/19/15 08:39	08/21/15 15:34	100
Nickel	**0.00093**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 02:12	1
Potassium	**9.3**		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 02:12	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/20/15 20:11	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 02:12	1
Sodium	**153**		100	12.5	mg/L		08/19/15 08:39	08/21/15 15:34	100
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 02:12	1
Vanadium	**0.0020**	**B**	0.0020	0.00010	mg/L		08/19/15 08:39	08/20/15 02:12	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/20/15 20:11	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/25/15 12:34	08/25/15 19:42	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 21:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/15/15 14:59	08/17/15 11:42	1
Bicarbonate Alkalinity as CaCO3	**96.4**		10.0	5.0	mg/L			08/15/15 16:44	1
Total Alkalinity as CaCO3	**96.4**		10.0	5.0	mg/L			08/15/15 16:44	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: OB-29-081215
Date Collected: 08/12/15 15:30
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/21/15 19:04	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/21/15 19:04	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/21/15 19:04	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/21/15 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*08/21/15 19:04*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/21/15 19:04*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 130*		*08/21/15 19:04*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/21/15 19:04*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 12:42	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/23/15 12:42	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 12:42	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 12:42	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/23/15 12:42	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/23/15 12:42	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/23/15 12:42	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/23/15 12:42	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/23/15 12:42	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/23/15 12:42	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 12:42	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/23/15 12:42	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/23/15 12:42	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/23/15 12:42	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/23/15 12:42	1
Acetone	2.7	U	25	2.7	ug/L			08/23/15 12:42	1
Benzene	0.20	U	1.0	0.20	ug/L			08/23/15 12:42	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/23/15 12:42	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/23/15 12:42	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/23/15 12:42	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/23/15 12:42	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 12:42	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/23/15 12:42	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/23/15 12:42	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/23/15 12:42	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/23/15 12:42	1
cis-1,2-Dichloroethene	0.21	U *	1.0	0.21	ug/L			08/23/15 12:42	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 12:42	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/23/15 12:42	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/23/15 12:42	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/23/15 12:42	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/23/15 12:42	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/23/15 12:42	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/23/15 12:42	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/23/15 12:42	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/23/15 12:42	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/23/15 12:42	1

Client Sample ID: OB-29-081215
Date Collected: 08/12/15 15:30
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.28	J	5.0	0.22	ug/L			08/23/15 12:42	1
Styrene	0.28	U	1.0	0.28	ug/L			08/23/15 12:42	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/23/15 12:42	1
Toluene	0.17	U	1.0	0.17	ug/L			08/23/15 12:42	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/23/15 12:42	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 12:42	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/23/15 12:42	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/23/15 12:42	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/23/15 12:42	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/23/15 12:42	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/23/15 12:42	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/23/15 12:42*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/23/15 12:42*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/23/15 12:42*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/23/15 12:42*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/23/15 12:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*		*08/23/15 12:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 20:09	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 20:09	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 20:09	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/19/15 14:30	08/26/15 20:09	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/19/15 14:30	08/26/15 20:09	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/19/15 14:30	08/26/15 20:09	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		08/19/15 14:30	08/26/15 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*81*		*10 - 120*	*08/19/15 14:30*	*08/26/15 20:09*	*1*
2-Fluorobiphenyl (Surr)	*73*		*29 - 120*	*08/19/15 14:30*	*08/26/15 20:09*	*1*
Nitrobenzene-d5	*66*		*27 - 120*	*08/19/15 14:30*	*08/26/15 20:09*	*1*
Terphenyl-d14	*91*		*13 - 120*	*08/19/15 14:30*	*08/26/15 20:09*	*1*
2-Fluorophenol	*52*		*10 - 120*	*08/19/15 14:30*	*08/26/15 20:09*	*1*
Phenol-d5	*35*		*10 - 120*	*08/19/15 14:30*	*08/26/15 20:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 15:43	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/19/15 17:49	08/21/15 15:43	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/19/15 17:49	08/21/15 15:43	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/19/15 17:49	08/21/15 15:43	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/19/15 17:49	08/21/15 15:43	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/19/15 17:49	08/21/15 15:43	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/19/15 17:49	08/21/15 15:43	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/19/15 17:49	08/21/15 15:43	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/19/15 17:49	08/21/15 15:43	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: OB-29-081215
Date Collected: 08/12/15 15:30
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 15:43	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 15:43	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/19/15 17:49	08/21/15 15:43	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/19/15 17:49	08/21/15 15:43	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 15:43	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/19/15 17:49	08/21/15 15:43	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/19/15 17:49	08/21/15 15:43	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/19/15 17:49	08/21/15 15:43	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/19/15 17:49	08/21/15 15:43	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/19/15 17:49	08/21/15 15:43	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/19/15 17:49	08/21/15 15:43	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/19/15 17:49	08/21/15 15:43	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/19/15 17:49	08/21/15 15:43	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/19/15 17:49	08/21/15 15:43	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 15:43	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/19/15 17:49	08/21/15 15:43	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/19/15 17:49	08/21/15 15:43	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/19/15 17:49	08/21/15 15:43	1
Acetophenone	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 15:43	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/19/15 17:49	08/21/15 15:43	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/19/15 17:49	08/21/15 15:43	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/19/15 17:49	08/21/15 15:43	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/19/15 17:49	08/21/15 15:43	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 15:43	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 15:43	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 15:43	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/19/15 17:49	08/21/15 15:43	1
Carbazole	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 15:43	1
Caprolactam	2.4	U	10	2.4	ug/L		08/19/15 17:49	08/21/15 15:43	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/19/15 17:49	08/21/15 15:43	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/19/15 17:49	08/21/15 15:43	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/19/15 17:49	08/21/15 15:43	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/19/15 17:49	08/21/15 15:43	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 15:43	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 15:43	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 15:43	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 15:43	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/19/15 17:49	08/21/15 15:43	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/19/15 17:49	08/21/15 15:43	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/19/15 17:49	08/21/15 15:43	1
Isophorone	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 15:43	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/19/15 17:49	08/21/15 15:43	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/19/15 17:49	08/21/15 15:43	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/19/15 17:49	08/21/15 15:43	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/19/15 17:49	08/21/15 15:43	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/19/15 17:49	08/21/15 15:43	1
Phenol	1.5	U	10	1.5	ug/L		08/19/15 17:49	08/21/15 15:43	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/19/15 17:49	08/21/15 15:43	1
Diphenyl	2.2	U	10	2.2	ug/L		08/19/15 17:49	08/21/15 15:43	1

Client Sample ID: OB-29-081215
Date Collected: 08/12/15 15:30
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 15:43	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 15:43	1
Atrazine	2.9	U	10	2.9	ug/L		08/19/15 17:49	08/21/15 15:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/19/15 17:49*	*08/21/15 15:43*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*102*		*10 - 120*	*08/19/15 17:49*	*08/21/15 15:43*	*1*
2-Fluorobiphenyl (Surr)	*84*		*29 - 120*	*08/19/15 17:49*	*08/21/15 15:43*	*1*
2-Fluorophenol (Surr)	*48*		*10 - 120*	*08/19/15 17:49*	*08/21/15 15:43*	*1*
Nitrobenzene-d5 (Surr)	*78*		*27 - 120*	*08/19/15 17:49*	*08/21/15 15:43*	*1*
Phenol-d5 (Surr)	*30*		*10 - 120*	*08/19/15 17:49*	*08/21/15 15:43*	*1*
Terphenyl-d14 (Surr)	*81*		*13 - 120*	*08/19/15 17:49*	*08/21/15 15:43*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 16:41	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 16:18	09/01/15 16:41	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 16:18	09/01/15 16:41	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 16:18	09/01/15 16:41	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 16:18	09/01/15 16:41	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 16:18	09/01/15 16:41	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 16:18	09/01/15 16:41	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*59*	*p*	*10 - 150*	*08/31/15 16:18*	*09/01/15 16:41*	*1*
Tetrachloro-m-xylene	*41*	*p*	*10 - 150*	*08/31/15 16:18*	*09/01/15 16:41*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.22**		1.00	0.70	mg/L			08/25/15 19:55	1
Sulfate	**5.38**		1.00	0.60	mg/L			08/25/15 19:55	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1.7**	**B**	0.020	0.0096	mg/L		08/26/15 09:10	08/26/15 17:19	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:04	1
Arsenic	**0.0015**	**J B**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:04	1
Barium	**0.013**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:04	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:04	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/18/15 09:34	08/24/15 18:04	1
Calcium	**13.9**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 18:04	1
Chromium	**0.0018**	**J**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:04	1
Cobalt	**0.00075**	**J**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:04	1
Copper	**0.0031**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:04	1
Iron	**1.2**		0.025	0.010	mg/L		08/18/15 09:34	08/24/15 18:04	1
Lead	**0.00054**	**J**	0.0020	0.00020	mg/L		08/18/15 09:34	08/24/15 18:04	1
Magnesium	**4.1**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 18:04	1
Manganese	**0.036**	**B**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:04	1

Client Sample ID: OB-29-081215
Date Collected: 08/12/15 15:30
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-6
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0022**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:04	1
Potassium	**1.3**		1.0	0.13	mg/L		08/18/15 09:34	08/19/15 15:28	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/18/15 09:34	08/24/15 18:04	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/19/15 15:28	1
Sodium	**3.2**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 18:04	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/18/15 09:34	08/24/15 18:04	1
Vanadium	**0.0028**	**B**	0.0020	0.00010	mg/L		08/18/15 09:34	08/19/15 15:28	1
Zinc	0.010	U	0.025	0.010	mg/L		08/18/15 09:34	08/24/15 18:04	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.84**		0.020	0.0096	mg/L		08/19/15 08:41	08/20/15 02:17	1
Antimony	**0.00073**	**J**	0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 02:17	1
Arsenic	**0.012**		0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 02:17	1
Barium	**0.015**		0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 20:16	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 20:16	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:41	08/20/15 02:17	1
Calcium	**47.4**		1.0	0.13	mg/L		08/19/15 08:41	08/21/15 13:53	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 02:17	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:41	08/21/15 13:53	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 02:17	1
Iron	**0.018**	**J**	0.025	0.010	mg/L		08/19/15 08:41	08/20/15 02:17	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:41	08/20/15 02:17	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/19/15 08:41	08/20/15 20:16	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 02:17	1
Nickel	**0.00097**	**J**	0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 02:17	1
Potassium	**10.8**		1.0	0.13	mg/L		08/19/15 08:41	08/20/15 02:17	1
Selenium	**0.0038**		0.0020	0.00060	mg/L		08/19/15 08:41	08/20/15 20:16	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 02:17	1
Sodium	**131**		20.0	2.5	mg/L		08/19/15 08:41	08/21/15 16:10	20
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:41	08/20/15 02:17	1
Vanadium	**0.015**	**B**	0.0020	0.00010	mg/L		08/19/15 08:41	08/20/15 02:17	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:41	08/20/15 20:16	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/25/15 12:34	08/25/15 19:44	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 21:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/15/15 14:59	08/17/15 11:43	1
Bicarbonate Alkalinity as CaCO3	**44.6**		10.0	5.0	mg/L			08/15/15 16:49	1
Total Alkalinity as CaCO3	**44.6**		10.0	5.0	mg/L			08/15/15 16:49	1

Client Sample ID: RW-12(130-140)-081215
Date Collected: 08/12/15 14:50
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/21/15 19:33	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/21/15 19:33	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/21/15 19:33	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/21/15 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/21/15 19:33*	*1*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*08/21/15 19:33*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/21/15 19:33*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/21/15 19:33*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 09:59	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/23/15 09:59	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 09:59	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 09:59	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/23/15 09:59	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/23/15 09:59	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/23/15 09:59	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/23/15 09:59	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/23/15 09:59	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/23/15 09:59	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 09:59	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/23/15 09:59	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/23/15 09:59	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/23/15 09:59	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/23/15 09:59	1
Acetone	2.7	U	25	2.7	ug/L			08/23/15 09:59	1
Benzene	0.20	U	1.0	0.20	ug/L			08/23/15 09:59	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/23/15 09:59	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/23/15 09:59	1
Carbon disulfide	**0.27**	**J**	1.0	0.22	ug/L			08/23/15 09:59	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/23/15 09:59	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 09:59	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/23/15 09:59	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/23/15 09:59	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/23/15 09:59	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/23/15 09:59	1
cis-1,2-Dichloroethene	0.21	U *	1.0	0.21	ug/L			08/23/15 09:59	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 09:59	1
Cyclohexane	**0.66**	**J**	5.0	0.13	ug/L			08/23/15 09:59	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/23/15 09:59	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/23/15 09:59	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/23/15 09:59	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/23/15 09:59	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/23/15 09:59	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/23/15 09:59	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/23/15 09:59	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/23/15 09:59	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: RW-12(130-140)-081215
Date Collected: 08/12/15 14:50
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	J	5.0	0.22	ug/L			08/23/15 09:59	1
Styrene	0.28	U	1.0	0.28	ug/L			08/23/15 09:59	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/23/15 09:59	1
Toluene	0.17	U	1.0	0.17	ug/L			08/23/15 09:59	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/23/15 09:59	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 09:59	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/23/15 09:59	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/23/15 09:59	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/23/15 09:59	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/23/15 09:59	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/23/15 09:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1-Hexanol, 2-ethyl-	*3.1*	*J N*	*ug/L*		*8.31*	*104-76-7*		*08/23/15 09:59*	*1*
3-Hydroxymandelic acid, ethyl ester, di-	*5.4*	*J N*	*ug/L*		*8.84*	*1000071-88-9*		*08/23/15 09:59*	*1*
Unknown	*5.2*	*J*	*ug/L*		*10.81*			*08/23/15 09:59*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/23/15 09:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/23/15 09:59*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/23/15 09:59*	*1*
Toluene-d8 (Surr)	*110*		*70 - 130*		*08/23/15 09:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*08/23/15 09:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 20:35	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 20:35	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 20:35	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/19/15 14:30	08/26/15 20:35	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/19/15 14:30	08/26/15 20:35	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/19/15 14:30	08/26/15 20:35	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		08/19/15 14:30	08/26/15 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*84*		*10 - 120*	*08/19/15 14:30*	*08/26/15 20:35*	*1*
2-Fluorobiphenyl (Surr)	*66*		*29 - 120*	*08/19/15 14:30*	*08/26/15 20:35*	*1*
Nitrobenzene-d5	*61*		*27 - 120*	*08/19/15 14:30*	*08/26/15 20:35*	*1*
Terphenyl-d14	*85*		*13 - 120*	*08/19/15 14:30*	*08/26/15 20:35*	*1*
2-Fluorophenol	*51*		*10 - 120*	*08/19/15 14:30*	*08/26/15 20:35*	*1*
Phenol-d5	*42*		*10 - 120*	*08/19/15 14:30*	*08/26/15 20:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 16:07	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/19/15 17:49	08/21/15 16:07	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/19/15 17:49	08/21/15 16:07	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/19/15 17:49	08/21/15 16:07	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/19/15 17:49	08/21/15 16:07	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/19/15 17:49	08/21/15 16:07	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: RW-12(130-140)-081215
Date Collected: 08/12/15 14:50
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/19/15 17:49	08/21/15 16:07	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/19/15 17:49	08/21/15 16:07	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/19/15 17:49	08/21/15 16:07	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 16:07	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 16:07	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/19/15 17:49	08/21/15 16:07	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/19/15 17:49	08/21/15 16:07	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 16:07	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/19/15 17:49	08/21/15 16:07	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/19/15 17:49	08/21/15 16:07	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/19/15 17:49	08/21/15 16:07	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/19/15 17:49	08/21/15 16:07	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/19/15 17:49	08/21/15 16:07	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/19/15 17:49	08/21/15 16:07	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/19/15 17:49	08/21/15 16:07	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/19/15 17:49	08/21/15 16:07	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/19/15 17:49	08/21/15 16:07	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 16:07	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/19/15 17:49	08/21/15 16:07	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/19/15 17:49	08/21/15 16:07	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/19/15 17:49	08/21/15 16:07	1
Acetophenone	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/21/15 16:07	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/19/15 17:49	08/21/15 16:07	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/19/15 17:49	08/21/15 16:07	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/19/15 17:49	08/21/15 16:07	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/19/15 17:49	08/21/15 16:07	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 16:07	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 16:07	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 16:07	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/19/15 17:49	08/21/15 16:07	1
Carbazole	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 16:07	1
Caprolactam	2.4	U	10	2.4	ug/L		08/19/15 17:49	08/21/15 16:07	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/19/15 17:49	08/21/15 16:07	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/19/15 17:49	08/21/15 16:07	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/19/15 17:49	08/21/15 16:07	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/19/15 17:49	08/21/15 16:07	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 16:07	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 16:07	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 16:07	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/21/15 16:07	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/19/15 17:49	08/21/15 16:07	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/19/15 17:49	08/21/15 16:07	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/19/15 17:49	08/21/15 16:07	1
Isophorone	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/21/15 16:07	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/19/15 17:49	08/21/15 16:07	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/19/15 17:49	08/21/15 16:07	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/19/15 17:49	08/21/15 16:07	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/19/15 17:49	08/21/15 16:07	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/19/15 17:49	08/21/15 16:07	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: RW-12(130-140)-081215
Date Collected: 08/12/15 14:50
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	1.5	U	10	1.5	ug/L		08/19/15 17:49	08/21/15 16:07	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/19/15 17:49	08/21/15 16:07	1
Diphenyl	2.2	U	10	2.2	ug/L		08/19/15 17:49	08/21/15 16:07	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/21/15 16:07	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/21/15 16:07	1
Atrazine	2.9	U	10	2.9	ug/L		08/19/15 17:49	08/21/15 16:07	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethanol, 2-(2-butoxyethoxy)-	*20*	*J N*	*ug/L*		*5.07*	*112-34-5*	*08/19/15 17:49*	*08/21/15 16:07*	*1*
Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]-	*8.2*	*J N*	*ug/L*		*6.16*	*143-22-6*	*08/19/15 17:49*	*08/21/15 16:07*	*1*
Phenol, 4-(1,1,3,3-tetramethylbutyl)-	*18*	*J N*	*ug/L*		*7.11*	*140-66-9*	*08/19/15 17:49*	*08/21/15 16:07*	*1*
n-Hexadecanoic acid	*19*	*J N*	*ug/L*		*7.95*	*57-10-3*	*08/19/15 17:49*	*08/21/15 16:07*	*1*
Diethylene glycol monododecyl ether	*16*	*J N*	*ug/L*		*8.13*	*3055-93-4*	*08/19/15 17:49*	*08/21/15 16:07*	*1*
Octadecanoic acid	*9.8*	*J N*	*ug/L*		*8.59*	*57-11-4*	*08/19/15 17:49*	*08/21/15 16:07*	*1*
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	*14*	*J N*	*ug/L*		*9.47*	*1740-19-8*	*08/19/15 17:49*	*08/21/15 16:07*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*99*		*10 - 120*	*08/19/15 17:49*	*08/21/15 16:07*	*1*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*	*08/19/15 17:49*	*08/21/15 16:07*	*1*
2-Fluorophenol (Surr)	*45*		*10 - 120*	*08/19/15 17:49*	*08/21/15 16:07*	*1*
Nitrobenzene-d5 (Surr)	*72*		*27 - 120*	*08/19/15 17:49*	*08/21/15 16:07*	*1*
Phenol-d5 (Surr)	*30*		*10 - 120*	*08/19/15 17:49*	*08/21/15 16:07*	*1*
Terphenyl-d14 (Surr)	*76*		*13 - 120*	*08/19/15 17:49*	*08/21/15 16:07*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 16:57	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 16:18	09/01/15 16:57	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 16:18	09/01/15 16:57	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 16:18	09/01/15 16:57	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 16:18	09/01/15 16:57	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 16:18	09/01/15 16:57	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 16:18	09/01/15 16:57	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*53*		*10 - 150*	*08/31/15 16:18*	*09/01/15 16:57*	*1*
Tetrachloro-m-xylene	*38*	*p*	*10 - 150*	*08/31/15 16:18*	*09/01/15 16:57*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.5**		1.00	0.70	mg/L			08/25/15 20:14	1
Sulfate	**145**		1.00	0.60	mg/L			08/25/15 20:14	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.90**	**B**	0.020	0.0096	mg/L		08/26/15 09:10	08/26/15 17:25	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:09	1
Arsenic	**0.013**	**B**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:09	1

Client Sample ID: RW-12(130-140)-081215
Date Collected: 08/12/15 14:50
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-7
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.015**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:09	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:09	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/18/15 09:34	08/24/15 18:09	1
Calcium	**44.7**		1.0	0.13	mg/L		08/18/15 09:34	08/24/15 18:09	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:09	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:09	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:09	1
Iron	**0.11**		0.025	0.010	mg/L		08/18/15 09:34	08/24/15 18:09	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/18/15 09:34	08/24/15 18:09	1
Magnesium	**0.14**	**J**	1.0	0.13	mg/L		08/18/15 09:34	08/24/15 18:09	1
Manganese	**0.0027**	**B**	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:09	1
Nickel	**0.0024**		0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 18:09	1
Potassium	**10.4**		1.0	0.13	mg/L		08/18/15 09:34	08/19/15 15:34	1
Selenium	**0.0038**		0.0020	0.00060	mg/L		08/18/15 09:34	08/24/15 18:09	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/19/15 15:34	1
Sodium	**98.8**		10.0	1.3	mg/L		08/18/15 09:34	08/25/15 18:33	10
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/18/15 09:34	08/24/15 18:09	1
Vanadium	**0.015**	**B**	0.0020	0.00010	mg/L		08/18/15 09:34	08/19/15 15:34	1
Zinc	0.010	U	0.025	0.010	mg/L		08/18/15 09:34	08/24/15 18:09	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.30**		0.020	0.0096	mg/L		08/19/15 08:41	08/20/15 02:23	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 02:23	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 02:23	1
Barium	**0.0089**		0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 20:21	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 20:21	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:41	08/20/15 02:23	1
Calcium	**14.2**		1.0	0.13	mg/L		08/19/15 08:41	08/21/15 13:58	1
Chromium	**0.00054**	**J**	0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 02:23	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:41	08/21/15 13:58	1
Copper	**0.00074**	**J**	0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 02:23	1
Iron	**0.32**		0.025	0.010	mg/L		08/19/15 08:41	08/20/15 02:23	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:41	08/20/15 02:23	1
Magnesium	**4.0**		1.0	0.13	mg/L		08/19/15 08:41	08/20/15 20:21	1
Manganese	**0.0067**		0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 02:23	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 02:23	1
Potassium	**1.3**		1.0	0.13	mg/L		08/19/15 08:41	08/20/15 02:23	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:41	08/20/15 20:21	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:41	08/20/15 02:23	1
Sodium	**3.9**		1.0	0.13	mg/L		08/19/15 08:41	08/20/15 20:21	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:41	08/20/15 02:23	1
Vanadium	**0.0022**	**B**	0.0020	0.00010	mg/L		08/19/15 08:41	08/20/15 02:23	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:41	08/20/15 20:21	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/25/15 12:34	08/25/15 19:47	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: RW-12(130-140)-081215
Date Collected: 08/12/15 14:50
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-7
Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 21:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/15/15 14:59	08/17/15 11:44	1
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/15/15 16:57	1
Total Alkalinity as CaCO3	**159**		10.0	5.0	mg/L			08/15/15 16:57	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: TB-06-081315
Date Collected: 08/13/15 01:00
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/21/15 16:13	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/21/15 16:13	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/21/15 16:13	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/21/15 16:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*08/21/15 16:13*	*1*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*08/21/15 16:13*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/21/15 16:13*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/21/15 16:13*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 08:37	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/23/15 08:37	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 08:37	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 08:37	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/23/15 08:37	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/23/15 08:37	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/23/15 08:37	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/23/15 08:37	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/23/15 08:37	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/23/15 08:37	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 08:37	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/23/15 08:37	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/23/15 08:37	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/23/15 08:37	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/23/15 08:37	1
Acetone	2.7	U	25	2.7	ug/L			08/23/15 08:37	1
Benzene	0.20	U	1.0	0.20	ug/L			08/23/15 08:37	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/23/15 08:37	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/23/15 08:37	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/23/15 08:37	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/23/15 08:37	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 08:37	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/23/15 08:37	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/23/15 08:37	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/23/15 08:37	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/23/15 08:37	1
cis-1,2-Dichloroethene	0.21	U *	1.0	0.21	ug/L			08/23/15 08:37	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 08:37	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/23/15 08:37	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/23/15 08:37	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/23/15 08:37	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/23/15 08:37	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/23/15 08:37	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/23/15 08:37	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/23/15 08:37	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/23/15 08:37	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/23/15 08:37	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: TB-06-081315
Date Collected: 08/13/15 01:00
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	**0.22**	**J**	5.0	0.22	ug/L			08/23/15 08:37	1
Styrene	0.28	U	1.0	0.28	ug/L			08/23/15 08:37	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/23/15 08:37	1
Toluene	0.17	U	1.0	0.17	ug/L			08/23/15 08:37	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/23/15 08:37	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 08:37	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/23/15 08:37	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/23/15 08:37	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/23/15 08:37	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/23/15 08:37	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/23/15 08:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/23/15 08:37*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/23/15 08:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/23/15 08:37*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/23/15 08:37*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/23/15 08:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*08/23/15 08:37*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-275550/7
Matrix: Water
Analysis Batch: 275550

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 05:54	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/23/15 05:54	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 05:54	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/23/15 05:54	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/23/15 05:54	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/23/15 05:54	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/23/15 05:54	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/23/15 05:54	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/23/15 05:54	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/23/15 05:54	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 05:54	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/23/15 05:54	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/23/15 05:54	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/23/15 05:54	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/23/15 05:54	1
Acetone	2.7	U	25	2.7	ug/L			08/23/15 05:54	1
Benzene	0.20	U	1.0	0.20	ug/L			08/23/15 05:54	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/23/15 05:54	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/23/15 05:54	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/23/15 05:54	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/23/15 05:54	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/23/15 05:54	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/23/15 05:54	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/23/15 05:54	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/23/15 05:54	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/23/15 05:54	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/23/15 05:54	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 05:54	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/23/15 05:54	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/23/15 05:54	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/23/15 05:54	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/23/15 05:54	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/23/15 05:54	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/23/15 05:54	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/23/15 05:54	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/23/15 05:54	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/23/15 05:54	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/23/15 05:54	1
Styrene	0.28	U	1.0	0.28	ug/L			08/23/15 05:54	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/23/15 05:54	1
Toluene	0.17	U	1.0	0.17	ug/L			08/23/15 05:54	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/23/15 05:54	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/23/15 05:54	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/23/15 05:54	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/23/15 05:54	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/23/15 05:54	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/23/15 05:54	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/23/15 05:54	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/23/15 05:54	1
Total Alkanes	0.000	J	ug/L					08/23/15 05:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130		08/23/15 05:54	1
Dibromofluoromethane (Surr)	113		70 - 130		08/23/15 05:54	1
Toluene-d8 (Surr)	99		70 - 130		08/23/15 05:54	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130		08/23/15 05:54	1

Lab Sample ID: LCS 490-275550/3
Matrix: Water
Analysis Batch: 275550

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	22.4		ug/L		112	78 - 135
Freon-113	20.0	18.9		ug/L		95	77 - 129
1,1,2,2-Tetrachloroethane	20.0	20.2		ug/L		101	69 - 131
1,1,2-Trichloroethane	20.0	19.2		ug/L		96	80 - 124
1,1-Dichloroethane	20.0	24.8		ug/L		124	78 - 125
1,1-Dichloroethene	20.0	19.9		ug/L		99	79 - 124
1,2,4-Trichlorobenzene	20.0	21.2		ug/L		106	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	18.9		ug/L		94	54 - 125
1,2-Dichlorobenzene	20.0	20.1		ug/L		101	80 - 121
1,2-Dichloropropane	20.0	20.9		ug/L		104	75 - 120
1,3-Dichlorobenzene	20.0	20.5		ug/L		102	80 - 122
1,4-Dichlorobenzene	20.0	20.2		ug/L		101	80 - 120
2-Butanone (MEK)	100	112		ug/L		112	62 - 133
2-Hexanone	100	107		ug/L		107	60 - 142
4-Methyl-2-pentanone (MIBK)	100	98.8		ug/L		99	60 - 137
Acetone	100	81.8		ug/L		82	54 - 145
Benzene	20.0	20.8		ug/L		104	80 - 121
Bromoform	20.0	19.9		ug/L		100	46 - 145
Bromomethane	20.0	18.9		ug/L		95	41 - 150
Carbon disulfide	20.0	19.8		ug/L		99	77 - 126
Carbon tetrachloride	20.0	22.1		ug/L		111	64 - 147
Chlorobenzene	20.0	19.8		ug/L		99	80 - 120
Chlorodibromomethane	20.0	19.2		ug/L		96	69 - 133
Chloroethane	20.0	19.5		ug/L		97	72 - 120
Chloroform	20.0	24.2		ug/L		121	73 - 129
Chloromethane	20.0	17.0		ug/L		85	12 - 150
cis-1,2-Dichloroethene	20.0	25.5	*	ug/L		128	76 - 125
cis-1,3-Dichloropropene	20.0	19.6		ug/L		98	74 - 140
Cyclohexane	20.0	24.4		ug/L		122	73 - 122
Dichlorobromomethane	20.0	20.5		ug/L		102	75 - 129
Dichlorodifluoromethane	20.0	23.9		ug/L		119	37 - 127
Ethylbenzene	20.0	21.3		ug/L		107	80 - 130
1,2-Dibromoethane	20.0	20.6		ug/L		103	80 - 129
Isopropylbenzene	20.0	23.1		ug/L		115	80 - 141
Methyl acetate	100	83.0		ug/L		83	64 - 150
Methyl tert-butyl ether	20.0	18.8		ug/L		94	72 - 133
Methylcyclohexane	20.0	22.3		ug/L		112	71 - 129
Methylene Chloride	20.0	19.1		ug/L		96	79 - 123
Styrene	20.0	21.9		ug/L		110	80 - 127

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

Lab Sample ID: LCS 490-275550/3
Matrix: Water
Analysis Batch: 275550

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	20.0	20.1		ug/L		100	80 - 126
Toluene	20.0	20.5		ug/L		102	80 - 126
trans-1,2-Dichloroethene	20.0	19.0		ug/L		95	79 - 126
trans-1,3-Dichloropropene	20.0	19.6		ug/L		98	63 - 134
Trichloroethene	20.0	21.8		ug/L		109	80 - 123
Trichlorofluoromethane	20.0	20.4		ug/L		102	65 - 124
Vinyl chloride	20.0	22.5		ug/L		113	68 - 120
1,2-Dichloroethane	20.0	21.0		ug/L		105	77 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 490-275550/4
Matrix: Water
Analysis Batch: 275550

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	20.0		ug/L		100	78 - 135	11	17
Freon-113	20.0	18.1		ug/L		90	77 - 129	5	18
1,1,2,2-Tetrachloroethane	20.0	18.2		ug/L		91	69 - 131	10	20
1,1,2-Trichloroethane	20.0	18.1		ug/L		90	80 - 124	6	15
1,1-Dichloroethane	20.0	22.3		ug/L		112	78 - 125	11	17
1,1-Dichloroethene	20.0	17.5		ug/L		88	79 - 124	13	17
1,2,4-Trichlorobenzene	20.0	19.3		ug/L		96	63 - 133	10	19
1,2-Dibromo-3-Chloropropane	20.0	16.7		ug/L		83	54 - 125	13	24
1,2-Dichlorobenzene	20.0	19.1		ug/L		95	80 - 121	5	15
1,2-Dichloropropane	20.0	19.6		ug/L		98	75 - 120	6	17
1,3-Dichlorobenzene	20.0	19.3		ug/L		96	80 - 122	6	15
1,4-Dichlorobenzene	20.0	19.0		ug/L		95	80 - 120	6	15
2-Butanone (MEK)	100	105		ug/L		105	62 - 133	7	19
2-Hexanone	100	102		ug/L		102	60 - 142	4	15
4-Methyl-2-pentanone (MIBK)	100	95.3		ug/L		95	60 - 137	4	17
Acetone	100	80.1		ug/L		80	54 - 145	2	21
Benzene	20.0	19.5		ug/L		98	80 - 121	6	17
Bromoform	20.0	18.2		ug/L		91	46 - 145	9	16
Bromomethane	20.0	20.2		ug/L		101	41 - 150	6	50
Carbon disulfide	20.0	18.1		ug/L		90	77 - 126	9	21
Carbon tetrachloride	20.0	20.4		ug/L		102	64 - 147	8	19
Chlorobenzene	20.0	19.0		ug/L		95	80 - 120	4	14
Chlorodibromomethane	20.0	17.8		ug/L		89	69 - 133	7	15
Chloroethane	20.0	20.7		ug/L		103	72 - 120	6	20
Chloroform	20.0	22.5		ug/L		113	73 - 129	7	18
Chloromethane	20.0	18.4		ug/L		92	12 - 150	8	31
cis-1,2-Dichloroethene	20.0	23.9		ug/L		120	76 - 125	6	17
cis-1,3-Dichloropropene	20.0	18.6		ug/L		93	74 - 140	5	15

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

Lab Sample ID: LCSD 490-275550/4
Matrix: Water
Analysis Batch: 275550

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyclohexane			20.0	22.6		ug/L		113	73 - 122	8	16
Dichlorobromomethane			20.0	19.0		ug/L		95	75 - 129	7	18
Dichlorodifluoromethane			20.0	23.5		ug/L		117	37 - 127	2	18
Ethylbenzene			20.0	19.8		ug/L		99	80 - 130	7	15
1,2-Dibromoethane			20.0	18.9		ug/L		94	80 - 129	9	15
Isopropylbenzene			20.0	21.0		ug/L		105	80 - 141	9	16
Methyl acetate			100	75.5		ug/L		76	64 - 150	9	31
Methyl tert-butyl ether			20.0	17.7		ug/L		89	72 - 133	6	16
Methylcyclohexane			20.0	19.6		ug/L		98	71 - 129	13	19
Methylene Chloride			20.0	17.6		ug/L		88	79 - 123	8	17
Styrene			20.0	20.9		ug/L		105	80 - 127	5	24
Tetrachloroethene			20.0	18.3		ug/L		91	80 - 126	9	16
Toluene			20.0	18.7		ug/L		94	80 - 126	9	15
trans-1,2-Dichloroethene			20.0	17.5		ug/L		88	79 - 126	8	16
trans-1,3-Dichloropropene			20.0	18.3		ug/L		92	63 - 134	7	14
Trichloroethene			20.0	19.8		ug/L		99	80 - 123	10	17
Trichlorofluoromethane			20.0	20.3		ug/L		101	65 - 124	1	18
Vinyl chloride			20.0	23.3		ug/L		117	68 - 120	4	17
1,2-Dichloroethane			20.0	19.4		ug/L		97	77 - 121	8	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*

Lab Sample ID: 490-85153-7 MS
Matrix: Water
Analysis Batch: 275550

Client Sample ID: RW-12(130-140)-081215
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.19	U	50.0	58.6		ug/L		117	76 - 149
Freon-113	0.15	U	50.0	43.3		ug/L		87	72 - 148
1,1,2,2-Tetrachloroethane	0.19	U	50.0	49.9		ug/L		100	56 - 143
1,1,2-Trichloroethane	0.19	U	50.0	46.2		ug/L		92	74 - 134
1,1-Dichloroethane	0.24	U	50.0	53.5		ug/L		107	71 - 139
1,1-Dichloroethene	0.25	U	50.0	42.4		ug/L		85	70 - 142
1,2,4-Trichlorobenzene	0.20	U	50.0	51.3		ug/L		103	60 - 136
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	51.6		ug/L		103	52 - 126
1,2-Dichlorobenzene	0.19	U	50.0	49.6		ug/L		99	79 - 128
1,2-Dichloropropane	0.25	U	50.0	52.1		ug/L		104	67 - 131
1,3-Dichlorobenzene	0.18	U	50.0	50.4		ug/L		101	77 - 131
1,4-Dichlorobenzene	0.17	U	50.0	48.7		ug/L		97	78 - 126
2-Butanone (MEK)	2.6	U	250	252		ug/L		101	50 - 138
2-Hexanone	1.3	U	250	278		ug/L		111	50 - 150
4-Methyl-2-pentanone (MIBK)	0.81	U	250	306		ug/L		122	50 - 147
Acetone	2.7	U	250	181		ug/L		72	45 - 141
Benzene	0.20	U	50.0	50.9		ug/L		102	75 - 133

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

Lab Sample ID: 490-85153-7 MS
Matrix: Water
Analysis Batch: 275550

Client Sample ID: RW-12(130-140)-081215
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromoform	0.29	U	50.0	48.4		ug/L		97	42 - 147
Bromomethane	0.35	U	50.0	46.2		ug/L		92	16 - 163
Carbon disulfide	0.27	J	50.0	34.2		ug/L		68	48 - 152
Carbon tetrachloride	0.18	U	50.0	57.6		ug/L		115	62 - 164
Chlorobenzene	0.18	U	50.0	48.8		ug/L		98	80 - 129
Chlorodibromomethane	0.25	U	50.0	44.5		ug/L		89	66 - 140
Chloroethane	0.36	U	50.0	46.2		ug/L		92	58 - 137
Chloroform	0.23	U	50.0	52.5		ug/L		105	66 - 138
Chloromethane	0.36	U	50.0	29.4		ug/L		59	10 - 169
cis-1,2-Dichloroethene	0.21	U *	50.0	53.5		ug/L		107	68 - 138
cis-1,3-Dichloropropene	0.17	U	50.0	53.2		ug/L		106	71 - 141
Cyclohexane	0.66	J	50.0	60.4	E	ug/L		120	58 - 144
Dichlorobromomethane	0.17	U	50.0	50.7		ug/L		101	70 - 140
Dichlorodifluoromethane	0.17	U	50.0	41.8		ug/L		84	40 - 127
Ethylbenzene	0.19	U	50.0	53.8		ug/L		108	79 - 139
1,2-Dibromoethane	0.21	U	50.0	47.8		ug/L		96	75 - 137
Isopropylbenzene	0.33	U	50.0	57.6		ug/L		115	80 - 153
Methyl acetate	0.58	U	250	150		ug/L		60	30 - 165
Methyl tert-butyl ether	0.17	U	50.0	42.0		ug/L		84	66 - 141
Methylcyclohexane	0.090	U	50.0	51.9		ug/L		104	59 - 151
Methylene Chloride	0.22	J	50.0	40.9		ug/L		82	64 - 139
Styrene	0.28	U	50.0	56.2		ug/L		112	61 - 148
Tetrachloroethene	0.14	U	50.0	49.0		ug/L		98	72 - 145
Toluene	0.17	U	50.0	49.3		ug/L		99	75 - 136
trans-1,2-Dichloroethene	0.23	U	50.0	40.1		ug/L		80	66 - 143
trans-1,3-Dichloropropene	0.17	U	50.0	46.7		ug/L		93	59 - 135
Trichloroethene	0.20	U	50.0	48.1		ug/L		96	73 - 144
Trichlorofluoromethane	0.21	U	50.0	47.0		ug/L		94	58 - 139
Vinyl chloride	0.18	U	50.0	45.4		ug/L		91	56 - 129
1,2-Dichloroethane	0.20	U	50.0	55.3		ug/L		111	64 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*

Lab Sample ID: 490-85153-7 MSD
Matrix: Water
Analysis Batch: 275550

Client Sample ID: RW-12(130-140)-081215
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.19	U	50.0	56.7		ug/L		113	76 - 149	3	17
Freon-113	0.15	U	50.0	40.8		ug/L		82	72 - 148	6	18
1,1,2,2-Tetrachloroethane	0.19	U	50.0	49.4		ug/L		99	56 - 143	1	20
1,1,2-Trichloroethane	0.19	U	50.0	44.3		ug/L		89	74 - 134	4	15
1,1-Dichloroethane	0.24	U	50.0	52.1		ug/L		104	71 - 139	3	17
1,1-Dichloroethene	0.25	U	50.0	43.6		ug/L		87	70 - 142	3	17

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

Lab Sample ID: 490-85153-7 MSD
Matrix: Water
Analysis Batch: 275550

Client Sample ID: RW-12(130-140)-081215
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	0.20	U	50.0	52.8		ug/L		106	60 - 136	3	19
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	49.8		ug/L		100	52 - 126	4	24
1,2-Dichlorobenzene	0.19	U	50.0	47.9		ug/L		96	79 - 128	4	15
1,2-Dichloropropane	0.25	U	50.0	50.6		ug/L		101	67 - 131	3	17
1,3-Dichlorobenzene	0.18	U	50.0	49.3		ug/L		99	77 - 131	2	15
1,4-Dichlorobenzene	0.17	U	50.0	47.8		ug/L		96	78 - 126	2	15
2-Butanone (MEK)	2.6	U	250	244		ug/L		97	50 - 138	3	19
2-Hexanone	1.3	U	250	268		ug/L		107	50 - 150	4	15
4-Methyl-2-pentanone (MIBK)	0.81	U	250	299		ug/L		120	50 - 147	2	17
Acetone	2.7	U	250	190		ug/L		76	45 - 141	5	21
Benzene	0.20	U	50.0	50.0		ug/L		100	75 - 133	2	17
Bromoform	0.29	U	50.0	46.7		ug/L		93	42 - 147	4	16
Bromomethane	0.35	U	50.0	49.5		ug/L		99	16 - 163	7	50
Carbon disulfide	0.27	J	50.0	34.1		ug/L		68	48 - 152	0	21
Carbon tetrachloride	0.18	U	50.0	55.2		ug/L		110	62 - 164	4	19
Chlorobenzene	0.18	U	50.0	47.4		ug/L		95	80 - 129	3	14
Chlorodibromomethane	0.25	U	50.0	44.4		ug/L		89	66 - 140	0	15
Chloroethane	0.36	U	50.0	41.1		ug/L		82	58 - 137	12	20
Chloroform	0.23	U	50.0	52.3		ug/L		105	66 - 138	0	18
Chloromethane	0.36	U	50.0	29.9		ug/L		60	10 - 169	2	31
cis-1,2-Dichloroethene	0.21	U *	50.0	50.8		ug/L		102	68 - 138	5	17
cis-1,3-Dichloropropene	0.17	U	50.0	51.2		ug/L		102	71 - 141	4	15
Cyclohexane	0.66	J	50.0	58.1	E	ug/L		115	58 - 144	4	16
Dichlorobromomethane	0.17	U	50.0	48.8		ug/L		98	70 - 140	4	18
Dichlorodifluoromethane	0.17	U	50.0	39.9		ug/L		80	40 - 127	5	18
Ethylbenzene	0.19	U	50.0	51.9		ug/L		104	79 - 139	4	15
1,2-Dibromoethane	0.21	U	50.0	46.5		ug/L		93	75 - 137	3	15
Isopropylbenzene	0.33	U	50.0	55.2		ug/L		110	80 - 153	4	16
Methyl acetate	0.58	U	250	147		ug/L		59	30 - 165	2	31
Methyl tert-butyl ether	0.17	U	50.0	40.8		ug/L		82	66 - 141	3	16
Methylcyclohexane	0.090	U	50.0	48.1		ug/L		96	59 - 151	8	19
Methylene Chloride	0.22	J	50.0	39.1		ug/L		78	64 - 139	5	17
Styrene	0.28	U	50.0	53.8		ug/L		108	61 - 148	4	24
Tetrachloroethene	0.14	U	50.0	47.1		ug/L		94	72 - 145	4	16
Toluene	0.17	U	50.0	50.7		ug/L		101	75 - 136	3	15
trans-1,2-Dichloroethene	0.23	U	50.0	39.1		ug/L		78	66 - 143	3	16
trans-1,3-Dichloropropene	0.17	U	50.0	44.8		ug/L		90	59 - 135	4	14
Trichloroethene	0.20	U	50.0	46.3		ug/L		93	73 - 144	4	17
Trichlorofluoromethane	0.21	U	50.0	42.3		ug/L		85	58 - 139	10	18
Vinyl chloride	0.18	U	50.0	44.3		ug/L		89	56 - 129	2	17
1,2-Dichloroethane	0.20	U	50.0	53.3		ug/L		107	64 - 136	4	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*

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

Lab Sample ID: MB 490-275185/9
Matrix: Water
Analysis Batch: 275185

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/21/15 15:44	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/21/15 15:44	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/21/15 15:44	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/21/15 15:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/21/15 15:44*	*1*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*08/21/15 15:44*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/21/15 15:44*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/21/15 15:44*	*1*

Lab Sample ID: LCS 490-275185/5
Matrix: Water
Analysis Batch: 275185

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.500	0.445		ug/L		89	70 - 131		
1,2-Dibromo-3-Chloropropane			0.500	0.455		ug/L		91	40 - 160		
1,4-Dioxane			10.0	10.3		ug/L		103	40 - 160		
Ethylene Dibromide			0.500	0.432		ug/L		86	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 490-275185/6
Matrix: Water
Analysis Batch: 275185

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.500	0.465		ug/L		93	70 - 131	4	19
1,2-Dibromo-3-Chloropropane			0.500	0.436		ug/L		87	40 - 160	4	20
1,4-Dioxane			10.0	9.60	J	ug/L		96	40 - 160	7	20
Ethylene Dibromide			0.500	0.429		ug/L		86	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*110*		*70 - 130*

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

Lab Sample ID: MB 490-274686/1-A
Matrix: Water
Analysis Batch: 274915

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274686

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/20/15 23:27	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/19/15 17:49	08/20/15 23:27	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/19/15 17:49	08/20/15 23:27	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/19/15 17:49	08/20/15 23:27	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/19/15 17:49	08/20/15 23:27	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/19/15 17:49	08/20/15 23:27	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/19/15 17:49	08/20/15 23:27	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/19/15 17:49	08/20/15 23:27	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/19/15 17:49	08/20/15 23:27	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/20/15 23:27	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/20/15 23:27	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/19/15 17:49	08/20/15 23:27	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/19/15 17:49	08/20/15 23:27	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/20/15 23:27	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/19/15 17:49	08/20/15 23:27	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/19/15 17:49	08/20/15 23:27	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/19/15 17:49	08/20/15 23:27	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/19/15 17:49	08/20/15 23:27	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/19/15 17:49	08/20/15 23:27	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/19/15 17:49	08/20/15 23:27	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/19/15 17:49	08/20/15 23:27	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/19/15 17:49	08/20/15 23:27	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/19/15 17:49	08/20/15 23:27	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/20/15 23:27	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/19/15 17:49	08/20/15 23:27	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/19/15 17:49	08/20/15 23:27	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/19/15 17:49	08/20/15 23:27	1
Acetophenone	2.3	U	10	2.3	ug/L		08/19/15 17:49	08/20/15 23:27	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/19/15 17:49	08/20/15 23:27	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/19/15 17:49	08/20/15 23:27	1
Benzo[g,h,i]perylene	3.91		2.0	0.62	ug/L		08/19/15 17:49	08/20/15 23:27	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/19/15 17:49	08/20/15 23:27	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/20/15 23:27	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/20/15 23:27	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/20/15 23:27	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/19/15 17:49	08/20/15 23:27	1
Carbazole	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/20/15 23:27	1
Caprolactam	2.4	U	10	2.4	ug/L		08/19/15 17:49	08/20/15 23:27	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/19/15 17:49	08/20/15 23:27	1
Dibenz(a,h)anthracene	4.94		2.0	0.45	ug/L		08/19/15 17:49	08/20/15 23:27	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/19/15 17:49	08/20/15 23:27	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/19/15 17:49	08/20/15 23:27	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/20/15 23:27	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/20/15 23:27	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/20/15 23:27	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/19/15 17:49	08/20/15 23:27	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/19/15 17:49	08/20/15 23:27	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/19/15 17:49	08/20/15 23:27	1

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

Lab Sample ID: MB 490-274686/1-A
Matrix: Water
Analysis Batch: 274915

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274686

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	3.93		2.0	0.41	ug/L		08/19/15 17:49	08/20/15 23:27	1
Isophorone	3.1	U	10	3.1	ug/L		08/19/15 17:49	08/20/15 23:27	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/19/15 17:49	08/20/15 23:27	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/19/15 17:49	08/20/15 23:27	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/19/15 17:49	08/20/15 23:27	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/19/15 17:49	08/20/15 23:27	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/19/15 17:49	08/20/15 23:27	1
Phenol	1.5	U	10	1.5	ug/L		08/19/15 17:49	08/20/15 23:27	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/19/15 17:49	08/20/15 23:27	1
Diphenyl	2.2	U	10	2.2	ug/L		08/19/15 17:49	08/20/15 23:27	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/19/15 17:49	08/20/15 23:27	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/19/15 17:49	08/20/15 23:27	1
Atrazine	2.9	U	10	2.9	ug/L		08/19/15 17:49	08/20/15 23:27	1

Tentatively Identified Compound	*Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/19/15 17:49*	*08/20/15 23:27*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*103*		*10 - 120*	*08/19/15 17:49*	*08/20/15 23:27*	*1*
2-Fluorobiphenyl (Surr)	*89*		*29 - 120*	*08/19/15 17:49*	*08/20/15 23:27*	*1*
2-Fluorophenol (Surr)	*56*		*10 - 120*	*08/19/15 17:49*	*08/20/15 23:27*	*1*
Nitrobenzene-d5 (Surr)	*84*		*27 - 120*	*08/19/15 17:49*	*08/20/15 23:27*	*1*
Phenol-d5 (Surr)	*37*		*10 - 120*	*08/19/15 17:49*	*08/20/15 23:27*	*1*
Terphenyl-d14 (Surr)	*94*		*13 - 120*	*08/19/15 17:49*	*08/20/15 23:27*	*1*

Lab Sample ID: LCS 490-274686/2-A
Matrix: Water
Analysis Batch: 274915

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274686

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	32.0	30.4		ug/L		95	46 - 120
1,2,4,5-Tetrachlorobenzene	32.0	29.1		ug/L		91	25 - 120
2,3,4,6-Tetrachlorophenol	32.0	34.9		ug/L		109	31 - 148
2,4,5-Trichlorophenol	32.0	31.6		ug/L		99	40 - 129
2,4,6-Trichlorophenol	32.0	30.7		ug/L		96	39 - 135
2,4-Dichlorophenol	32.0	27.9		ug/L		87	38 - 120
2,4-Dimethylphenol	32.0	26.1		ug/L		82	21 - 126
2,4-Dinitrophenol	64.0	58.2		ug/L		91	20 - 150
2,4-Dinitrotoluene	32.0	33.5		ug/L		105	46 - 132
2,6-Dinitrotoluene	32.0	31.7		ug/L		99	54 - 128
2-Chloronaphthalene	32.0	29.3		ug/L		92	39 - 120
2-Chlorophenol	32.0	25.5		ug/L		80	40 - 120
2-Methylnaphthalene	32.0	26.8		ug/L		84	31 - 120
2-Methylphenol	32.0	24.8		ug/L		77	38 - 120
2-Nitroaniline	32.0	32.8		ug/L		102	46 - 131
2-Nitrophenol	32.0	28.6		ug/L		89	32 - 120
3,3'-Dichlorobenzidine	32.0	32.6		ug/L		102	46 - 129

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

Lab Sample ID: LCS 490-274686/2-A
Matrix: Water
Analysis Batch: 274915

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274686

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3 & 4 Methylphenol	32.0	22.0		ug/L		69	33 - 120
3-Nitroaniline	32.0	29.3		ug/L		92	54 - 121
4,6-Dinitro-2-methylphenol	64.0	67.9		ug/L		106	19 - 150
4-Bromophenyl phenyl ether	32.0	31.7		ug/L		99	47 - 127
4-Chloro-3-methylphenol	32.0	31.2		ug/L		97	44 - 120
4-Chloroaniline	32.0	24.7		ug/L		77	44 - 120
4-Chlorophenyl phenyl ether	32.0	30.6		ug/L		96	50 - 120
4-Nitroaniline	32.0	33.7		ug/L		105	55 - 123
4-Nitrophenol	64.0	29.8		ug/L		47	10 - 120
Acenaphthylene	32.0	30.0		ug/L		94	48 - 120
Acetophenone	32.0	27.4		ug/L		86	52 - 133
Anthracene	32.0	33.5		ug/L		105	58 - 130
Benzaldehyde	32.0	45.2	*	ug/L		141	34 - 120
Benzo[g,h,i]perylene	32.0	34.2		ug/L		107	51 - 123
Benzo[k]fluoranthene	32.0	35.3		ug/L		110	51 - 120
Bis(2-chloroethoxy)methane	32.0	26.1		ug/L		82	44 - 120
Bis(2-chloroethyl)ether	32.0	24.6		ug/L		77	47 - 120
Butyl benzyl phthalate	32.0	32.7		ug/L		102	51 - 146
Bis(2-ethylhexyl) phthalate	32.0	36.4		ug/L		114	47 - 138
Carbazole	32.0	33.9		ug/L		106	54 - 123
Caprolactam	32.0	7.73	J	ug/L		24	10 - 120
Chrysene	32.0	32.1		ug/L		100	55 - 120
Dibenz(a,h)anthracene	32.0	34.8		ug/L		109	50 - 125
Dibenzofuran	32.0	29.9		ug/L		94	50 - 120
Diethyl phthalate	32.0	32.2		ug/L		101	54 - 128
Dimethyl phthalate	32.0	31.6		ug/L		99	53 - 127
Di-n-butyl phthalate	32.0	34.6		ug/L		108	54 - 140
Fluoranthene	32.0	35.5		ug/L		111	56 - 120
Fluorene	32.0	31.5		ug/L		98	52 - 120
Hexachlorocyclopentadiene	32.0	29.2		ug/L		91	17 - 120
Hexachloroethane	32.0	26.1		ug/L		82	30 - 120
Indeno[1,2,3-cd]pyrene	32.0	34.1		ug/L		107	54 - 125
Isophorone	32.0	27.9		ug/L		87	47 - 120
Naphthalene	32.0	27.6		ug/L		86	37 - 120
Nitrobenzene	32.0	27.7		ug/L		86	36 - 120
N-Nitrosodi-n-propylamine	32.0	26.9		ug/L		84	51 - 120
N-Nitrosodiphenylamine	64.0	64.1		ug/L		100	58 - 149
Phenanthrene	32.0	32.2		ug/L		101	56 - 120
Phenol	32.0	12.0		ug/L		37	14 - 120
Pyrene	32.0	30.5		ug/L		95	53 - 129
Diphenyl	32.0	29.6		ug/L		93	10 - 146
Di-n-octyl phthalate	32.0	33.9		ug/L		106	50 - 142
2,2'-oxybis[1-chloropropane]	32.0	25.0		ug/L		78	44 - 120
Atrazine	32.0	35.8		ug/L		112	24 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*97*		*10 - 120*
2-Fluorobiphenyl (Surr)	*80*		*29 - 120*

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

Lab Sample ID: LCS 490-274686/2-A
Matrix: Water
Analysis Batch: 274915

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274686

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol (Surr)	*44*		*10 - 120*
Nitrobenzene-d5 (Surr)	*74*		*27 - 120*
Phenol-d5 (Surr)	*31*		*10 - 120*
Terphenyl-d14 (Surr)	*86*		*13 - 120*

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

Lab Sample ID: MB 490-274580/1-A
Matrix: Water
Analysis Batch: 276355

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274580

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 15:40	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 15:40	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/19/15 14:30	08/26/15 15:40	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/19/15 14:30	08/26/15 15:40	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/19/15 14:30	08/26/15 15:40	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/19/15 14:30	08/26/15 15:40	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/19/15 14:30	08/26/15 15:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*75*		*10 - 120*	*08/19/15 14:30*	*08/26/15 15:40*	*1*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*	*08/19/15 14:30*	*08/26/15 15:40*	*1*
Nitrobenzene-d5	*63*		*27 - 120*	*08/19/15 14:30*	*08/26/15 15:40*	*1*
Terphenyl-d14	*88*		*13 - 120*	*08/19/15 14:30*	*08/26/15 15:40*	*1*
2-Fluorophenol	*56*		*10 - 120*	*08/19/15 14:30*	*08/26/15 15:40*	*1*
Phenol-d5	*39*		*10 - 120*	*08/19/15 14:30*	*08/26/15 15:40*	*1*

Lab Sample ID: LCS 490-274580/2-A
Matrix: Water
Analysis Batch: 276355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274580

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.736		ug/L		92	57 - 120
Benzo[a]pyrene	0.800	0.647		ug/L		81	57 - 124
Benzo[b]fluoranthene	0.800	0.670		ug/L		84	51 - 125
Hexachlorobenzene	0.800	0.582		ug/L		73	48 - 131
Hexachlorobutadiene	0.800	0.519		ug/L		65	28 - 120
N-Nitrosodimethylamine	0.800	0.466	J	ug/L		58	20 - 120
Pentachlorophenol	1.60	0.591		ug/L		37	21 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*80*		*10 - 120*
2-Fluorobiphenyl (Surr)	*76*		*29 - 120*
Nitrobenzene-d5	*77*		*27 - 120*
Terphenyl-d14	*90*		*13 - 120*
2-Fluorophenol	*57*		*10 - 120*

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

Lab Sample ID: LCS 490-274580/2-A
Matrix: Water
Analysis Batch: 276355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274580

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Phenol-d5	*40*		*10 - 120*

Lab Sample ID: LCSD 490-274580/3-A
Matrix: Water
Analysis Batch: 276355

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 274580

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene			0.800	0.772		ug/L		96	57 - 120	5	27
Benzo[a]pyrene			0.800	0.661		ug/L		83	57 - 124	2	27
Benzo[b]fluoranthene			0.800	0.708		ug/L		88	51 - 125	5	39
Hexachlorobenzene			0.800	0.592		ug/L		74	48 - 131	2	28
Hexachlorobutadiene			0.800	0.538		ug/L		67	28 - 120	4	30
N-Nitrosodimethylamine			0.800	0.363	J	ug/L		45	20 - 120	25	32
Pentachlorophenol			1.60	1.20	*	ug/L		75	21 - 150	68	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*89*		*10 - 120*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*
Nitrobenzene-d5	*78*		*27 - 120*
Terphenyl-d14	*100*		*13 - 120*
2-Fluorophenol	*53*		*10 - 120*
Phenol-d5	*38*		*10 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-277885/1-A
Matrix: Water
Analysis Batch: 278119

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277885

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 14:50	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 16:18	09/01/15 14:50	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 16:18	09/01/15 14:50	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 16:18	09/01/15 14:50	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 16:18	09/01/15 14:50	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 16:18	09/01/15 14:50	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 16:18	09/01/15 14:50	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 14:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*51*		*10 - 150*	*08/31/15 16:18*	*09/01/15 14:50*	*1*
Tetrachloro-m-xylene	*39*		*10 - 150*	*08/31/15 16:18*	*09/01/15 14:50*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 490-277885/2-A
Matrix: Water
Analysis Batch: 278119

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277885

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	2.90		ug/L		73	23 - 139
PCB-1260	4.00	2.58		ug/L		64	36 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*46*		*10 - 150*
Tetrachloro-m-xylene	*36*	*p*	*10 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 490-276222/6
Matrix: Water
Analysis Batch: 276222

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			08/25/15 13:52	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/25/15 13:52	1

Lab Sample ID: LCS 490-276222/7
Matrix: Water
Analysis Batch: 276222

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	94.86		mg/L		95	80 - 120
Sulfate	100	91.92		mg/L		92	80 - 120

Lab Sample ID: LCSD 490-276222/8
Matrix: Water
Analysis Batch: 276222

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	95.22		mg/L		95	80 - 120	0	20
Sulfate	100	91.80		mg/L		92	80 - 120	0	20

Lab Sample ID: 490-85153-4 MS
Matrix: Water
Analysis Batch: 276222

Client Sample ID: SC-2-081215
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.93		100	92.88		mg/L		91	80 - 120
Sulfate	27.4		100	118.3		mg/L		91	80 - 120

Lab Sample ID: 490-85153-4 MSD
Matrix: Water
Analysis Batch: 276222

Client Sample ID: SC-2-081215
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.93		100	92.21		mg/L		90	80 - 120	1	20
Sulfate	27.4		100	117.3		mg/L		90	80 - 120	1	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 490-273945/1-A
Matrix: Water
Analysis Batch: 274758

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 273945

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	0.13	U	1.0	0.13	mg/L		08/18/15 09:34	08/19/15 13:39	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/19/15 13:39	1
Vanadium	0.00104	J	0.0020	0.00010	mg/L		08/18/15 09:34	08/19/15 13:39	1

Lab Sample ID: MB 490-273945/1-A
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 273945

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.000647	J	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 16:46	1
Arsenic	0.000696	J	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 16:46	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 16:46	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 16:46	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/18/15 09:34	08/24/15 16:46	1
Calcium	0.13	U	1.0	0.13	mg/L		08/18/15 09:34	08/24/15 16:46	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 16:46	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 16:46	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 16:46	1
Iron	0.010	U	0.025	0.010	mg/L		08/18/15 09:34	08/24/15 16:46	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/18/15 09:34	08/24/15 16:46	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/18/15 09:34	08/24/15 16:46	1
Manganese	0.000747	J	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 16:46	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/18/15 09:34	08/24/15 16:46	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/18/15 09:34	08/24/15 16:46	1
Sodium	0.13	U	1.0	0.13	mg/L		08/18/15 09:34	08/24/15 16:46	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/18/15 09:34	08/24/15 16:46	1
Zinc	0.010	U	0.025	0.010	mg/L		08/18/15 09:34	08/24/15 16:46	1

Lab Sample ID: LCS 490-273945/2-A
Matrix: Water
Analysis Batch: 274758

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 273945

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	10.0	9.77		mg/L		98	80 - 120
Silver	0.100	0.102		mg/L		102	80 - 120
Vanadium	0.100	0.101		mg/L		101	80 - 120

Lab Sample ID: LCS 490-273945/2-A
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 273945

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.100	0.103		mg/L		103	80 - 120
Arsenic	0.100	0.0968		mg/L		97	80 - 120
Barium	0.100	0.104		mg/L		104	80 - 120
Beryllium	0.100	0.107		mg/L		107	80 - 120
Cadmium	0.100	0.0978		mg/L		98	80 - 120
Calcium	10.0	10.13		mg/L		101	80 - 120
Chromium	0.100	0.0989		mg/L		99	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-273945/2-A
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 273945

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.100	0.102		mg/L		102	80 - 120
Copper	0.100	0.0968		mg/L		97	80 - 120
Iron	1.00	1.06		mg/L		106	80 - 120
Lead	0.100	0.104		mg/L		104	80 - 120
Magnesium	10.0	9.75		mg/L		98	80 - 120
Manganese	0.100	0.101		mg/L		101	80 - 120
Nickel	0.100	0.100		mg/L		100	80 - 120
Selenium	0.100	0.0923		mg/L		92	80 - 120
Sodium	10.0	9.89		mg/L		99	80 - 120
Thallium	0.100	0.103		mg/L		103	80 - 120
Zinc	0.100	0.0922		mg/L		92	80 - 120

Lab Sample ID: 490-85021-G-1-B MS
Matrix: Water
Analysis Batch: 274758

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 273945

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	2.6		10.0	12.82		mg/L		103	75 - 125
Silver	0.00050	U	0.100	0.0999		mg/L		100	75 - 125
Vanadium	0.0033	B	0.100	0.105		mg/L		102	75 - 125

Lab Sample ID: 490-85021-G-1-B MS
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 273945

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.00067	J	0.100	0.105		mg/L		104	75 - 125
Arsenic	0.017		0.100	0.109		mg/L		92	75 - 125
Barium	0.025		0.100	0.128		mg/L		103	75 - 125
Beryllium	0.00050	U	0.100	0.107		mg/L		107	75 - 125
Cadmium	0.00040	U	0.100	0.0970		mg/L		97	75 - 125
Calcium	84.0		10.0	90.24	4	mg/L		63	75 - 125
Chromium	0.024		0.100	0.121		mg/L		97	75 - 125
Cobalt	0.0058		0.100	0.109		mg/L		103	75 - 125
Copper	0.0027		0.100	0.0970		mg/L		94	75 - 125
Iron	2.1		1.00	3.06		mg/L		96	75 - 125
Lead	0.0084		0.100	0.111		mg/L		102	75 - 125
Magnesium	39.3		10.0	46.99		mg/L		77	75 - 125
Manganese	5.4	E	0.100	5.44	E 4	mg/L		11	75 - 125
Nickel	0.022		0.100	0.121		mg/L		98	75 - 125
Selenium	0.00060	U	0.100	0.0871		mg/L		87	75 - 125
Sodium	14.1		10.0	22.98		mg/L		88	75 - 125
Thallium	0.00051	J	0.100	0.102		mg/L		101	75 - 125
Zinc	0.010	U	0.100	0.0932		mg/L		93	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85021-G-1-C MSD
Matrix: Water
Analysis Batch: 274758

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 273945

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Potassium	2.6		10.0	13.03		mg/L		105	75 - 125	2	20
Silver	0.00050	U	0.100	0.103		mg/L		103	75 - 125	3	20
Vanadium	0.0033	B	0.100	0.108		mg/L		105	75 - 125	3	20

Lab Sample ID: 490-85021-G-1-C MSD
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 273945

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.00067	J	0.100	0.107		mg/L		106	75 - 125	2	20
Arsenic	0.017		0.100	0.114		mg/L		98	75 - 125	5	20
Barium	0.025		0.100	0.132		mg/L		107	75 - 125	3	20
Beryllium	0.00050	U	0.100	0.110		mg/L		110	75 - 125	3	20
Cadmium	0.00040	U	0.100	0.0985		mg/L		99	75 - 125	2	20
Calcium	84.0		10.0	95.42	4	mg/L		115	75 - 125	6	20
Chromium	0.024		0.100	0.127		mg/L		103	75 - 125	5	20
Cobalt	0.0058		0.100	0.110		mg/L		104	75 - 125	1	20
Copper	0.0027		0.100	0.0987		mg/L		96	75 - 125	2	20
Iron	2.1		1.00	3.20		mg/L		111	75 - 125	5	20
Lead	0.0084		0.100	0.115		mg/L		106	75 - 125	4	20
Magnesium	39.3		10.0	49.95		mg/L		106	75 - 125	6	20
Manganese	5.4	E	0.100	5.83	E 4	mg/L		400	75 - 125	7	20
Nickel	0.022		0.100	0.123		mg/L		100	75 - 125	2	20
Selenium	0.00060	U	0.100	0.0893		mg/L		89	75 - 125	2	20
Sodium	14.1		10.0	24.32		mg/L		102	75 - 125	6	20
Thallium	0.00051	J	0.100	0.105		mg/L		105	75 - 125	3	20
Zinc	0.010	U	0.100	0.0942		mg/L		94	75 - 125	1	20

Lab Sample ID: MB 490-275991/1-A
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275991

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0130	J	0.020	0.0096	mg/L		08/25/15 11:44	08/26/15 13:45	1

Lab Sample ID: LCS 490-275991/2-A
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275991

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.01		mg/L		101	80 - 120

Lab Sample ID: 490-85759-B-1-B MS
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275991

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.16	B	1.00	1.18		mg/L		102	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85759-B-1-C MSD
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275991

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.16	B	1.00	1.20		mg/L		105	75 - 125	2	20

Lab Sample ID: MB 490-274351/1-B
Matrix: Water
Analysis Batch: 274758

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 274354

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/19/15 23:47	1
Iron	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/19/15 23:47	1
Potassium	0.13	U	1.0	0.13	mg/L		08/19/15 08:39	08/19/15 23:47	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/19/15 23:47	1

Lab Sample ID: MB 490-274351/1-B
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 274354

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/19/15 08:39	08/21/15 11:38	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 11:38	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 11:38	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 11:38	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 11:38	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:39	08/21/15 11:38	1
Calcium	0.13	U	1.0	0.13	mg/L		08/19/15 08:39	08/21/15 11:38	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 11:38	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 11:38	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/21/15 11:38	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/19/15 08:39	08/21/15 11:38	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 11:38	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 11:38	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/21/15 11:38	1
Sodium	0.13	U	1.0	0.13	mg/L		08/19/15 08:39	08/21/15 11:38	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/21/15 11:38	1
Vanadium	0.00303		0.0020	0.00010	mg/L		08/19/15 08:39	08/21/15 11:38	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/21/15 11:38	1

Lab Sample ID: LCS 490-274351/2-B
Matrix: Water
Analysis Batch: 274758

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 274354

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.100	0.0937		mg/L		94	80 - 120
Iron	1.00	1.07		mg/L		107	80 - 120
Potassium	10.0	10.06		mg/L		101	80 - 120
Silver	0.100	0.102		mg/L		102	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-274351/2-B
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 274354

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.04		mg/L		104	80 - 120
Antimony	0.100	0.106		mg/L		106	80 - 120
Arsenic	0.100	0.101		mg/L		101	80 - 120
Barium	0.100	0.102		mg/L		102	80 - 120
Beryllium	0.100	0.102		mg/L		102	80 - 120
Cadmium	0.100	0.100		mg/L		100	80 - 120
Calcium	10.0	9.70		mg/L		97	80 - 120
Chromium	0.100	0.106		mg/L		106	80 - 120
Cobalt	0.100	0.107		mg/L		107	80 - 120
Lead	0.100	0.102		mg/L		102	80 - 120
Magnesium	10.0	9.90		mg/L		99	80 - 120
Manganese	0.100	0.108		mg/L		108	80 - 120
Nickel	0.100	0.102		mg/L		102	80 - 120
Selenium	0.100	0.0930		mg/L		93	80 - 120
Sodium	10.0	9.89		mg/L		99	80 - 120
Thallium	0.100	0.0933		mg/L		93	80 - 120
Vanadium	0.100	0.104		mg/L		104	80 - 120
Zinc	0.100	0.0965		mg/L		96	80 - 120

Lab Sample ID: 490-85229-H-12-C MS
Matrix: Water
Analysis Batch: 274758

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 274354

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.00050	U	0.100	0.0874		mg/L		87	75 - 125
Iron	5.1	F2	1.00	6.25	4	mg/L		111	75 - 125
Manganese	1.4	E	0.100	1.47	E 4	mg/L		70	75 - 125
Potassium	4.6		10.0	14.54		mg/L		100	75 - 125
Silver	0.00050	U	0.100	0.100		mg/L		100	75 - 125
Vanadium	0.0017	J B	0.100	0.102		mg/L		100	75 - 125

Lab Sample ID: 490-85229-H-12-C MS
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 274354

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0096	U	1.00	1.05		mg/L		105	75 - 125
Antimony	0.00068	J	0.100	0.110		mg/L		109	75 - 125
Arsenic	0.0011	J	0.100	0.0969		mg/L		96	75 - 125
Barium	0.093		0.100	0.199		mg/L		106	75 - 125
Beryllium	0.00050	U	0.100	0.0986		mg/L		99	75 - 125
Cadmium	0.00040	U	0.100	0.104		mg/L		104	75 - 125
Calcium	83.7		10.0	93.66	4	mg/L		100	75 - 125
Chromium	0.00050	U	0.100	0.100		mg/L		100	75 - 125
Cobalt	0.00050	U	0.100	0.0962		mg/L		96	75 - 125
Lead	0.00020	U	0.100	0.106		mg/L		106	75 - 125
Magnesium	24.0		10.0	33.83		mg/L		99	75 - 125
Nickel	0.0018	J	0.100	0.105		mg/L		103	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85229-H-12-C MS
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 274354

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	0.00060	U	0.100	0.0929		mg/L		93	75 - 125
Sodium	90.4		10.0	101.6	E 4	mg/L		112	75 - 125
Thallium	0.00068	J	0.100	0.0933		mg/L		93	75 - 125
Zinc	0.48		0.100	0.638	4	mg/L		160	75 - 125

Lab Sample ID: 490-85229-H-12-C MS
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 274354

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	86.0		10.0	96.76	4	mg/L		108	75 - 125
Cobalt	0.010	U	0.100	0.0951		mg/L		95	75 - 125
Vanadium	0.0052	J	0.100	0.110		mg/L		105	75 - 125

Lab Sample ID: 490-85229-H-12-D MSD
Matrix: Water
Analysis Batch: 274758

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 274354

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	0.00050	U	0.100	0.0871		mg/L		87	75 - 125	0	20
Iron	5.1	F2	1.00	7.72	4 F2	mg/L		259	75 - 125	21	20
Manganese	1.4	E	0.100	1.44	E 4	mg/L		34	75 - 125	2	20
Potassium	4.6		10.0	14.54		mg/L		100	75 - 125	0	20
Silver	0.00050	U	0.100	0.0992		mg/L		99	75 - 125	1	20
Vanadium	0.0017	J B	0.100	0.104		mg/L		102	75 - 125	2	20

Lab Sample ID: 490-85229-H-12-D MSD
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 274354

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0096	U	1.00	1.05		mg/L		105	75 - 125	0	20
Antimony	0.00068	J	0.100	0.110		mg/L		109	75 - 125	0	20
Arsenic	0.0011	J	0.100	0.0986		mg/L		97	75 - 125	2	20
Barium	0.093		0.100	0.197		mg/L		104	75 - 125	1	20
Beryllium	0.00050	U	0.100	0.100		mg/L		100	75 - 125	2	20
Cadmium	0.00040	U	0.100	0.103		mg/L		103	75 - 125	1	20
Calcium	83.7		10.0	89.46	4	mg/L		58	75 - 125	5	20
Chromium	0.00050	U	0.100	0.102		mg/L		102	75 - 125	2	20
Cobalt	0.00050	U	0.100	0.0978		mg/L		98	75 - 125	2	20
Lead	0.00020	U	0.100	0.106		mg/L		106	75 - 125	0	20
Magnesium	24.0		10.0	32.68		mg/L		87	75 - 125	3	20
Nickel	0.0018	J	0.100	0.103		mg/L		101	75 - 125	2	20
Selenium	0.00060	U	0.100	0.0934		mg/L		93	75 - 125	1	20
Sodium	90.4		10.0	98.44	4	mg/L		80	75 - 125	3	20
Thallium	0.00068	J	0.100	0.0943		mg/L		94	75 - 125	1	20
Zinc	0.48		0.100	0.703	4	mg/L		225	75 - 125	10	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85229-H-12-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 275699 — **Prep Batch: 274354**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	86.0		10.0	100.9	4	mg/L		149	75 - 125	4	20
Cobalt	0.010	U	0.100	0.106		mg/L		106	75 - 125	11	20
Vanadium	0.0052	J	0.100	0.119		mg/L		113	75 - 125	8	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 490-276031/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 276434 — **Prep Batch: 276031**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/25/15 12:34	08/26/15 10:48	1

Lab Sample ID: LCS 490-276031/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 276434 — **Prep Batch: 276031**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000814		mg/L		81	80 - 120

Lab Sample ID: LCSD 490-276031/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 276434 — **Prep Batch: 276031**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00100	0.000803		mg/L		80	80 - 120	1	20

Lab Sample ID: 490-85149-G-2-F MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 276434 — **Prep Batch: 276031**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U F1	0.00100	0.000386	F1	mg/L		39	75 - 125

Lab Sample ID: 490-85149-G-2-G MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 276250 — **Prep Batch: 276031**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U F1	0.00100	0.00015	U F1	mg/L		0	75 - 125	NC	20

Lab Sample ID: MB 490-274255/1-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 274818 — **Prep Batch: 274266**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/18/15 16:30	08/19/15 20:35	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 490-274255/2-B
Matrix: Water
Analysis Batch: 274818

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 274266

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00100	0.000961		mg/L		96	80 - 120		

Lab Sample ID: 490-85116-D-8-K MS
Matrix: Water
Analysis Batch: 274818

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 274266

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.00015	U	0.00100	0.000797		mg/L		80	75 - 125		

Lab Sample ID: 490-85116-D-8-L MSD
Matrix: Water
Analysis Batch: 274818

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 274266

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000805		mg/L		80	75 - 125	1	20

Lab Sample ID: MB 490-275791/1-B
Matrix: Water
Analysis Batch: 276250

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 275794

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 20:25	1

Lab Sample ID: LCS 490-275791/2-B
Matrix: Water
Analysis Batch: 276250

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 275794

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00100	0.000803		mg/L		80	80 - 120		

Lab Sample ID: 490-85229-H-12-G MS
Matrix: Water
Analysis Batch: 276250

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 275794

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.00015	U	0.00100	0.000880		mg/L		88	75 - 125		

Lab Sample ID: 490-85229-H-12-H MSD
Matrix: Water
Analysis Batch: 276250

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 275794

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000871		mg/L		87	75 - 125	1	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 490-273559/1-A
Matrix: Water
Analysis Batch: 273826

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 273559

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/15/15 14:59	08/17/15 11:33	1

Lab Sample ID: LCS 490-273559/2-A
Matrix: Water
Analysis Batch: 273826

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 273559

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0981		mg/L		98	90 - 110

Lab Sample ID: LCSD 490-273559/3-A
Matrix: Water
Analysis Batch: 273826

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 273559

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.100	0.0939		mg/L		94	90 - 110	4	20

Lab Sample ID: 490-85149-F-7-B MS
Matrix: Water
Analysis Batch: 273826

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 273559

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1	0.100	0.0070	U F1	mg/L		0	70 - 130

Lab Sample ID: 490-85149-F-7-C MSD
Matrix: Water
Analysis Batch: 273826

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 273559

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1	0.100	0.0070	U F1	mg/L		0	70 - 130	NC	46

Lab Sample ID: 490-85153-7 DU
Matrix: Water
Analysis Batch: 273826

Client Sample ID: RW-12(130-140)-081215
Prep Type: Total/NA
Prep Batch: 273559

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.0070	U	0.0070	U	mg/L		NC	20

Lab Sample ID: MB 490-274313/1-A
Matrix: Water
Analysis Batch: 274429

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274313

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/18/15 19:20	08/19/15 09:34	1

Lab Sample ID: LCS 490-274313/2-A
Matrix: Water
Analysis Batch: 274429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274313

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0979		mg/L		98	90 - 110

Lab Sample ID: 490-85229-I-12-B MS
Matrix: Water
Analysis Batch: 274429

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 274313

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1	0.100	0.0585	F1	mg/L		59	70 - 130

Lab Sample ID: 490-85229-I-12-C MSD
Matrix: Water
Analysis Batch: 274429

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 274313

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1	0.100	0.0612	F1	mg/L		61	70 - 130	5	46

Lab Sample ID: 490-85153-1 DU
Matrix: Water
Analysis Batch: 274429

Client Sample ID: PM AirShaft-50-081215
Prep Type: Total/NA
Prep Batch: 274313

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.0070	U	0.0070	U	mg/L		NC	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 490-274134/5
Matrix: Water
Analysis Batch: 274134

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/15/15 15:06	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/15/15 15:06	1

Lab Sample ID: LCS 490-274134/6
Matrix: Water
Analysis Batch: 274134

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	100	95.99		mg/L		96	90 - 110

Lab Sample ID: 490-85157-D-3 DU
Matrix: Water
Analysis Batch: 274134

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	192		193.6		mg/L		0.9	20
Total Alkalinity as CaCO3	192		193.6		mg/L		0.9	20

GC/MS VOA

Analysis Batch: 275185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	8260C SIM	
490-85153-2	OB-25-081215	Total/NA	Water	8260C SIM	
490-85153-3	OB-2-081215	Total/NA	Water	8260C SIM	
490-85153-4	SC-2-081215	Total/NA	Water	8260C SIM	
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	8260C SIM	
490-85153-6	OB-29-081215	Total/NA	Water	8260C SIM	
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	8260C SIM	
490-85153-8	TB-06-081315	Total/NA	Water	8260C SIM	
LCS 490-275185/5	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-275185/6	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-275185/9	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 275550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	8260C	
490-85153-2	OB-25-081215	Total/NA	Water	8260C	
490-85153-3	OB-2-081215	Total/NA	Water	8260C	
490-85153-4	SC-2-081215	Total/NA	Water	8260C	
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	8260C	
490-85153-6	OB-29-081215	Total/NA	Water	8260C	
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	8260C	
490-85153-7 MS	RW-12(130-140)-081215	Total/NA	Water	8260C	
490-85153-7 MSD	RW-12(130-140)-081215	Total/NA	Water	8260C	
490-85153-8	TB-06-081315	Total/NA	Water	8260C	
LCS 490-275550/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-275550/4	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 490-275550/7	Method Blank	Total/NA	Water	8260C	

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Prep Batch: 274580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	3510C	
490-85153-2	OB-25-081215	Total/NA	Water	3510C	
490-85153-3	OB-2-081215	Total/NA	Water	3510C	
490-85153-4	SC-2-081215	Total/NA	Water	3510C	
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	3510C	
490-85153-6	OB-29-081215	Total/NA	Water	3510C	
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	3510C	
LCS 490-274580/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-274580/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 490-274580/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 274686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	3510C	
490-85153-2	OB-25-081215	Total/NA	Water	3510C	
490-85153-3	OB-2-081215	Total/NA	Water	3510C	
490-85153-4	SC-2-081215	Total/NA	Water	3510C	
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 274686 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-6	OB-29-081215	Total/NA	Water	3510C	
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	3510C	
LCS 490-274686/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-274686/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 274915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	8270D	274686
490-85153-2	OB-25-081215	Total/NA	Water	8270D	274686
490-85153-3	OB-2-081215	Total/NA	Water	8270D	274686
490-85153-4	SC-2-081215	Total/NA	Water	8270D	274686
LCS 490-274686/2-A	Lab Control Sample	Total/NA	Water	8270D	274686
MB 490-274686/1-A	Method Blank	Total/NA	Water	8270D	274686

Analysis Batch: 275237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	8270D	274686
490-85153-6	OB-29-081215	Total/NA	Water	8270D	274686
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	8270D	274686

Analysis Batch: 276355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	8270D SIM	274580
490-85153-2	OB-25-081215	Total/NA	Water	8270D SIM	274580
490-85153-3	OB-2-081215	Total/NA	Water	8270D SIM	274580
490-85153-4	SC-2-081215	Total/NA	Water	8270D SIM	274580
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	8270D SIM	274580
490-85153-6	OB-29-081215	Total/NA	Water	8270D SIM	274580
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	8270D SIM	274580
LCS 490-274580/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	274580
LCSD 490-274580/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	274580
MB 490-274580/1-A	Method Blank	Total/NA	Water	8270D SIM	274580

GC Semi VOA

Prep Batch: 277885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	3510C	
490-85153-2	OB-25-081215	Total/NA	Water	3510C	
490-85153-3	OB-2-081215	Total/NA	Water	3510C	
490-85153-4	SC-2-081215	Total/NA	Water	3510C	
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	3510C	
490-85153-6	OB-29-081215	Total/NA	Water	3510C	
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	3510C	
LCS 490-277885/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-277885/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 278119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	8082A	277885

GC Semi VOA (Continued)

Analysis Batch: 278119 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-2	OB-25-081215	Total/NA	Water	8082A	277885
490-85153-3	OB-2-081215	Total/NA	Water	8082A	277885
490-85153-4	SC-2-081215	Total/NA	Water	8082A	277885
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	8082A	277885
490-85153-6	OB-29-081215	Total/NA	Water	8082A	277885
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	8082A	277885
LCS 490-277885/2-A	Lab Control Sample	Total/NA	Water	8082A	277885
MB 490-277885/1-A	Method Blank	Total/NA	Water	8082A	277885

HPLC/IC

Analysis Batch: 276222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	9056A	
490-85153-2	OB-25-081215	Total/NA	Water	9056A	
490-85153-3	OB-2-081215	Total/NA	Water	9056A	
490-85153-4	SC-2-081215	Total/NA	Water	9056A	
490-85153-4 MS	SC-2-081215	Total/NA	Water	9056A	
490-85153-4 MSD	SC-2-081215	Total/NA	Water	9056A	
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	9056A	
490-85153-6	OB-29-081215	Total/NA	Water	9056A	
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	9056A	
LCS 490-276222/7	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-276222/8	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-276222/6	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 273945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85021-G-1-B MS	Matrix Spike	Total/NA	Water	3010A	
490-85021-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	3010A	
490-85153-2	OB-25-081215	Total/NA	Water	3010A	
490-85153-3	OB-2-081215	Total/NA	Water	3010A	
490-85153-4	SC-2-081215	Total/NA	Water	3010A	
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	3010A	
490-85153-6	OB-29-081215	Total/NA	Water	3010A	
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	3010A	
LCS 490-273945/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-273945/1-A	Method Blank	Total/NA	Water	3010A	

Filtration Batch: 274255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85116-D-8-K MS	Matrix Spike	Dissolved	Water	Filtration	
490-85116-D-8-L MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	
490-85153-1	PM AirShaft-50-081215	Dissolved	Water	Filtration	
490-85153-2	OB-25-081215	Dissolved	Water	Filtration	
490-85153-3	OB-2-081215	Dissolved	Water	Filtration	
490-85153-4	SC-2-081215	Dissolved	Water	Filtration	

Metals (Continued)

Filtration Batch: 274255 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-274255/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-274255/1-B	Method Blank	Dissolved	Water	Filtration	

Prep Batch: 274266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85116-D-8-K MS	Matrix Spike	Dissolved	Water	7470A	274255
490-85116-D-8-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	274255
490-85153-1	PM AirShaft-50-081215	Dissolved	Water	7470A	274255
490-85153-2	OB-25-081215	Dissolved	Water	7470A	274255
490-85153-3	OB-2-081215	Dissolved	Water	7470A	274255
490-85153-4	SC-2-081215	Dissolved	Water	7470A	274255
LCS 490-274255/2-B	Lab Control Sample	Dissolved	Water	7470A	274255
MB 490-274255/1-B	Method Blank	Dissolved	Water	7470A	274255

Filtration Batch: 274351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Dissolved	Water	Filtration	
490-85153-2	OB-25-081215	Dissolved	Water	Filtration	
490-85153-3	OB-2-081215	Dissolved	Water	Filtration	
490-85153-4	SC-2-081215	Dissolved	Water	Filtration	
490-85153-5	RW-13(150-170)-081215	Dissolved	Water	Filtration	
490-85153-6	OB-29-081215	Dissolved	Water	Filtration	
490-85153-7	RW-12(130-140)-081215	Dissolved	Water	Filtration	
490-85229-H-12-C MS	Matrix Spike	Dissolved	Water	Filtration	
490-85229-H-12-D MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	
LCS 490-274351/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-274351/1-B	Method Blank	Dissolved	Water	Filtration	

Prep Batch: 274354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Dissolved	Water	3005A	274351
490-85153-2	OB-25-081215	Dissolved	Water	3005A	274351
490-85153-3	OB-2-081215	Dissolved	Water	3005A	274351
490-85153-4	SC-2-081215	Dissolved	Water	3005A	274351
490-85153-5	RW-13(150-170)-081215	Dissolved	Water	3005A	274351
490-85153-6	OB-29-081215	Dissolved	Water	3005A	274351
490-85153-7	RW-12(130-140)-081215	Dissolved	Water	3005A	274351
490-85229-H-12-C MS	Matrix Spike	Dissolved	Water	3005A	274351
490-85229-H-12-D MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	274351
LCS 490-274351/2-B	Lab Control Sample	Dissolved	Water	3005A	274351
MB 490-274351/1-B	Method Blank	Dissolved	Water	3005A	274351

Analysis Batch: 274758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85021-G-1-B MS	Matrix Spike	Total/NA	Water	6020A	273945
490-85021-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	273945
490-85153-1	PM AirShaft-50-081215	Dissolved	Water	6020A	274354
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	6020A	273945
490-85153-2	OB-25-081215	Dissolved	Water	6020A	274354
490-85153-2	OB-25-081215	Total/NA	Water	6020A	273945
490-85153-3	OB-2-081215	Dissolved	Water	6020A	274354

Metals (Continued)

Analysis Batch: 274758 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-3	OB-2-081215	Total/NA	Water	6020A	273945
490-85153-4	SC-2-081215	Dissolved	Water	6020A	274354
490-85153-4	SC-2-081215	Total/NA	Water	6020A	273945
490-85153-5	RW-13(150-170)-081215	Dissolved	Water	6020A	274354
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	6020A	273945
490-85153-6	OB-29-081215	Dissolved	Water	6020A	274354
490-85153-6	OB-29-081215	Total/NA	Water	6020A	273945
490-85153-7	RW-12(130-140)-081215	Dissolved	Water	6020A	274354
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	6020A	273945
490-85229-H-12-C MS	Matrix Spike	Dissolved	Water	6020A	274354
490-85229-H-12-D MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	274354
LCS 490-273945/2-A	Lab Control Sample	Total/NA	Water	6020A	273945
LCS 490-274351/2-B	Lab Control Sample	Dissolved	Water	6020A	274354
MB 490-273945/1-A	Method Blank	Total/NA	Water	6020A	273945
MB 490-274351/1-B	Method Blank	Dissolved	Water	6020A	274354

Analysis Batch: 274818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85116-D-8-K MS	Matrix Spike	Dissolved	Water	7470A	274266
490-85116-D-8-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	274266
490-85153-1	PM AirShaft-50-081215	Dissolved	Water	7470A	274266
490-85153-2	OB-25-081215	Dissolved	Water	7470A	274266
490-85153-3	OB-2-081215	Dissolved	Water	7470A	274266
490-85153-4	SC-2-081215	Dissolved	Water	7470A	274266
LCS 490-274255/2-B	Lab Control Sample	Dissolved	Water	7470A	274266
MB 490-274255/1-B	Method Blank	Dissolved	Water	7470A	274266

Analysis Batch: 275098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Dissolved	Water	6020A	274354
490-85153-2	OB-25-081215	Dissolved	Water	6020A	274354
490-85153-3	OB-2-081215	Dissolved	Water	6020A	274354
490-85153-4	SC-2-081215	Dissolved	Water	6020A	274354
490-85153-5	RW-13(150-170)-081215	Dissolved	Water	6020A	274354
490-85153-6	OB-29-081215	Dissolved	Water	6020A	274354
490-85153-7	RW-12(130-140)-081215	Dissolved	Water	6020A	274354

Analysis Batch: 275699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Dissolved	Water	6020A	274354
490-85153-2	OB-25-081215	Dissolved	Water	6020A	274354
490-85153-3	OB-2-081215	Dissolved	Water	6020A	274354
490-85153-4	SC-2-081215	Dissolved	Water	6020A	274354
490-85153-4	SC-2-081215	Dissolved	Water	6020A	274354
490-85153-5	RW-13(150-170)-081215	Dissolved	Water	6020A	274354
490-85153-6	OB-29-081215	Dissolved	Water	6020A	274354
490-85153-6	OB-29-081215	Dissolved	Water	6020A	274354
490-85153-7	RW-12(130-140)-081215	Dissolved	Water	6020A	274354
490-85229-H-12-C MS	Matrix Spike	Dissolved	Water	6020A	274354
490-85229-H-12-C MS	Matrix Spike	Dissolved	Water	6020A	274354
490-85229-H-12-D MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	274354

Metals (Continued)

Analysis Batch: 275699 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-H-12-D MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	274354
LCS 490-274351/2-B	Lab Control Sample	Dissolved	Water	6020A	274354
MB 490-274351/1-B	Method Blank	Dissolved	Water	6020A	274354

Filtration Batch: 275791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-5	RW-13(150-170)-081215	Dissolved	Water	Filtration	
490-85153-6	OB-29-081215	Dissolved	Water	Filtration	
490-85153-7	RW-12(130-140)-081215	Dissolved	Water	Filtration	
490-85229-H-12-G MS	Matrix Spike	Dissolved	Water	Filtration	
490-85229-H-12-H MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	
LCS 490-275791/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-275791/1-B	Method Blank	Dissolved	Water	Filtration	

Prep Batch: 275794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-5	RW-13(150-170)-081215	Dissolved	Water	7470A	275791
490-85153-6	OB-29-081215	Dissolved	Water	7470A	275791
490-85153-7	RW-12(130-140)-081215	Dissolved	Water	7470A	275791
490-85229-H-12-G MS	Matrix Spike	Dissolved	Water	7470A	275791
490-85229-H-12-H MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	275791
LCS 490-275791/2-B	Lab Control Sample	Dissolved	Water	7470A	275791
MB 490-275791/1-B	Method Blank	Dissolved	Water	7470A	275791

Analysis Batch: 275984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85021-G-1-B MS	Matrix Spike	Total/NA	Water	6020A	273945
490-85021-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	273945
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	6020A	273945
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	6020A	273945
490-85153-2	OB-25-081215	Total/NA	Water	6020A	273945
490-85153-3	OB-2-081215	Total/NA	Water	6020A	273945
490-85153-4	SC-2-081215	Total/NA	Water	6020A	273945
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	6020A	273945
490-85153-6	OB-29-081215	Total/NA	Water	6020A	273945
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	6020A	273945
LCS 490-273945/2-A	Lab Control Sample	Total/NA	Water	6020A	273945
MB 490-273945/1-A	Method Blank	Total/NA	Water	6020A	273945

Prep Batch: 275991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	3010A	
490-85153-2	OB-25-081215	Total/NA	Water	3010A	
490-85153-3	OB-2-081215	Total/NA	Water	3010A	
490-85153-4	SC-2-081215	Total/NA	Water	3010A	
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	3010A	
490-85153-6	OB-29-081215	Total/NA	Water	3010A	
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	3010A	
490-85759-B-1-B MS	Matrix Spike	Total/NA	Water	3010A	
490-85759-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
LCS 490-275991/2-A	Lab Control Sample	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 275991 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-275991/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 276031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85149-G-2-F MS	Matrix Spike	Total/NA	Water	7470A	
490-85149-G-2-G MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	7470A	
490-85153-2	OB-25-081215	Total/NA	Water	7470A	
490-85153-3	OB-2-081215	Total/NA	Water	7470A	
490-85153-4	SC-2-081215	Total/NA	Water	7470A	
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	7470A	
490-85153-6	OB-29-081215	Total/NA	Water	7470A	
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	7470A	
LCS 490-276031/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 490-276031/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 490-276031/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 276250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85149-G-2-G MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	276031
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	7470A	276031
490-85153-2	OB-25-081215	Total/NA	Water	7470A	276031
490-85153-3	OB-2-081215	Total/NA	Water	7470A	276031
490-85153-4	SC-2-081215	Total/NA	Water	7470A	276031
490-85153-5	RW-13(150-170)-081215	Dissolved	Water	7470A	275794
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	7470A	276031
490-85153-6	OB-29-081215	Dissolved	Water	7470A	275794
490-85153-6	OB-29-081215	Total/NA	Water	7470A	276031
490-85153-7	RW-12(130-140)-081215	Dissolved	Water	7470A	275794
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	7470A	276031
490-85229-H-12-G MS	Matrix Spike	Dissolved	Water	7470A	275794
490-85229-H-12-H MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	275794
LCS 490-275791/2-B	Lab Control Sample	Dissolved	Water	7470A	275794
MB 490-275791/1-B	Method Blank	Dissolved	Water	7470A	275794

Analysis Batch: 276307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	6020A	273945

Analysis Batch: 276434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85149-G-2-F MS	Matrix Spike	Total/NA	Water	7470A	276031
LCS 490-276031/2-A	Lab Control Sample	Total/NA	Water	7470A	276031
LCSD 490-276031/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	276031
MB 490-276031/1-A	Method Blank	Total/NA	Water	7470A	276031

Analysis Batch: 276838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	6020A	275991
490-85153-2	OB-25-081215	Total/NA	Water	6020A	275991
490-85153-3	OB-2-081215	Total/NA	Water	6020A	275991

Metals (Continued)

Analysis Batch: 276838 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-4	SC-2-081215	Total/NA	Water	6020A	275991
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	6020A	275991
490-85153-6	OB-29-081215	Total/NA	Water	6020A	275991
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	6020A	275991
490-85759-B-1-B MS	Matrix Spike	Total/NA	Water	6020A	275991
490-85759-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	275991
LCS 490-275991/2-A	Lab Control Sample	Total/NA	Water	6020A	275991
MB 490-275991/1-A	Method Blank	Total/NA	Water	6020A	275991

General Chemistry

Prep Batch: 273559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85149-F-7-B MS	Matrix Spike	Total/NA	Water	9012B	
490-85149-F-7-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	
490-85153-2	OB-25-081215	Total/NA	Water	9012B	
490-85153-3	OB-2-081215	Total/NA	Water	9012B	
490-85153-4	SC-2-081215	Total/NA	Water	9012B	
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	9012B	
490-85153-6	OB-29-081215	Total/NA	Water	9012B	
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	9012B	
490-85153-7 DU	RW-12(130-140)-081215	Total/NA	Water	9012B	
LCS 490-273559/2-A	Lab Control Sample	Total/NA	Water	9012B	
LCSD 490-273559/3-A	Lab Control Sample Dup	Total/NA	Water	9012B	
MB 490-273559/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 273826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85149-F-7-B MS	Matrix Spike	Total/NA	Water	9012B	273559
490-85149-F-7-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	273559
490-85153-2	OB-25-081215	Total/NA	Water	9012B	273559
490-85153-3	OB-2-081215	Total/NA	Water	9012B	273559
490-85153-4	SC-2-081215	Total/NA	Water	9012B	273559
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	9012B	273559
490-85153-6	OB-29-081215	Total/NA	Water	9012B	273559
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	9012B	273559
490-85153-7 DU	RW-12(130-140)-081215	Total/NA	Water	9012B	273559
LCS 490-273559/2-A	Lab Control Sample	Total/NA	Water	9012B	273559
LCSD 490-273559/3-A	Lab Control Sample Dup	Total/NA	Water	9012B	273559
MB 490-273559/1-A	Method Blank	Total/NA	Water	9012B	273559

Analysis Batch: 274134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	SM 2320B	
490-85153-2	OB-25-081215	Total/NA	Water	SM 2320B	
490-85153-3	OB-2-081215	Total/NA	Water	SM 2320B	
490-85153-4	SC-2-081215	Total/NA	Water	SM 2320B	
490-85153-5	RW-13(150-170)-081215	Total/NA	Water	SM 2320B	
490-85153-6	OB-29-081215	Total/NA	Water	SM 2320B	
490-85153-7	RW-12(130-140)-081215	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 274134 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85157-D-3 DU	Duplicate	Total/NA	Water	SM 2320B	
LCS 490-274134/6	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 490-274134/5	Method Blank	Total/NA	Water	SM 2320B	

Prep Batch: 274313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	9012B	
490-85153-1 DU	PM AirShaft-50-081215	Total/NA	Water	9012B	
490-85229-I-12-B MS	Matrix Spike	Total/NA	Water	9012B	
490-85229-I-12-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	
LCS 490-274313/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 490-274313/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 274429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-1	PM AirShaft-50-081215	Total/NA	Water	9012B	274313
490-85153-1 DU	PM AirShaft-50-081215	Total/NA	Water	9012B	274313
490-85229-I-12-B MS	Matrix Spike	Total/NA	Water	9012B	274313
490-85229-I-12-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	274313
LCS 490-274313/2-A	Lab Control Sample	Total/NA	Water	9012B	274313
MB 490-274313/1-A	Method Blank	Total/NA	Water	9012B	274313

Client Sample ID: PM AirShaft-50-081215

Lab Sample ID: 490-85153-1

Date Collected: 08/12/15 10:05

Matrix: Water

Date Received: 08/14/15 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	275550	08/23/15 10:26	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275185	08/21/15 16:41	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274686	08/19/15 17:49	MLT	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	274915	08/21/15 01:24	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274580	08/19/15 14:30	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276355	08/26/15 17:55	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277885	08/31/15 16:18	BGD	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278119	09/01/15 15:22	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		276222	08/25/15 17:03	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 01:37	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275098	08/20/15 19:40	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 13:17	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	273945	08/18/15 09:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274758	08/19/15 14:59	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	273945	08/18/15 09:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 17:22	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	273945	08/18/15 09:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		5	50 mL	50 mL	275984	08/24/15 17:27	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275991	08/26/15 09:10	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 16:43	LEG	TAL NSH
Dissolved	Filtration	Filtration			30.0 mL	30.0 mL	274255	08/18/15 16:25	BLG	TAL NSH
Dissolved	Prep	7470A			30.0 mL	30.0 mL	274266	08/18/15 16:30	BLG	TAL NSH
Dissolved	Analysis	7470A		1	30.0 mL	30.0 mL	274818	08/19/15 21:33	BLG	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	276031	08/25/15 12:34	BLG	TAL NSH
Total/NA	Analysis	7470A		1	30.0 mL	30.0 mL	276250	08/25/15 19:15	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274313	08/18/15 19:20	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	274429	08/19/15 09:40	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/15/15 16:11	SMB	TAL NSH

Client Sample ID: OB-25-081215

Lab Sample ID: 490-85153-2

Date Collected: 08/12/15 09:50

Matrix: Water

Date Received: 08/14/15 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	275550	08/23/15 10:53	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275185	08/21/15 17:10	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274686	08/19/15 17:49	MLT	TAL NSH

Client Sample ID: OB-25-081215

Date Collected: 08/12/15 09:50
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D		1	250 mL	1 mL	274915	08/21/15 01:01	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274580	08/19/15 14:30	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276355	08/26/15 18:22	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277885	08/31/15 16:18	BGD	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278119	09/01/15 15:38	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		276222	08/25/15 17:22	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 01:43	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275098	08/20/15 19:45	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 13:22	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	273945	08/18/15 09:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274758	08/19/15 15:05	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	273945	08/18/15 09:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 17:33	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275991	08/26/15 09:10	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 16:48	LEG	TAL NSH
Dissolved	Filtration	Filtration			30.0 mL	30.0 mL	274255	08/18/15 16:25	BLG	TAL NSH
Dissolved	Prep	7470A			30.0 mL	30.0 mL	274266	08/18/15 16:30	BLG	TAL NSH
Dissolved	Analysis	7470A		1	30.0 mL	30.0 mL	274818	08/19/15 21:36	BLG	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	276031	08/25/15 12:34	BLG	TAL NSH
Total/NA	Analysis	7470A		1	30.0 mL	30.0 mL	276250	08/25/15 19:17	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	273559	08/15/15 14:59	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	273826	08/17/15 11:40	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/15/15 16:28	SMB	TAL NSH

Client Sample ID: OB-2-081215

Date Collected: 08/12/15 12:55
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	275550	08/23/15 11:21	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275185	08/21/15 17:39	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274686	08/19/15 17:49	MLT	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	274915	08/21/15 00:37	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274580	08/19/15 14:30	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276355	08/26/15 18:49	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277885	08/31/15 16:18	BGD	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278119	09/01/15 15:54	MGH	TAL NSH

Client Sample ID: OB-2-081215

Lab Sample ID: 490-85153-3

Date Collected: 08/12/15 12:55

Matrix: Water

Date Received: 08/14/15 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	10 mL		276222	08/25/15 17:41	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 01:49	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275098	08/20/15 19:50	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 13:27	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	273945	08/18/15 09:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274758	08/19/15 15:11	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	273945	08/18/15 09:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 17:48	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275991	08/26/15 09:10	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 16:54	LEG	TAL NSH
Dissolved	Filtration	Filtration			30.0 mL	30.0 mL	274255	08/18/15 16:25	BLG	TAL NSH
Dissolved	Prep	7470A			30.0 mL	30.0 mL	274266	08/18/15 16:30	BLG	TAL NSH
Dissolved	Analysis	7470A		1	30.0 mL	30.0 mL	274818	08/19/15 21:38	BLG	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	276031	08/25/15 12:34	BLG	TAL NSH
Total/NA	Analysis	7470A		1	30.0 mL	30.0 mL	276250	08/25/15 19:20	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	273559	08/15/15 14:59	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	273826	08/17/15 11:40	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/15/15 16:33	SMB	TAL NSH

Client Sample ID: SC-2-081215

Lab Sample ID: 490-85153-4

Date Collected: 08/12/15 14:25

Matrix: Water

Date Received: 08/14/15 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	275550	08/23/15 11:48	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275185	08/21/15 18:07	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274686	08/19/15 17:49	MLT	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	274915	08/21/15 00:14	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274580	08/19/15 14:30	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276355	08/26/15 19:15	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277885	08/31/15 16:18	BGD	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278119	09/01/15 16:10	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		276222	08/25/15 18:38	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 02:06	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH

Client Sample ID: SC-2-081215

Lab Sample ID: 490-85153-4

Date Collected: 08/12/15 14:25

Matrix: Water

Date Received: 08/14/15 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020A		1	50 mL	50 mL	275098	08/20/15 20:06	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 13:43	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		50	50 mL	50 mL	275699	08/21/15 15:28	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	273945	08/18/15 09:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274758	08/19/15 15:17	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	273945	08/18/15 09:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 17:53	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275991	08/26/15 09:10	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 16:59	LEG	TAL NSH
Dissolved	Filtration	Filtration			30.0 mL	30.0 mL	274255	08/18/15 16:25	BLG	TAL NSH
Dissolved	Prep	7470A			30.0 mL	30.0 mL	274266	08/18/15 16:30	BLG	TAL NSH
Dissolved	Analysis	7470A		1	30.0 mL	30.0 mL	274818	08/19/15 21:41	BLG	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	276031	08/25/15 12:34	BLG	TAL NSH
Total/NA	Analysis	7470A		1	30.0 mL	30.0 mL	276250	08/25/15 19:39	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	273559	08/15/15 14:59	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	273826	08/17/15 11:41	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/15/15 16:38	SMB	TAL NSH

Client Sample ID: RW-13(150-170)-081215

Lab Sample ID: 490-85153-5

Date Collected: 08/12/15 11:10

Matrix: Water

Date Received: 08/14/15 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	275550	08/23/15 12:15	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275185	08/21/15 18:36	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274686	08/19/15 17:49	MLT	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	275237	08/21/15 15:20	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274580	08/19/15 14:30	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276355	08/26/15 19:42	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277885	08/31/15 16:18	BGD	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278119	09/01/15 16:25	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		276222	08/25/15 19:36	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 02:12	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275098	08/20/15 20:11	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH

Client Sample ID: RW-13(150-170)-081215

Lab Sample ID: 490-85153-5

Date Collected: 08/12/15 11:10

Matrix: Water

Date Received: 08/14/15 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020A		100	50 mL	50 mL	275699	08/21/15 15:34	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	273945	08/18/15 09:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274758	08/19/15 15:23	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	273945	08/18/15 09:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 17:59	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275991	08/26/15 09:10	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 17:14	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 21:06	BLG	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	276031	08/25/15 12:34	BLG	TAL NSH
Total/NA	Analysis	7470A		1	30.0 mL	30.0 mL	276250	08/25/15 19:42	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	273559	08/15/15 14:59	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	273826	08/17/15 11:42	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/15/15 16:44	SMB	TAL NSH

Client Sample ID: OB-29-081215

Lab Sample ID: 490-85153-6

Date Collected: 08/12/15 15:30

Matrix: Water

Date Received: 08/14/15 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	275550	08/23/15 12:42	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275185	08/21/15 19:04	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274686	08/19/15 17:49	MLT	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	275237	08/21/15 15:43	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274580	08/19/15 14:30	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276355	08/26/15 20:09	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277885	08/31/15 16:18	BGD	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278119	09/01/15 16:41	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		276222	08/25/15 19:55	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:41	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:41	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 02:17	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:41	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:41	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275098	08/20/15 20:16	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:41	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:41	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 13:53	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:41	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:41	ZLN	TAL NSH
Dissolved	Analysis	6020A		20	50 mL	50 mL	275699	08/21/15 16:10	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	273945	08/18/15 09:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274758	08/19/15 15:28	KKK	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	273945	08/18/15 09:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 18:04	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275991	08/26/15 09:10	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 17:19	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 21:08	BLG	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	276031	08/25/15 12:34	BLG	TAL NSH
Total/NA	Analysis	7470A		1	30.0 mL	30.0 mL	276250	08/25/15 19:44	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	273559	08/15/15 14:59	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	273826	08/17/15 11:43	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/15/15 16:49	SMB	TAL NSH

Client Sample ID: RW-12(130-140)-081215

Date Collected: 08/12/15 14:50
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	275550	08/23/15 09:59	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275185	08/21/15 19:33	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274686	08/19/15 17:49	MLT	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	275237	08/21/15 16:07	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274580	08/19/15 14:30	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276355	08/26/15 20:35	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277885	08/31/15 16:18	BGD	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278119	09/01/15 16:57	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		276222	08/25/15 20:14	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:41	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:41	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 02:23	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:41	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:41	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275098	08/20/15 20:21	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:41	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:41	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 13:58	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	273945	08/18/15 09:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	274758	08/19/15 15:34	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	273945	08/18/15 09:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 18:09	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	273945	08/18/15 09:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		10	50 mL	50 mL	276307	08/25/15 18:33	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275991	08/26/15 09:10	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 17:25	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 21:11	BLG	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	276031	08/25/15 12:34	BLG	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Client Sample ID: RW-12(130-140)-081215

Date Collected: 08/12/15 14:50
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7470A		1	30.0 mL	30.0 mL	276250	08/25/15 19:47	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	273559	08/15/15 14:59	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	273826	08/17/15 11:44	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/15/15 16:57	SMB	TAL NSH

Client Sample ID: TB-06-081315

Date Collected: 08/13/15 01:00
Date Received: 08/14/15 09:55

Lab Sample ID: 490-85153-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	275550	08/23/15 08:37	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275185	08/21/15 16:13	MJH	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
9056A	Anions, Ion Chromatography	SW846	TAL NSH
6020A	Metals (ICP/MS)	SW846	TAL NSH
7470A	Mercury (CVAA)	SW846	TAL NSH
9012B	Cyanide, Total andor Amenable	SW846	TAL NSH
SM 2320B	Alkalinity	SM	TAL NSH

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85153-1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	TN965	09-30-15

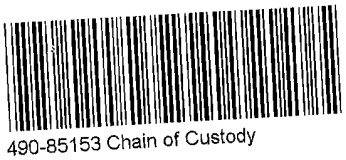
The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total
8260C		Water	Dichlorobromomethane
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	1,4-Dioxane
8260C SIM		Water	Ethylene Dibromide
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

New York City


490-85153 Chain of Custody

Cooler Received/Opened On: 8/14/2015 @0955

1. Tracking # 2460 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 4.1 Degrees C

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: ⌀

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) +

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO...NA

b. Was there any observable headspace present in any VOA vial? YES..NO..NA

14. Was there a Trip Blank in this cooler? YES..NO..NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) MDM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES...NO..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) MDM

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) MDM

I certify that I attached a label with the unique LIMS number to each container (intial) MDM

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO..#_____

BIS = Broken in shipment

Loc: 490
85153

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 8/14/2015 @ 9:55

1. Tracking # 2427 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 2.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO...NA

If yes, how many and where:

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) ADH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO...NA

b. Was there any observable headspace present in any VOA vial? YES..NO..NA

14. Was there a Trip Blank in this cooler? YES..NO...NA If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (intial) MDW

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES..NO..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) MDW

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) MDW

I certify that I attached a label with the unique LIMS number to each container (intial) MDW MDW 8/14/15

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO..#

MDW 8/14/15

Parts of PMAir Shaft - 50-081215. not received. mom

08-25 - no vua vials - no 250ml NP received. mom

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
85153
#1
A

Cooler Received/Opened On 8/14/2015 @ 0955

1. Tracking # 2438 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960357

2. Temperature of rep. sample or temp blank when opened: 2.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA

4. Were custody seals on outside of cooler? YES..NO..NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO..NA

6. Were custody papers inside cooler? YES..NO..NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO..NA

Were these signed and dated correctly? YES...NO..NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO...NA

b. Was there any observable headspace present in any VOA vial? YES..NO..NA

14. Was there a Trip Blank in this cooler? YES..NO..NA If multiple coolers, sequence #_____ MDM 8.14.15

I certify that I unloaded the cooler and answered questions 7-14 (intial) MDM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES..NO..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) MDM

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) MDM

I certify that I attached a label with the unique LIMS number to each container (intial) MDM

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES..NO..#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
85153
#1
B

Cooler Received/Opened On 8/14/2015 @0955

1. Tracking # 2449 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 97310166

2. Temperature of rep. sample or temp blank when opened: 0.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...(NA)

4. Were custody seals on outside of cooler? YES...(NO)...NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? YES...(NO)...NA

I certify that I opened the cooler and answered questions 1-6 (intial) HKG

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...(NO)...NA

14. Was there a Trip Blank in this cooler? YES...(NO)...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) MDM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? (YES)...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES...(NO)...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) MDM

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) MDM

I certify that I attached a label with the unique LIMS number to each container (intial) MDM

21. Were there Non-Conformance issues at login? YES...(NO) Was a NCM generated? YES...(NO)...#_____

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL

Loc: 490
85153

9/17/2015

Client Information	Sampler: Robert Lawfenberg	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	8082A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
PM-AirShaft-50-081215	8/12/15	10:05	G	Water	N	N	✓	✓	✓	✓	✓	–	✓	✓	–	✓					-1
OB-25-081215	8/12/15	09:50	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	–					2
OB-2-081215	8/12/15	12:55	G	Water	N	N	✓	–	–	✓	✓	✓	✓	✓	✓	✓					3
SC-2-081215	8/12/15	14:25	G	Water	N	N	✓	–	✓	✓	✓	✓	✓	✓	✓	✓					4
RW-13(150-170)-081215	8/12/15	11:10	G	Water	N	N	✓	✓	✓	✓	✓	–	✓	✓	✓	✓					5
OB-29-081215	8/12/15	15:30	G	Water	N	N	✓	–	✓	✓	✓	✓	✓	✓	✓	✓					6
RW-12(130-140)-081215	8/12/15	14:50	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					7
TB-06-081315	8/13/15	—	—	Water	N	N	✓	✓													8
				Water																	
				Water																	
				Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	8/13/15 830	TA	[signature]	8/13/15 830	TA
2	[signature]	8/13/15 1225	TA	[signature]	8-14-15 @ 0955	TAN
3						

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.1/2.0/0.4/4.5

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

King of Prussia

490-85153-02 Chain of Custody

Cooler Received/Opened On 8/15/2015 @ 0930

1. Tracking # 2450 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 1.3 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1 of 1

I certify that I unloaded the cooler and answered questions 7-14 (intial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) _____

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) _____

I certify that I attached a label with the unique LIMS number to each container (intial) _____

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-34

Loc: 490
85153

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENT

Loc: 490
85153

Client Information

Client Contact: Tim Roeper
Company: Cornerstone Environmental Group, LLC/ FORD
Address: 100 Crystal Run Road Suite 101
City: Middletown
State, Zip: NY, 10941
Phone: 845-695-0252(Tel)
Email: tim.roeper@cornerstoneeg.com
Project Name: FORD Ringwood Mines SA GW/SW E203361
Site:

Sampler: Robert Laufenberg
Phone: 845 695 0200
Lab PM: Brown, Shali
E-Mail: shali.brown@testamericainc.com
Carrier Tracking No(s):
COC No: 490-41539-14078.2
Page:
Job #:

Due Date Requested:
TAT Requested (days): Standard TAT -Levl IV data package
PO #:
WO #:
Project #: 49008864.
SSOW#:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:															
PMAirShaft-50-081215	8/12/15	10:05	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		-1
OB-25-081215	8/12/15	09:50	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		2
OB-2-081215	8/12/15	12:55	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		3
SC-2-081215	8/12/15	14:25	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		4
RW-13(150-170)-081215	8/12/15	11:10	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		5
OB-29-081215	8/12/15	15:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		6
RW-12(130-140)-081215	8/12/15	14:50	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		7
TB-06-081315	8/13/15	—	—	Water	N	N	✓	✓										8
				Water														
				Water														
				Water														

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	8/13/15 830	TA	[signature]	8/13/15 830	TA
James Thieme	8/13/15 1225	TA	[signature]	8-14-15 @ 0955	TAW

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 21/20/04/4 / 1.3 8/15/15 0930

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 490-85153-1

Login Number: 85153
List Number: 1
Creator: McBride, Mike

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1/2.8/0.1/4.1/1.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-85229-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Tim Roeper

Authorized for release by:
9/21/2015 10:08:36 AM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-85229-1	RW-13 (100-120) - 081315	Water	08/13/15 09:15	08/15/15 09:30
490-85229-2	OB-24-081315	Water	08/13/15 09:50	08/15/15 09:30
490-85229-3	OB-14A-081315	Water	08/13/15 10:55	08/15/15 09:30
490-85229-4	OB-14B-081315	Water	08/13/15 10:20	08/15/15 09:30
490-85229-5	OB-16-081315	Water	08/13/15 15:45	08/15/15 09:30
490-85229-6	OB-18-081315	Water	08/13/15 14:25	08/15/15 09:30
490-85229-7	OB-28-081315	Water	08/13/15 15:15	08/15/15 09:30
490-85229-8	OB-17-081315	Water	08/13/15 14:05	08/15/15 09:30
490-85229-9	TB-07-081415	Water	08/14/15 01:00	08/15/15 09:30
490-85229-10	OB-10-081415	Water	08/14/15 10:20	08/15/15 09:30
490-85229-11	DUP-03-081415	Water	08/14/15 12:00	08/15/15 09:30
490-85229-12	CM-50-081415	Water	08/14/15 10:25	08/15/15 09:30

Job ID: 490-85229-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 490-85229-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 8/15/2015 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 9 coolers at receipt time were 2.6º C, 2.8º C, 2.9º C, 3.5º C, 3.7º C, 3.9º C, 4.2º C, 5.8º C and 5.8º C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples RW-13 (100-120) - 081315 (490-85229-1), OB-24-081315 (490-85229-2), OB-14A-081315 (490-85229-3), OB-14B-081315 (490-85229-4), OB-16-081315 (490-85229-5), OB-18-081315 (490-85229-6), OB-28-081315 (490-85229-7), OB-17-081315 (490-85229-8), TB-07-081415 (490-85229-9), OB-10-081415 (490-85229-10), DUP-03-081415 (490-85229-11) and CM-50-081415 (490-85229-12) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/26/2015.

Toluene was detected in method blank MB 490-276265/7 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

Job ID: 490-85229-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

VOLATILE ORGANIC COMPOUNDS (GC-MS SIM)

Samples RW-13 (100-120) - 081315 (490-85229-1), OB-24-081315 (490-85229-2), OB-14A-081315 (490-85229-3), OB-14B-081315 (490-85229-4), OB-16-081315 (490-85229-5), OB-18-081315 (490-85229-6), OB-28-081315 (490-85229-7), OB-17-081315 (490-85229-8), TB-07-081415 (490-85229-9), OB-10-081415 (490-85229-10), DUP-03-081415 (490-85229-11) and CM-50-081415 (490-85229-12) were analyzed for volatile organic compounds (GC-MS SIM) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/24/2015 and 08/25/2015.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GC MS)

Samples RW-13 (100-120) - 081315 (490-85229-1), OB-24-081315 (490-85229-2), OB-14A-081315 (490-85229-3), OB-14B-081315 (490-85229-4), OB-16-081315 (490-85229-5), OB-18-081315 (490-85229-6), OB-28-081315 (490-85229-7), OB-17-081315 (490-85229-8), OB-10-081415 (490-85229-10), DUP-03-081415 (490-85229-11) and CM-50-081415 (490-85229-12) were analyzed for semivolatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/20/2015 and analyzed on 08/21/2015.

2,4,6-Tribromophenol (Surr) failed the surrogate recovery criteria high for RW-13 (100-120) - 081315 (490-85229-1).
2,4,6-Tribromophenol (Surr) failed the surrogate recovery criteria high for OB-28-081315 (490-85229-7). This sample did not contain any target analytes associated with this surrogate above the reporting limit (RL); therefore, re-extraction was not performed.

Bis(2-chloroethyl)ether failed the recovery criteria high for LCS 490-274736/2-A. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

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

POLYCHLORINATED BIPHENYLS (PCBS)

Samples RW-13 (100-120) - 081315 (490-85229-1), OB-24-081315 (490-85229-2), OB-14A-081315 (490-85229-3), OB-14B-081315 (490-85229-4), OB-16-081315 (490-85229-5), OB-18-081315 (490-85229-6), OB-28-081315 (490-85229-7), OB-17-081315 (490-85229-8), OB-10-081415 (490-85229-10), DUP-03-081415 (490-85229-11) and CM-50-081415 (490-85229-12) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 08/27/2015 and 08/31/2015 and analyzed on 08/27/2015 and 09/01/2015.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-277885.

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

POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

Samples RW-13 (100-120) - 081315 (490-85229-1), OB-24-081315 (490-85229-2), OB-14A-081315 (490-85229-3), OB-14B-081315 (490-85229-4), OB-16-081315 (490-85229-5), OB-18-081315 (490-85229-6), OB-28-081315 (490-85229-7), OB-17-081315 (490-85229-8), OB-10-081415 (490-85229-10), DUP-03-081415 (490-85229-11) and CM-50-081415 (490-85229-12) were analyzed for polycyclic aromatic hydrocarbons (PAHs) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/20/2015 and 08/30/2015 and analyzed on 08/26/2015 and 08/31/2015.

2-Fluorobiphenyl (Surr) and Terphenyl-d14 failed the surrogate recovery criteria high for CM-50-081415 (490-85229-12). Re-extraction and re-analysis was performed outside of holding time with acceptable results. Both sets of data have been reported.

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

DISSOLVED METALS (ICPMS)

Samples RW-13 (100-120) - 081315 (490-85229-1), OB-24-081315 (490-85229-2), OB-14A-081315 (490-85229-3), OB-14B-081315 (490-85229-4), OB-16-081315 (490-85229-5), OB-18-081315 (490-85229-6), OB-28-081315 (490-85229-7), OB-17-081315 (490-85229-8), OB-10-081415 (490-85229-10), DUP-03-081415 (490-85229-11) and CM-50-081415 (490-85229-12) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/19/2015 and analyzed on 08/19/2015, 08/20/2015 and 08/21/2015.

Job ID: 490-85229-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

Vanadium was detected in method blank MB 490-274351/1-B at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Vanadium was detected in method blank MB 490-274351/1-B at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Manganese failed the recovery criteria low for the MS of sample CM-50-081415 MSMS (490-85229-12) in batch 490-275699. Zinc failed the recovery criteria high.
For the MSD of sample CM-50-081415 MSDMSD (490-85229-12) in batch 490-275699, Selenium and Calcium failed the recovery criteria low. Iron, Zinc and Manganese failed the recovery criteria high. Also, Iron exceeded the RPD limit. Refer to the QC report for details.

Samples RW-13 (100-120) - 081315 (490-85229-1)[20X], OB-14A-081315 (490-85229-3)[20X], OB-14B-081315 (490-85229-4)[20X], OB-16-081315 (490-85229-5)[20X], OB-28-081315 (490-85229-7)[20X] and CM-50-081415 (490-85229-12)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

METALS (ICPMS)

Samples RW-13 (100-120) - 081315 (490-85229-1), OB-24-081315 (490-85229-2), OB-14A-081315 (490-85229-3), OB-14B-081315 (490-85229-4), OB-16-081315 (490-85229-5), OB-18-081315 (490-85229-6), OB-28-081315 (490-85229-7), OB-17-081315 (490-85229-8), OB-10-081415 (490-85229-10), DUP-03-081415 (490-85229-11) and CM-50-081415 (490-85229-12) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/20/2015 and 08/24/2015 and analyzed on 08/21/2015, 08/24/2015, 08/25/2015, 08/26/2015, 09/02/2015 and 09/07/2015.

Manganese and Vanadium were detected in method blank MB 490-274876/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Arsenic and Vanadium were detected in method blank MB 490-275634/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Iron, Sodium and Zinc failed the recovery criteria high for the MS of sample CM-50-081415 MSMS (490-85229-12) in batch 490-275984.
Iron and Zinc failed the recovery criteria high for the MSD of sample CM-50-081415 MSDMSD (490-85229-12) in batch 490-275984. Refer to the QC report for details.

Samples RW-13 (100-120) - 081315 (490-85229-1)[10X], OB-14A-081315 (490-85229-3)[10X], OB-14B-081315 (490-85229-4)[10X], OB-16-081315 (490-85229-5)[10X], OB-28-081315 (490-85229-7)[10X] and OB-17-081315 (490-85229-8)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

DISSOLVED MERCURY (CVAA)

Samples RW-13 (100-120) - 081315 (490-85229-1), OB-24-081315 (490-85229-2), OB-14A-081315 (490-85229-3), OB-14B-081315 (490-85229-4), OB-16-081315 (490-85229-5), OB-18-081315 (490-85229-6), OB-28-081315 (490-85229-7), OB-17-081315 (490-85229-8), OB-10-081415 (490-85229-10), DUP-03-081415 (490-85229-11) and CM-50-081415 (490-85229-12) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/24/2015 and analyzed on 08/25/2015.

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

TOTAL MERCURY

Samples RW-13 (100-120) - 081315 (490-85229-1), OB-24-081315 (490-85229-2), OB-14A-081315 (490-85229-3), OB-14B-081315 (490-85229-4), OB-16-081315 (490-85229-5), OB-18-081315 (490-85229-6), OB-28-081315 (490-85229-7), OB-17-081315 (490-85229-8), OB-10-081415 (490-85229-10), DUP-03-081415 (490-85229-11) and CM-50-081415 (490-85229-12) were analyzed for

Job ID: 490-85229-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/20/2015 and 08/24/2015 and analyzed on 08/21/2015 and 08/25/2015.

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

ALKALINITY

Samples RW-13 (100-120) - 081315 (490-85229-1), OB-24-081315 (490-85229-2), OB-14A-081315 (490-85229-3), OB-14B-081315 (490-85229-4), OB-16-081315 (490-85229-5), OB-18-081315 (490-85229-6), OB-28-081315 (490-85229-7), OB-17-081315 (490-85229-8), OB-10-081415 (490-85229-10), DUP-03-081415 (490-85229-11) and CM-50-081415 (490-85229-12) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/15/2015 and 08/18/2015.

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

TOTAL CYANIDE

Samples RW-13 (100-120) - 081315 (490-85229-1), OB-24-081315 (490-85229-2), OB-14A-081315 (490-85229-3), OB-14B-081315 (490-85229-4), OB-16-081315 (490-85229-5), OB-18-081315 (490-85229-6), OB-28-081315 (490-85229-7), OB-17-081315 (490-85229-8), OB-10-081415 (490-85229-10), DUP-03-081415 (490-85229-11) and CM-50-081415 (490-85229-12) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared on 08/18/2015, 08/19/2015 and 08/21/2015 and analyzed on 08/19/2015, 08/20/2015 and 08/26/2015.

Cyanide, Total failed the recovery criteria low for the MS of sample CM-50-081415 MSMS (490-85229-12) in batch 490-274429.
Cyanide, Total failed the recovery criteria low for the MSD of sample CM-50-081415 MSDMSD (490-85229-12) in batch 490-274429.

Cyanide, Total failed the recovery criteria low for the MS of sample 490-85229-1 in batch 490-275205.
Cyanide, Total failed the recovery criteria low for the MSD of sample 490-85229-1 in batch 490-275205. Cyanide, Total exceeded the RPD limit.

Cyanide, Total failed the recovery criteria low for the MS of sample 490-85529-3 in batch 490-276908.
Cyanide, Total failed the recovery criteria low for the MSD of sample 490-85529-3 in batch 490-276908. Cyanide, Total exceeded the RPD limit.

Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

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

ANIONS

Samples RW-13 (100-120) - 081315 (490-85229-1), OB-24-081315 (490-85229-2), OB-14A-081315 (490-85229-3), OB-14B-081315 (490-85229-4), OB-16-081315 (490-85229-5), OB-18-081315 (490-85229-6), OB-28-081315 (490-85229-7), OB-17-081315 (490-85229-8), OB-10-081415 (490-85229-10), DUP-03-081415 (490-85229-11) and CM-50-081415 (490-85229-12) were analyzed for anions in accordance with SW-846 Method 9056. The samples were analyzed on 08/26/2015.

Chloride failed the recovery criteria low for the MS of sample CM-50-081415 MSMS (490-85229-12) in batch 490-276491.
Chloride failed the recovery criteria low for the MSD of sample CM-50-081415 MSDMSD (490-85229-12) in batch 490-276491. Refer to the QC report for details.

Sample RW-13 (100-120) - 081315 (490-85229-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

ORGANIC PREP

Job ID: 490-85229-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

The following sample was improperly preserved in the field: Samples RW-13 (100-120) - 081315 (490-85229-1), Received sample at pH of 11 instead of 7. The preservative used is not compatible with the analytes requested.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
E	Result exceeded calibration range.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: RW-13 (100-120) - 081315

Lab Sample ID: 490-85229-1

Date Collected: 08/13/15 09:15

Matrix: Water

Date Received: 08/15/15 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/24/15 22:42	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/24/15 22:42	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/24/15 22:42	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/24/15 22:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/24/15 22:42*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*08/24/15 22:42*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/24/15 22:42*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/24/15 22:42*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 17:18	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/26/15 17:18	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 17:18	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 17:18	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/26/15 17:18	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/26/15 17:18	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/26/15 17:18	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/26/15 17:18	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/26/15 17:18	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/26/15 17:18	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 17:18	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/26/15 17:18	1
2-Butanone (MEK)	**3.2**	**J**	50	2.6	ug/L			08/26/15 17:18	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/26/15 17:18	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/26/15 17:18	1
Acetone	**41**		25	2.7	ug/L			08/26/15 17:18	1
Benzene	0.20	U	1.0	0.20	ug/L			08/26/15 17:18	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/26/15 17:18	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/26/15 17:18	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/26/15 17:18	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/26/15 17:18	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 17:18	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/26/15 17:18	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/26/15 17:18	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/26/15 17:18	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/26/15 17:18	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/26/15 17:18	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 17:18	1
Cyclohexane	**0.14**	**J**	5.0	0.13	ug/L			08/26/15 17:18	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/26/15 17:18	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/26/15 17:18	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/26/15 17:18	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/26/15 17:18	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/26/15 17:18	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/26/15 17:18	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/26/15 17:18	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/26/15 17:18	1

Client Sample ID: RW-13 (100-120) - 081315

Date Collected: 08/13/15 09:15
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/26/15 17:18	1
Styrene	0.28	U	1.0	0.28	ug/L			08/26/15 17:18	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/26/15 17:18	1
Toluene	**0.65**	**J B**	1.0	0.17	ug/L			08/26/15 17:18	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/26/15 17:18	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 17:18	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/26/15 17:18	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/26/15 17:18	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/26/15 17:18	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/26/15 17:18	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/26/15 17:18	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1-Hexanol, 2-ethyl-	*6.7*	*J N*	*ug/L*		*8.08*	*104-76-7*		*08/26/15 17:18*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/26/15 17:18*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*08/26/15 17:18*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*08/26/15 17:18*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*08/26/15 17:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/26/15 17:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 00:45	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 00:45	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 00:45	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/20/15 13:28	08/26/15 00:45	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/20/15 13:28	08/26/15 00:45	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/20/15 13:28	08/26/15 00:45	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/20/15 13:28	08/26/15 00:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*88*		*10 - 120*	*08/20/15 13:28*	*08/26/15 00:45*	*1*
2-Fluorobiphenyl (Surr)	*70*		*29 - 120*	*08/20/15 13:28*	*08/26/15 00:45*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*08/20/15 13:28*	*08/26/15 00:45*	*1*
Terphenyl-d14	*81*		*13 - 120*	*08/20/15 13:28*	*08/26/15 00:45*	*1*
2-Fluorophenol	*49*		*10 - 120*	*08/20/15 13:28*	*08/26/15 00:45*	*1*
Phenol-d5	*40*		*10 - 120*	*08/20/15 13:28*	*08/26/15 00:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 16:54	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/20/15 07:34	08/21/15 16:54	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/20/15 07:34	08/21/15 16:54	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/20/15 07:34	08/21/15 16:54	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/20/15 07:34	08/21/15 16:54	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/20/15 07:34	08/21/15 16:54	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 16:54	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/20/15 07:34	08/21/15 16:54	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/20/15 07:34	08/21/15 16:54	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: RW-13 (100-120) - 081315
Date Collected: 08/13/15 09:15
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 16:54	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 16:54	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/20/15 07:34	08/21/15 16:54	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/20/15 07:34	08/21/15 16:54	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 16:54	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/20/15 07:34	08/21/15 16:54	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/20/15 07:34	08/21/15 16:54	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/20/15 07:34	08/21/15 16:54	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 16:54	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/20/15 07:34	08/21/15 16:54	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/20/15 07:34	08/21/15 16:54	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 16:54	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/20/15 07:34	08/21/15 16:54	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 16:54	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 16:54	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/20/15 07:34	08/21/15 16:54	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/20/15 07:34	08/21/15 16:54	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 16:54	1
Acetophenone	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 16:54	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/20/15 07:34	08/21/15 16:54	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/20/15 07:34	08/21/15 16:54	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/20/15 07:34	08/21/15 16:54	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 16:54	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 16:54	1
Bis(2-chloroethyl)ether	2.8	U *	10	2.8	ug/L		08/20/15 07:34	08/21/15 16:54	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 16:54	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/20/15 07:34	08/21/15 16:54	1
Carbazole	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 16:54	1
Caprolactam	2.4	U	10	2.4	ug/L		08/20/15 07:34	08/21/15 16:54	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/20/15 07:34	08/21/15 16:54	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/20/15 07:34	08/21/15 16:54	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 16:54	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/20/15 07:34	08/21/15 16:54	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 16:54	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 16:54	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 16:54	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 16:54	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/20/15 07:34	08/21/15 16:54	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/20/15 07:34	08/21/15 16:54	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/20/15 07:34	08/21/15 16:54	1
Isophorone	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 16:54	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 16:54	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 16:54	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/20/15 07:34	08/21/15 16:54	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/20/15 07:34	08/21/15 16:54	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/20/15 07:34	08/21/15 16:54	1
Phenol	**6.6**	**J**	10	1.5	ug/L		08/20/15 07:34	08/21/15 16:54	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 16:54	1
Diphenyl	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 16:54	1

Client Sample ID: RW-13 (100-120) - 081315

Date Collected: 08/13/15 09:15
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 16:54	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 16:54	1
Atrazine	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 16:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzyl Alcohol	*14*	*J N*	*ug/L*		*4.44*	*100-51-6*	*08/20/15 07:34*	*08/21/15 16:54*	*1*
Ethanol, 2-(2-butoxyethoxy)-	*96*	*J N*	*ug/L*		*5.08*	*112-34-5*	*08/20/15 07:34*	*08/21/15 16:54*	*1*
Dodecanoic acid	*10*	*J N*	*ug/L*		*6.51*	*143-07-7*	*08/20/15 07:34*	*08/21/15 16:54*	*1*
Allyldimethylphenylsilane	*10*	*J N*	*ug/L*		*7.13*	*18001-18-8*	*08/20/15 07:34*	*08/21/15 16:54*	*1*
Phenol, 4-(1,1-dimethylpropyl)-	*12*	*J N*	*ug/L*		*7.26*	*80-46-6*	*08/20/15 07:34*	*08/21/15 16:54*	*1*
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca -6,	*21*	*J N*	*ug/L*		*7.82*	*82304-66-3*	*08/20/15 07:34*	*08/21/15 16:54*	*1*
n-Hexadecanoic acid	*85*	*J N*	*ug/L*		*7.95*	*57-10-3*	*08/20/15 07:34*	*08/21/15 16:54*	*1*
2-HYDRAZINO-2-IMIDAZOLINE	*43*	*J N*	*ug/L*		*8.14*	*1000239-54-7*	*08/20/15 07:34*	*08/21/15 16:54*	*1*
Octadecanoic acid	*100*	*J N*	*ug/L*		*8.61*	*57-11-4*	*08/20/15 07:34*	*08/21/15 16:54*	*1*
Furan, tetrahydro-2,5-dipropyl-	*9.5*	*J N*	*ug/L*		*8.72*	*4457-62-9*	*08/20/15 07:34*	*08/21/15 16:54*	*1*
Triethylene glycol monododecyl ether	*8.3*	*J N*	*ug/L*		*8.92*	*3055-94-5*	*08/20/15 07:34*	*08/21/15 16:54*	*1*
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	*26*	*J N*	*ug/L*		*9.47*	*1740-19-8*	*08/20/15 07:34*	*08/21/15 16:54*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*121*	*X*	*10 - 120*	*08/20/15 07:34*	*08/21/15 16:54*	*1*
2-Fluorobiphenyl (Surr)	*96*		*29 - 120*	*08/20/15 07:34*	*08/21/15 16:54*	*1*
2-Fluorophenol (Surr)	*55*		*10 - 120*	*08/20/15 07:34*	*08/21/15 16:54*	*1*
Nitrobenzene-d5 (Surr)	*88*		*27 - 120*	*08/20/15 07:34*	*08/21/15 16:54*	*1*
Phenol-d5 (Surr)	*37*		*10 - 120*	*08/20/15 07:34*	*08/21/15 16:54*	*1*
Terphenyl-d14 (Surr)	*95*		*13 - 120*	*08/20/15 07:34*	*08/21/15 16:54*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 17:13	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 16:18	09/01/15 17:13	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 16:18	09/01/15 17:13	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 16:18	09/01/15 17:13	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 16:18	09/01/15 17:13	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 16:18	09/01/15 17:13	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 16:18	09/01/15 17:13	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*51*		*10 - 150*	*08/31/15 16:18*	*09/01/15 17:13*	*1*
Tetrachloro-m-xylene	*39*		*10 - 150*	*08/31/15 16:18*	*09/01/15 17:13*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**25.9**		5.00	3.50	mg/L			08/26/15 00:30	5
Sulfate	**50.7**		5.00	3.00	mg/L			08/26/15 00:30	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5.6**		0.020	0.0096	mg/L		08/20/15 11:46	08/21/15 19:38	1

Client Sample ID: RW-13 (100-120) - 081315

Date Collected: 08/13/15 09:15
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-1

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:38	1
Arsenic	**0.0032**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:38	1
Barium	**0.024**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:38	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:38	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/20/15 11:46	08/21/15 19:38	1
Calcium	**24.9**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 19:38	1
Chromium	**0.055**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:38	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:38	1
Copper	**0.019**		0.0020	0.00050	mg/L		08/20/15 11:46	09/02/15 08:52	1
Iron	**0.38**		0.025	0.010	mg/L		08/20/15 11:46	08/25/15 23:46	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 19:38	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/20/15 11:46	08/21/15 19:38	1
Manganese	**0.00060**	**J B**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:38	1
Nickel	**0.0028**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:38	1
Potassium	**232**		10.0	1.3	mg/L		08/20/15 11:46	09/02/15 19:52	10
Selenium	**0.012**		0.0020	0.00060	mg/L		08/20/15 11:46	08/21/15 19:38	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/25/15 23:46	1
Sodium	**246**		10.0	1.3	mg/L		08/20/15 11:46	09/02/15 19:52	10
Thallium	**0.00090**	**J**	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 19:38	1
Vanadium	**0.039**	**B**	0.0020	0.00010	mg/L		08/20/15 11:46	08/25/15 23:46	1
Zinc	0.010	U	0.025	0.010	mg/L		08/20/15 11:46	08/21/15 19:38	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4.8**		0.020	0.0096	mg/L		08/19/15 08:39	08/20/15 00:28	1
Antimony	**0.00063**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:28	1
Arsenic	**0.0021**		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:28	1
Barium	**0.021**		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:28	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:14	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:39	08/20/15 00:28	1
Calcium	**26.2**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:14	1
Chromium	**0.050**		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:28	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:14	1
Copper	**0.013**		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:28	1
Iron	**0.31**		0.025	0.010	mg/L		08/19/15 08:39	08/20/15 00:28	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 00:28	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:14	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:28	1
Nickel	**0.0016**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:28	1
Potassium	**209**		20.0	2.5	mg/L		08/19/15 08:39	08/21/15 14:50	20
Selenium	**0.011**		0.0020	0.00060	mg/L		08/19/15 08:39	08/21/15 12:14	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:28	1
Sodium	**210**		20.0	2.5	mg/L		08/19/15 08:39	08/21/15 14:50	20
Thallium	**0.00089**	**J**	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 00:28	1
Vanadium	**0.035**	**B**	0.0020	0.00010	mg/L		08/19/15 08:39	08/20/15 00:28	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/21/15 12:14	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/20/15 21:51	08/21/15 14:05	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 20:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/21/15 16:35	08/26/15 21:25	1
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/15/15 18:48	1
Total Alkalinity as CaCO3	**547**		10.0	5.0	mg/L			08/15/15 18:48	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-24-081315
Date Collected: 08/13/15 09:50
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/24/15 23:10	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/24/15 23:10	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/24/15 23:10	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/24/15 23:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/24/15 23:10*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*08/24/15 23:10*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/24/15 23:10*	*1*
Toluene-d8 (Surr)	*111*		*70 - 130*		*08/24/15 23:10*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 17:44	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/26/15 17:44	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 17:44	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 17:44	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/26/15 17:44	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/26/15 17:44	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/26/15 17:44	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/26/15 17:44	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/26/15 17:44	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/26/15 17:44	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 17:44	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/26/15 17:44	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/26/15 17:44	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/26/15 17:44	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/26/15 17:44	1
Acetone	2.7	U	25	2.7	ug/L			08/26/15 17:44	1
Benzene	0.20	U	1.0	0.20	ug/L			08/26/15 17:44	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/26/15 17:44	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/26/15 17:44	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/26/15 17:44	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/26/15 17:44	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 17:44	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/26/15 17:44	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/26/15 17:44	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/26/15 17:44	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/26/15 17:44	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/26/15 17:44	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 17:44	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/26/15 17:44	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/26/15 17:44	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/26/15 17:44	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/26/15 17:44	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/26/15 17:44	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/26/15 17:44	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/26/15 17:44	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/26/15 17:44	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/26/15 17:44	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-24-081315
Date Collected: 08/13/15 09:50
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/26/15 17:44	1
Styrene	0.28	U	1.0	0.28	ug/L			08/26/15 17:44	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/26/15 17:44	1
Toluene	0.17	U	1.0	0.17	ug/L			08/26/15 17:44	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/26/15 17:44	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 17:44	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/26/15 17:44	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/26/15 17:44	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/26/15 17:44	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/26/15 17:44	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/26/15 17:44	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/15 17:44*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/26/15 17:44*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*08/26/15 17:44*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/26/15 17:44*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*08/26/15 17:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/26/15 17:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 01:11	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 01:11	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 01:11	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/20/15 13:28	08/26/15 01:11	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/20/15 13:28	08/26/15 01:11	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/20/15 13:28	08/26/15 01:11	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/20/15 13:28	08/26/15 01:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*90*		*10 - 120*	*08/20/15 13:28*	*08/26/15 01:11*	*1*
2-Fluorobiphenyl (Surr)	*80*		*29 - 120*	*08/20/15 13:28*	*08/26/15 01:11*	*1*
Nitrobenzene-d5	*71*		*27 - 120*	*08/20/15 13:28*	*08/26/15 01:11*	*1*
Terphenyl-d14	*94*		*13 - 120*	*08/20/15 13:28*	*08/26/15 01:11*	*1*
2-Fluorophenol	*46*		*10 - 120*	*08/20/15 13:28*	*08/26/15 01:11*	*1*
Phenol-d5	*32*		*10 - 120*	*08/20/15 13:28*	*08/26/15 01:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 17:18	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/20/15 07:34	08/21/15 17:18	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/20/15 07:34	08/21/15 17:18	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/20/15 07:34	08/21/15 17:18	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/20/15 07:34	08/21/15 17:18	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/20/15 07:34	08/21/15 17:18	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 17:18	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/20/15 07:34	08/21/15 17:18	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/20/15 07:34	08/21/15 17:18	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-24-081315
Date Collected: 08/13/15 09:50
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 17:18	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 17:18	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/20/15 07:34	08/21/15 17:18	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/20/15 07:34	08/21/15 17:18	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 17:18	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/20/15 07:34	08/21/15 17:18	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/20/15 07:34	08/21/15 17:18	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/20/15 07:34	08/21/15 17:18	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 17:18	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/20/15 07:34	08/21/15 17:18	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/20/15 07:34	08/21/15 17:18	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 17:18	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/20/15 07:34	08/21/15 17:18	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 17:18	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 17:18	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/20/15 07:34	08/21/15 17:18	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/20/15 07:34	08/21/15 17:18	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 17:18	1
Acetophenone	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 17:18	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/20/15 07:34	08/21/15 17:18	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/20/15 07:34	08/21/15 17:18	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/20/15 07:34	08/21/15 17:18	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 17:18	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 17:18	1
Bis(2-chloroethyl)ether	2.8	U *	10	2.8	ug/L		08/20/15 07:34	08/21/15 17:18	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 17:18	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/20/15 07:34	08/21/15 17:18	1
Carbazole	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 17:18	1
Caprolactam	2.4	U	10	2.4	ug/L		08/20/15 07:34	08/21/15 17:18	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/20/15 07:34	08/21/15 17:18	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/20/15 07:34	08/21/15 17:18	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 17:18	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/20/15 07:34	08/21/15 17:18	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 17:18	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 17:18	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 17:18	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 17:18	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/20/15 07:34	08/21/15 17:18	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/20/15 07:34	08/21/15 17:18	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/20/15 07:34	08/21/15 17:18	1
Isophorone	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 17:18	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 17:18	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 17:18	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/20/15 07:34	08/21/15 17:18	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/20/15 07:34	08/21/15 17:18	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/20/15 07:34	08/21/15 17:18	1
Phenol	1.5	U	10	1.5	ug/L		08/20/15 07:34	08/21/15 17:18	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 17:18	1
Diphenyl	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 17:18	1

Client Sample ID: OB-24-081315
Date Collected: 08/13/15 09:50
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 17:18	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 17:18	1
Atrazine	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 17:18	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/20/15 07:34*	*08/21/15 17:18*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*95*		*10 - 120*	*08/20/15 07:34*	*08/21/15 17:18*	*1*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*	*08/20/15 07:34*	*08/21/15 17:18*	*1*
2-Fluorophenol (Surr)	*41*		*10 - 120*	*08/20/15 07:34*	*08/21/15 17:18*	*1*
Nitrobenzene-d5 (Surr)	*73*		*27 - 120*	*08/20/15 07:34*	*08/21/15 17:18*	*1*
Phenol-d5 (Surr)	*26*		*10 - 120*	*08/20/15 07:34*	*08/21/15 17:18*	*1*
Terphenyl-d14 (Surr)	*78*		*13 - 120*	*08/20/15 07:34*	*08/21/15 17:18*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 17:29	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 16:18	09/01/15 17:29	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 16:18	09/01/15 17:29	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 16:18	09/01/15 17:29	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 16:18	09/01/15 17:29	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 16:18	09/01/15 17:29	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 16:18	09/01/15 17:29	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*59*		*10 - 150*	*08/31/15 16:18*	*09/01/15 17:29*	*1*
Tetrachloro-m-xylene	*41*		*10 - 150*	*08/31/15 16:18*	*09/01/15 17:29*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**86.8**		1.00	0.70	mg/L			08/26/15 01:42	1
Sulfate	**27.3**		1.00	0.60	mg/L			08/26/15 01:42	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.060**		0.020	0.0096	mg/L		08/20/15 11:46	08/21/15 19:43	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:43	1
Arsenic	**0.0018**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:43	1
Barium	**0.048**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:43	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:43	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/20/15 11:46	08/21/15 19:43	1
Calcium	**99.2**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 19:43	1
Chromium	**0.00092**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:43	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:43	1
Copper	**0.0011**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	09/02/15 08:57	1
Iron	**0.17**		0.025	0.010	mg/L		08/20/15 11:46	08/26/15 00:03	1
Lead	**0.00024**	**J**	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 19:43	1
Magnesium	**23.8**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 19:43	1
Manganese	**1.3**	**B**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:43	1

Client Sample ID: OB-24-081315

Date Collected: 08/13/15 09:50
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-2

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0015**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:43	1
Potassium	**2.4**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 19:43	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/20/15 11:46	08/21/15 19:43	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 00:03	1
Sodium	**16.2**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 19:43	1
Thallium	**0.00044**	**J**	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 19:43	1
Vanadium	**0.0035**	**B**	0.0020	0.00010	mg/L		08/20/15 11:46	08/26/15 00:03	1
Zinc	0.010	U	0.025	0.010	mg/L		08/20/15 11:46	08/21/15 19:43	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.010**	**J**	0.020	0.0096	mg/L		08/19/15 08:39	08/20/15 00:34	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:34	1
Arsenic	**0.00064**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:34	1
Barium	**0.032**		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:34	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:19	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:39	08/20/15 00:34	1
Calcium	**99.2**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:19	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:34	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:19	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:34	1
Iron	**0.014**	**J**	0.025	0.010	mg/L		08/19/15 08:39	08/20/15 00:34	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 00:34	1
Magnesium	**24.6**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:19	1
Manganese	**0.022**		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:34	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:34	1
Potassium	**2.1**		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 00:34	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/21/15 12:19	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:34	1
Sodium	**18.0**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:19	1
Thallium	**0.00031**	**J**	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 00:34	1
Vanadium	**0.0022**	**B**	0.0020	0.00010	mg/L		08/19/15 08:39	08/20/15 00:34	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/21/15 12:19	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/20/15 21:51	08/21/15 14:07	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 20:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 13:18	08/20/15 15:52	1
Bicarbonate Alkalinity as CaCO3	**218**		10.0	5.0	mg/L			08/15/15 18:54	1
Total Alkalinity as CaCO3	**218**		10.0	5.0	mg/L			08/15/15 18:54	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-14A-081315
Date Collected: 08/13/15 10:55
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/24/15 23:39	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/24/15 23:39	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/24/15 23:39	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/24/15 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/24/15 23:39*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*08/24/15 23:39*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/24/15 23:39*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/24/15 23:39*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 18:10	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/26/15 18:10	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 18:10	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 18:10	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/26/15 18:10	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/26/15 18:10	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/26/15 18:10	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/26/15 18:10	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/26/15 18:10	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/26/15 18:10	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 18:10	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/26/15 18:10	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/26/15 18:10	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/26/15 18:10	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/26/15 18:10	1
Acetone	2.7	U	25	2.7	ug/L			08/26/15 18:10	1
Benzene	0.20	U	1.0	0.20	ug/L			08/26/15 18:10	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/26/15 18:10	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/26/15 18:10	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/26/15 18:10	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/26/15 18:10	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 18:10	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/26/15 18:10	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/26/15 18:10	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/26/15 18:10	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/26/15 18:10	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/26/15 18:10	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 18:10	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/26/15 18:10	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/26/15 18:10	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/26/15 18:10	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/26/15 18:10	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/26/15 18:10	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/26/15 18:10	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/26/15 18:10	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/26/15 18:10	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/26/15 18:10	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-14A-081315
Date Collected: 08/13/15 10:55
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/26/15 18:10	1
Styrene	0.28	U	1.0	0.28	ug/L			08/26/15 18:10	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/26/15 18:10	1
Toluene	0.17	U	1.0	0.17	ug/L			08/26/15 18:10	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/26/15 18:10	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 18:10	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/26/15 18:10	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/26/15 18:10	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/26/15 18:10	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/26/15 18:10	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/26/15 18:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/15 18:10*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/26/15 18:10*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/26/15 18:10*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/26/15 18:10*	*1*
Toluene-d8 (Surr)	*84*		*70 - 130*		*08/26/15 18:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/26/15 18:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 01:37	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 01:37	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 01:37	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/20/15 13:28	08/26/15 01:37	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/20/15 13:28	08/26/15 01:37	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/20/15 13:28	08/26/15 01:37	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/20/15 13:28	08/26/15 01:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*60*		*10 - 120*	*08/20/15 13:28*	*08/26/15 01:37*	*1*
2-Fluorobiphenyl (Surr)	*41*		*29 - 120*	*08/20/15 13:28*	*08/26/15 01:37*	*1*
Nitrobenzene-d5	*33*		*27 - 120*	*08/20/15 13:28*	*08/26/15 01:37*	*1*
Terphenyl-d14	*59*		*13 - 120*	*08/20/15 13:28*	*08/26/15 01:37*	*1*
2-Fluorophenol	*27*		*10 - 120*	*08/20/15 13:28*	*08/26/15 01:37*	*1*
Phenol-d5	*22*		*10 - 120*	*08/20/15 13:28*	*08/26/15 01:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 17:42	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/20/15 07:34	08/21/15 17:42	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/20/15 07:34	08/21/15 17:42	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/20/15 07:34	08/21/15 17:42	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/20/15 07:34	08/21/15 17:42	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/20/15 07:34	08/21/15 17:42	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 17:42	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/20/15 07:34	08/21/15 17:42	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/20/15 07:34	08/21/15 17:42	1

Client Sample ID: OB-14A-081315
Date Collected: 08/13/15 10:55
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 17:42	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 17:42	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/20/15 07:34	08/21/15 17:42	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/20/15 07:34	08/21/15 17:42	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 17:42	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/20/15 07:34	08/21/15 17:42	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/20/15 07:34	08/21/15 17:42	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/20/15 07:34	08/21/15 17:42	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 17:42	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/20/15 07:34	08/21/15 17:42	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/20/15 07:34	08/21/15 17:42	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 17:42	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/20/15 07:34	08/21/15 17:42	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 17:42	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 17:42	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/20/15 07:34	08/21/15 17:42	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/20/15 07:34	08/21/15 17:42	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 17:42	1
Acetophenone	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 17:42	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/20/15 07:34	08/21/15 17:42	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/20/15 07:34	08/21/15 17:42	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/20/15 07:34	08/21/15 17:42	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 17:42	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 17:42	1
Bis(2-chloroethyl)ether	2.8	U *	10	2.8	ug/L		08/20/15 07:34	08/21/15 17:42	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 17:42	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/20/15 07:34	08/21/15 17:42	1
Carbazole	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 17:42	1
Caprolactam	2.4	U	10	2.4	ug/L		08/20/15 07:34	08/21/15 17:42	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/20/15 07:34	08/21/15 17:42	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/20/15 07:34	08/21/15 17:42	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 17:42	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/20/15 07:34	08/21/15 17:42	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 17:42	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 17:42	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 17:42	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 17:42	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/20/15 07:34	08/21/15 17:42	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/20/15 07:34	08/21/15 17:42	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/20/15 07:34	08/21/15 17:42	1
Isophorone	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 17:42	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 17:42	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 17:42	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/20/15 07:34	08/21/15 17:42	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/20/15 07:34	08/21/15 17:42	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/20/15 07:34	08/21/15 17:42	1
Phenol	1.5	U	10	1.5	ug/L		08/20/15 07:34	08/21/15 17:42	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 17:42	1
Diphenyl	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 17:42	1

Client Sample ID: OB-14A-081315

Date Collected: 08/13/15 10:55
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 17:42	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 17:42	1
Atrazine	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 17:42	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclohexanamine, N-cyclohexyl-	*16*	*J N*	*ug/L*		*6.09*	*101-83-7*	*08/20/15 07:34*	*08/21/15 17:42*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*98*		*10 - 120*	*08/20/15 07:34*	*08/21/15 17:42*	*1*
2-Fluorobiphenyl (Surr)	*83*		*29 - 120*	*08/20/15 07:34*	*08/21/15 17:42*	*1*
2-Fluorophenol (Surr)	*48*		*10 - 120*	*08/20/15 07:34*	*08/21/15 17:42*	*1*
Nitrobenzene-d5 (Surr)	*78*		*27 - 120*	*08/20/15 07:34*	*08/21/15 17:42*	*1*
Phenol-d5 (Surr)	*31*		*10 - 120*	*08/20/15 07:34*	*08/21/15 17:42*	*1*
Terphenyl-d14 (Surr)	*82*		*13 - 120*	*08/20/15 07:34*	*08/21/15 17:42*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 17:44	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 16:18	09/01/15 17:44	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 16:18	09/01/15 17:44	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 16:18	09/01/15 17:44	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 16:18	09/01/15 17:44	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 16:18	09/01/15 17:44	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 16:18	09/01/15 17:44	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*71*		*10 - 150*	*08/31/15 16:18*	*09/01/15 17:44*	*1*
Tetrachloro-m-xylene	*43*		*10 - 150*	*08/31/15 16:18*	*09/01/15 17:44*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.6**		1.00	0.70	mg/L			08/26/15 02:06	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/26/15 02:06	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.025**		0.020	0.0096	mg/L		08/20/15 11:46	08/21/15 19:59	1
Antimony	**0.00061**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:59	1
Arsenic	**0.0092**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:59	1
Barium	**0.46**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:59	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:59	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/20/15 11:46	08/21/15 19:59	1
Calcium	**146**		10.0	1.3	mg/L		08/20/15 11:46	09/02/15 19:58	10
Chromium	**0.00077**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:59	1
Cobalt	**0.0012**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:59	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	09/02/15 09:14	1
Iron	**59.3**		0.025	0.010	mg/L		08/20/15 11:46	08/26/15 00:09	1
Lead	**0.00086**	**J**	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 19:59	1
Magnesium	**10.9**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 19:59	1
Manganese	**1.5**	**B**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:59	1

Client Sample ID: OB-14A-081315
Date Collected: 08/13/15 10:55
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-3
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0026**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 19:59	1
Potassium	**5.8**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 19:59	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/20/15 11:46	08/21/15 19:59	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 00:09	1
Sodium	**18.4**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 19:59	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 19:59	1
Vanadium	**0.0040**	**B**	0.0020	0.00010	mg/L		08/20/15 11:46	08/26/15 00:09	1
Zinc	0.010	U	0.025	0.010	mg/L		08/20/15 11:46	08/21/15 19:59	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/19/15 08:39	08/20/15 00:39	1
Antimony	**0.00074**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:39	1
Arsenic	**0.0012**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:39	1
Barium	**0.31**		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:39	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:25	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:39	08/20/15 00:39	1
Calcium	**115**		20.0	2.5	mg/L		08/19/15 08:39	08/21/15 15:01	20
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:39	1
Cobalt	**0.00088**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:25	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:39	1
Iron	**27.3**		0.025	0.010	mg/L		08/19/15 08:39	08/20/15 00:39	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 00:39	1
Magnesium	**10.2**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:25	1
Manganese	**1.8**		0.040	0.010	mg/L		08/19/15 08:39	08/21/15 15:01	20
Nickel	**0.0013**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:39	1
Potassium	**5.1**		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 00:39	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/21/15 12:25	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:39	1
Sodium	**17.5**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:25	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 00:39	1
Vanadium	**0.0017**	**J B**	0.0020	0.00010	mg/L		08/19/15 08:39	08/20/15 00:39	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/21/15 12:25	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 17:54	08/25/15 13:59	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 20:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 13:18	08/20/15 15:52	1
Bicarbonate Alkalinity as CaCO3	**377**		10.0	5.0	mg/L			08/18/15 11:50	1
Total Alkalinity as CaCO3	**377**		10.0	5.0	mg/L			08/18/15 11:50	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-14B-081315
Date Collected: 08/13/15 10:20
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/25/15 00:07	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/25/15 00:07	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/25/15 00:07	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/25/15 00:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/25/15 00:07*	*1*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*08/25/15 00:07*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/25/15 00:07*	*1*
Toluene-d8 (Surr)	*111*		*70 - 130*		*08/25/15 00:07*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 18:37	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/26/15 18:37	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 18:37	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 18:37	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/26/15 18:37	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/26/15 18:37	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/26/15 18:37	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/26/15 18:37	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/26/15 18:37	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/26/15 18:37	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 18:37	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/26/15 18:37	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/26/15 18:37	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/26/15 18:37	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/26/15 18:37	1
Acetone	2.7	U	25	2.7	ug/L			08/26/15 18:37	1
Benzene	0.20	U	1.0	0.20	ug/L			08/26/15 18:37	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/26/15 18:37	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/26/15 18:37	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/26/15 18:37	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/26/15 18:37	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 18:37	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/26/15 18:37	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/26/15 18:37	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/26/15 18:37	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/26/15 18:37	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/26/15 18:37	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 18:37	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/26/15 18:37	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/26/15 18:37	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/26/15 18:37	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/26/15 18:37	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/26/15 18:37	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/26/15 18:37	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/26/15 18:37	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/26/15 18:37	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/26/15 18:37	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-14B-081315
Date Collected: 08/13/15 10:20
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/26/15 18:37	1
Styrene	0.28	U	1.0	0.28	ug/L			08/26/15 18:37	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/26/15 18:37	1
Toluene	0.17	U	1.0	0.17	ug/L			08/26/15 18:37	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/26/15 18:37	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 18:37	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/26/15 18:37	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/26/15 18:37	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/26/15 18:37	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/26/15 18:37	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/26/15 18:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/15 18:37*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/26/15 18:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/26/15 18:37*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*08/26/15 18:37*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/26/15 18:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/26/15 18:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 02:03	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 02:03	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 02:03	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/20/15 13:28	08/26/15 02:03	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/20/15 13:28	08/26/15 02:03	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/20/15 13:28	08/26/15 02:03	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/20/15 13:28	08/26/15 02:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*78*		*10 - 120*	*08/20/15 13:28*	*08/26/15 02:03*	*1*
2-Fluorobiphenyl (Surr)	*70*		*29 - 120*	*08/20/15 13:28*	*08/26/15 02:03*	*1*
Nitrobenzene-d5	*62*		*27 - 120*	*08/20/15 13:28*	*08/26/15 02:03*	*1*
Terphenyl-d14	*83*		*13 - 120*	*08/20/15 13:28*	*08/26/15 02:03*	*1*
2-Fluorophenol	*50*		*10 - 120*	*08/20/15 13:28*	*08/26/15 02:03*	*1*
Phenol-d5	*36*		*10 - 120*	*08/20/15 13:28*	*08/26/15 02:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 18:05	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/20/15 07:34	08/21/15 18:05	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/20/15 07:34	08/21/15 18:05	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/20/15 07:34	08/21/15 18:05	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/20/15 07:34	08/21/15 18:05	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/20/15 07:34	08/21/15 18:05	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 18:05	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/20/15 07:34	08/21/15 18:05	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/20/15 07:34	08/21/15 18:05	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-14B-081315
Date Collected: 08/13/15 10:20
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 18:05	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 18:05	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/20/15 07:34	08/21/15 18:05	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/20/15 07:34	08/21/15 18:05	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 18:05	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/20/15 07:34	08/21/15 18:05	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/20/15 07:34	08/21/15 18:05	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/20/15 07:34	08/21/15 18:05	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 18:05	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/20/15 07:34	08/21/15 18:05	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/20/15 07:34	08/21/15 18:05	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 18:05	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/20/15 07:34	08/21/15 18:05	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 18:05	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 18:05	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/20/15 07:34	08/21/15 18:05	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/20/15 07:34	08/21/15 18:05	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 18:05	1
Acetophenone	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 18:05	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/20/15 07:34	08/21/15 18:05	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/20/15 07:34	08/21/15 18:05	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/20/15 07:34	08/21/15 18:05	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 18:05	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 18:05	1
Bis(2-chloroethyl)ether	2.8	U *	10	2.8	ug/L		08/20/15 07:34	08/21/15 18:05	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 18:05	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/20/15 07:34	08/21/15 18:05	1
Carbazole	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 18:05	1
Caprolactam	2.4	U	10	2.4	ug/L		08/20/15 07:34	08/21/15 18:05	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/20/15 07:34	08/21/15 18:05	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/20/15 07:34	08/21/15 18:05	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 18:05	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/20/15 07:34	08/21/15 18:05	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 18:05	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 18:05	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 18:05	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 18:05	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/20/15 07:34	08/21/15 18:05	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/20/15 07:34	08/21/15 18:05	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/20/15 07:34	08/21/15 18:05	1
Isophorone	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 18:05	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 18:05	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 18:05	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/20/15 07:34	08/21/15 18:05	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/20/15 07:34	08/21/15 18:05	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/20/15 07:34	08/21/15 18:05	1
Phenol	1.5	U	10	1.5	ug/L		08/20/15 07:34	08/21/15 18:05	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 18:05	1
Diphenyl	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 18:05	1

Client Sample ID: OB-14B-081315
Date Collected: 08/13/15 10:20
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 18:05	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 18:05	1
Atrazine	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 18:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/20/15 07:34*	*08/21/15 18:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*110*		*10 - 120*	*08/20/15 07:34*	*08/21/15 18:05*	*1*
2-Fluorobiphenyl (Surr)	*88*		*29 - 120*	*08/20/15 07:34*	*08/21/15 18:05*	*1*
2-Fluorophenol (Surr)	*49*		*10 - 120*	*08/20/15 07:34*	*08/21/15 18:05*	*1*
Nitrobenzene-d5 (Surr)	*82*		*27 - 120*	*08/20/15 07:34*	*08/21/15 18:05*	*1*
Phenol-d5 (Surr)	*31*		*10 - 120*	*08/20/15 07:34*	*08/21/15 18:05*	*1*
Terphenyl-d14 (Surr)	*92*		*13 - 120*	*08/20/15 07:34*	*08/21/15 18:05*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 20:59	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/27/15 09:48	08/27/15 20:59	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/27/15 09:48	08/27/15 20:59	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/27/15 09:48	08/27/15 20:59	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/27/15 09:48	08/27/15 20:59	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/27/15 09:48	08/27/15 20:59	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/27/15 09:48	08/27/15 20:59	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*76*		*10 - 150*	*08/27/15 09:48*	*08/27/15 20:59*	*1*
Tetrachloro-m-xylene	*80*		*10 - 150*	*08/27/15 09:48*	*08/27/15 20:59*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**45.1**		1.00	0.70	mg/L			08/26/15 02:30	1
Sulfate	**13.4**		1.00	0.60	mg/L			08/26/15 02:30	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/20/15 11:46	08/21/15 20:04	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:04	1
Arsenic	**0.0025**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:04	1
Barium	**0.041**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:04	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:04	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/20/15 11:46	08/21/15 20:04	1
Calcium	**125**		10.0	1.3	mg/L		08/20/15 11:46	09/02/15 20:03	10
Chromium	**0.00055**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:04	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:04	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	09/02/15 09:19	1
Iron	**0.93**		0.025	0.010	mg/L		08/20/15 11:46	08/26/15 00:14	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:04	1
Magnesium	**28.8**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:04	1
Manganese	**1.6**	**B**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:04	1

Client Sample ID: OB-14B-081315

Date Collected: 08/13/15 10:20
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-4

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0019**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:04	1
Potassium	**3.1**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:04	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/20/15 11:46	08/21/15 20:04	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 00:14	1
Sodium	**18.4**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:04	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:04	1
Vanadium	**0.0024**	**B**	0.0020	0.00010	mg/L		08/20/15 11:46	08/26/15 00:14	1
Zinc	0.010	U	0.025	0.010	mg/L		08/20/15 11:46	08/21/15 20:04	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/19/15 08:39	08/20/15 00:57	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:57	1
Arsenic	**0.0011**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:57	1
Barium	**0.041**		0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:40	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:40	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:39	08/20/15 00:57	1
Calcium	**100**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:40	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:57	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:40	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:57	1
Iron	**0.050**		0.025	0.010	mg/L		08/19/15 08:39	08/20/15 00:57	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 00:57	1
Magnesium	**29.9**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:40	1
Manganese	**3.3**		0.040	0.010	mg/L		08/19/15 08:39	08/21/15 15:06	20
Nickel	**0.0012**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:57	1
Potassium	**2.9**		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 00:57	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/21/15 12:40	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 00:57	1
Sodium	**19.4**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:40	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 00:57	1
Vanadium	**0.0016**	**J B**	0.0020	0.00010	mg/L		08/19/15 08:39	08/20/15 00:57	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/21/15 12:40	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 17:54	08/25/15 14:02	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 20:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 13:18	08/20/15 15:53	1
Bicarbonate Alkalinity as CaCO3	**311**		10.0	5.0	mg/L			08/18/15 12:01	1
Total Alkalinity as CaCO3	**311**		10.0	5.0	mg/L			08/18/15 12:01	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-16-081315
Date Collected: 08/13/15 15:45
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/25/15 00:36	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/25/15 00:36	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/25/15 00:36	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/25/15 00:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/25/15 00:36*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*08/25/15 00:36*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/25/15 00:36*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/25/15 00:36*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 19:03	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/26/15 19:03	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 19:03	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 19:03	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/26/15 19:03	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/26/15 19:03	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/26/15 19:03	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/26/15 19:03	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/26/15 19:03	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/26/15 19:03	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 19:03	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/26/15 19:03	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/26/15 19:03	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/26/15 19:03	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/26/15 19:03	1
Acetone	2.7	U	25	2.7	ug/L			08/26/15 19:03	1
Benzene	0.20	U	1.0	0.20	ug/L			08/26/15 19:03	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/26/15 19:03	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/26/15 19:03	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/26/15 19:03	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/26/15 19:03	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 19:03	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/26/15 19:03	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/26/15 19:03	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/26/15 19:03	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/26/15 19:03	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/26/15 19:03	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 19:03	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/26/15 19:03	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/26/15 19:03	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/26/15 19:03	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/26/15 19:03	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/26/15 19:03	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/26/15 19:03	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/26/15 19:03	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/26/15 19:03	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/26/15 19:03	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-16-081315
Date Collected: 08/13/15 15:45
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/26/15 19:03	1
Styrene	0.28	U	1.0	0.28	ug/L			08/26/15 19:03	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/26/15 19:03	1
Toluene	0.17	U	1.0	0.17	ug/L			08/26/15 19:03	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/26/15 19:03	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 19:03	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/26/15 19:03	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/26/15 19:03	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/26/15 19:03	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/26/15 19:03	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/26/15 19:03	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/15 19:03*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/26/15 19:03*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/26/15 19:03*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/26/15 19:03*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/26/15 19:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/26/15 19:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 02:29	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 02:29	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 02:29	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/20/15 13:28	08/26/15 02:29	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/20/15 13:28	08/26/15 02:29	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/20/15 13:28	08/26/15 02:29	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/20/15 13:28	08/26/15 02:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*86*		*10 - 120*	*08/20/15 13:28*	*08/26/15 02:29*	*1*
2-Fluorobiphenyl (Surr)	*80*		*29 - 120*	*08/20/15 13:28*	*08/26/15 02:29*	*1*
Nitrobenzene-d5	*68*		*27 - 120*	*08/20/15 13:28*	*08/26/15 02:29*	*1*
Terphenyl-d14	*91*		*13 - 120*	*08/20/15 13:28*	*08/26/15 02:29*	*1*
2-Fluorophenol	*53*		*10 - 120*	*08/20/15 13:28*	*08/26/15 02:29*	*1*
Phenol-d5	*37*		*10 - 120*	*08/20/15 13:28*	*08/26/15 02:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 18:29	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/20/15 07:34	08/21/15 18:29	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/20/15 07:34	08/21/15 18:29	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/20/15 07:34	08/21/15 18:29	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/20/15 07:34	08/21/15 18:29	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/20/15 07:34	08/21/15 18:29	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 18:29	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/20/15 07:34	08/21/15 18:29	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/20/15 07:34	08/21/15 18:29	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-16-081315
Date Collected: 08/13/15 15:45
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 18:29	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 18:29	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/20/15 07:34	08/21/15 18:29	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/20/15 07:34	08/21/15 18:29	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 18:29	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/20/15 07:34	08/21/15 18:29	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/20/15 07:34	08/21/15 18:29	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/20/15 07:34	08/21/15 18:29	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 18:29	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/20/15 07:34	08/21/15 18:29	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/20/15 07:34	08/21/15 18:29	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 18:29	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/20/15 07:34	08/21/15 18:29	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 18:29	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 18:29	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/20/15 07:34	08/21/15 18:29	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/20/15 07:34	08/21/15 18:29	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 18:29	1
Acetophenone	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 18:29	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/20/15 07:34	08/21/15 18:29	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/20/15 07:34	08/21/15 18:29	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/20/15 07:34	08/21/15 18:29	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 18:29	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 18:29	1
Bis(2-chloroethyl)ether	2.8	U *	10	2.8	ug/L		08/20/15 07:34	08/21/15 18:29	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 18:29	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/20/15 07:34	08/21/15 18:29	1
Carbazole	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 18:29	1
Caprolactam	2.4	U	10	2.4	ug/L		08/20/15 07:34	08/21/15 18:29	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/20/15 07:34	08/21/15 18:29	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/20/15 07:34	08/21/15 18:29	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 18:29	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/20/15 07:34	08/21/15 18:29	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 18:29	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 18:29	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 18:29	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 18:29	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/20/15 07:34	08/21/15 18:29	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/20/15 07:34	08/21/15 18:29	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/20/15 07:34	08/21/15 18:29	1
Isophorone	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 18:29	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 18:29	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 18:29	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/20/15 07:34	08/21/15 18:29	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/20/15 07:34	08/21/15 18:29	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/20/15 07:34	08/21/15 18:29	1
Phenol	1.5	U	10	1.5	ug/L		08/20/15 07:34	08/21/15 18:29	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 18:29	1
Diphenyl	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 18:29	1

Client Sample ID: OB-16-081315

Date Collected: 08/13/15 15:45
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 18:29	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 18:29	1
Atrazine	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 18:29	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Pyridine, 3-butyl-, 1-oxide	*13*	*J N*	*ug/L*		*5.94*	*31396-33-5*	*08/20/15 07:34*	*08/21/15 18:29*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*103*		*10 - 120*	*08/20/15 07:34*	*08/21/15 18:29*	*1*
2-Fluorobiphenyl (Surr)	*85*		*29 - 120*	*08/20/15 07:34*	*08/21/15 18:29*	*1*
2-Fluorophenol (Surr)	*47*		*10 - 120*	*08/20/15 07:34*	*08/21/15 18:29*	*1*
Nitrobenzene-d5 (Surr)	*78*		*27 - 120*	*08/20/15 07:34*	*08/21/15 18:29*	*1*
Phenol-d5 (Surr)	*31*		*10 - 120*	*08/20/15 07:34*	*08/21/15 18:29*	*1*
Terphenyl-d14 (Surr)	*85*		*13 - 120*	*08/20/15 07:34*	*08/21/15 18:29*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 21:15	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/27/15 09:48	08/27/15 21:15	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/27/15 09:48	08/27/15 21:15	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/27/15 09:48	08/27/15 21:15	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/27/15 09:48	08/27/15 21:15	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/27/15 09:48	08/27/15 21:15	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/27/15 09:48	08/27/15 21:15	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*88*		*10 - 150*	*08/27/15 09:48*	*08/27/15 21:15*	*1*
Tetrachloro-m-xylene	*93*		*10 - 150*	*08/27/15 09:48*	*08/27/15 21:15*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**56.6**		1.00	0.70	mg/L			08/26/15 02:54	1
Sulfate	**3.37**		1.00	0.60	mg/L			08/26/15 02:54	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/20/15 11:46	08/21/15 20:09	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:09	1
Arsenic	**0.012**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:09	1
Barium	**0.10**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:09	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:09	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/20/15 11:46	08/21/15 20:09	1
Calcium	**170**		10.0	1.3	mg/L		08/20/15 11:46	09/02/15 20:09	10
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:09	1
Cobalt	**0.0019**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:09	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	09/02/15 09:25	1
Iron	**20.1**		0.025	0.010	mg/L		08/20/15 11:46	08/26/15 00:20	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:09	1
Magnesium	**18.2**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:09	1
Manganese	**4.9**	**B**	0.020	0.0050	mg/L		08/20/15 11:46	09/02/15 20:09	10

Client Sample ID: OB-16-081315
Date Collected: 08/13/15 15:45
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-5
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.0015	J	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:09	1
Potassium	10.6		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:09	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/20/15 11:46	08/21/15 20:09	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 00:20	1
Sodium	34.2		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:09	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:09	1
Vanadium	0.0025	B	0.0020	0.00010	mg/L		08/20/15 11:46	08/26/15 00:20	1
Zinc	0.011	J	0.025	0.010	mg/L		08/20/15 11:46	08/21/15 20:09	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/19/15 08:39	08/20/15 01:02	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:02	1
Arsenic	0.0023		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:02	1
Barium	0.069		0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:46	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:46	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:39	08/20/15 01:02	1
Calcium	142		20.0	2.5	mg/L		08/19/15 08:39	08/21/15 15:13	20
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:02	1
Cobalt	0.0018	J	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:46	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:02	1
Iron	2.9		0.025	0.010	mg/L		08/19/15 08:39	08/20/15 01:02	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:02	1
Magnesium	18.0		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:46	1
Manganese	4.0		0.040	0.010	mg/L		08/19/15 08:39	08/21/15 15:13	20
Nickel	0.00070	J	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:02	1
Potassium	10.5		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 01:02	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/21/15 12:46	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:02	1
Sodium	34.4		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:46	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:02	1
Vanadium	0.0016	J B	0.0020	0.00010	mg/L		08/19/15 08:39	08/20/15 01:02	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/21/15 12:46	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 17:54	08/25/15 14:04	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 20:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 13:18	08/20/15 15:54	1
Bicarbonate Alkalinity as CaCO3	401		10.0	5.0	mg/L			08/18/15 12:07	1
Total Alkalinity as CaCO3	401		10.0	5.0	mg/L			08/18/15 12:07	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-18-081315
Date Collected: 08/13/15 14:25
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/25/15 01:04	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/25/15 01:04	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/25/15 01:04	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/25/15 01:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/25/15 01:04*	*1*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*08/25/15 01:04*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/25/15 01:04*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/25/15 01:04*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 19:29	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/26/15 19:29	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 19:29	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 19:29	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/26/15 19:29	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/26/15 19:29	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/26/15 19:29	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/26/15 19:29	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/26/15 19:29	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/26/15 19:29	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 19:29	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/26/15 19:29	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/26/15 19:29	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/26/15 19:29	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/26/15 19:29	1
Acetone	2.7	U	25	2.7	ug/L			08/26/15 19:29	1
Benzene	0.20	U	1.0	0.20	ug/L			08/26/15 19:29	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/26/15 19:29	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/26/15 19:29	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/26/15 19:29	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/26/15 19:29	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 19:29	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/26/15 19:29	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/26/15 19:29	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/26/15 19:29	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/26/15 19:29	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/26/15 19:29	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 19:29	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/26/15 19:29	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/26/15 19:29	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/26/15 19:29	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/26/15 19:29	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/26/15 19:29	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/26/15 19:29	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/26/15 19:29	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/26/15 19:29	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/26/15 19:29	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-18-081315
Date Collected: 08/13/15 14:25
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/26/15 19:29	1
Styrene	0.28	U	1.0	0.28	ug/L			08/26/15 19:29	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/26/15 19:29	1
Toluene	0.17	U	1.0	0.17	ug/L			08/26/15 19:29	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/26/15 19:29	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 19:29	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/26/15 19:29	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/26/15 19:29	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/26/15 19:29	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/26/15 19:29	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/26/15 19:29	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/15 19:29*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/26/15 19:29*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*08/26/15 19:29*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/26/15 19:29*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/26/15 19:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/26/15 19:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 02:55	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 02:55	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 02:55	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/20/15 13:28	08/26/15 02:55	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/20/15 13:28	08/26/15 02:55	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/20/15 13:28	08/26/15 02:55	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/20/15 13:28	08/26/15 02:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*86*		*10 - 120*	*08/20/15 13:28*	*08/26/15 02:55*	*1*
2-Fluorobiphenyl (Surr)	*77*		*29 - 120*	*08/20/15 13:28*	*08/26/15 02:55*	*1*
Nitrobenzene-d5	*63*		*27 - 120*	*08/20/15 13:28*	*08/26/15 02:55*	*1*
Terphenyl-d14	*93*		*13 - 120*	*08/20/15 13:28*	*08/26/15 02:55*	*1*
2-Fluorophenol	*55*		*10 - 120*	*08/20/15 13:28*	*08/26/15 02:55*	*1*
Phenol-d5	*41*		*10 - 120*	*08/20/15 13:28*	*08/26/15 02:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 18:53	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/20/15 07:34	08/21/15 18:53	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/20/15 07:34	08/21/15 18:53	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/20/15 07:34	08/21/15 18:53	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/20/15 07:34	08/21/15 18:53	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/20/15 07:34	08/21/15 18:53	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 18:53	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/20/15 07:34	08/21/15 18:53	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/20/15 07:34	08/21/15 18:53	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-18-081315
Date Collected: 08/13/15 14:25
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 18:53	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 18:53	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/20/15 07:34	08/21/15 18:53	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/20/15 07:34	08/21/15 18:53	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 18:53	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/20/15 07:34	08/21/15 18:53	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/20/15 07:34	08/21/15 18:53	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/20/15 07:34	08/21/15 18:53	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 18:53	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/20/15 07:34	08/21/15 18:53	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/20/15 07:34	08/21/15 18:53	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 18:53	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/20/15 07:34	08/21/15 18:53	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 18:53	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 18:53	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/20/15 07:34	08/21/15 18:53	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/20/15 07:34	08/21/15 18:53	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 18:53	1
Acetophenone	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 18:53	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/20/15 07:34	08/21/15 18:53	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/20/15 07:34	08/21/15 18:53	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/20/15 07:34	08/21/15 18:53	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 18:53	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 18:53	1
Bis(2-chloroethyl)ether	2.8	U *	10	2.8	ug/L		08/20/15 07:34	08/21/15 18:53	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 18:53	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/20/15 07:34	08/21/15 18:53	1
Carbazole	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 18:53	1
Caprolactam	2.4	U	10	2.4	ug/L		08/20/15 07:34	08/21/15 18:53	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/20/15 07:34	08/21/15 18:53	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/20/15 07:34	08/21/15 18:53	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 18:53	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/20/15 07:34	08/21/15 18:53	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 18:53	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 18:53	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 18:53	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 18:53	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/20/15 07:34	08/21/15 18:53	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/20/15 07:34	08/21/15 18:53	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/20/15 07:34	08/21/15 18:53	1
Isophorone	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 18:53	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 18:53	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 18:53	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/20/15 07:34	08/21/15 18:53	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/20/15 07:34	08/21/15 18:53	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/20/15 07:34	08/21/15 18:53	1
Phenol	1.5	U	10	1.5	ug/L		08/20/15 07:34	08/21/15 18:53	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 18:53	1
Diphenyl	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 18:53	1

Client Sample ID: OB-18-081315
Date Collected: 08/13/15 14:25
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 18:53	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 18:53	1
Atrazine	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 18:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/20/15 07:34*	*08/21/15 18:53*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*109*		*10 - 120*	*08/20/15 07:34*	*08/21/15 18:53*	*1*
2-Fluorobiphenyl (Surr)	*94*		*29 - 120*	*08/20/15 07:34*	*08/21/15 18:53*	*1*
2-Fluorophenol (Surr)	*50*		*10 - 120*	*08/20/15 07:34*	*08/21/15 18:53*	*1*
Nitrobenzene-d5 (Surr)	*85*		*27 - 120*	*08/20/15 07:34*	*08/21/15 18:53*	*1*
Phenol-d5 (Surr)	*32*		*10 - 120*	*08/20/15 07:34*	*08/21/15 18:53*	*1*
Terphenyl-d14 (Surr)	*91*		*13 - 120*	*08/20/15 07:34*	*08/21/15 18:53*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 21:30	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/27/15 09:48	08/27/15 21:30	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/27/15 09:48	08/27/15 21:30	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/27/15 09:48	08/27/15 21:30	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/27/15 09:48	08/27/15 21:30	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/27/15 09:48	08/27/15 21:30	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/27/15 09:48	08/27/15 21:30	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 21:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*85*		*10 - 150*	*08/27/15 09:48*	*08/27/15 21:30*	*1*
Tetrachloro-m-xylene	*79*		*10 - 150*	*08/27/15 09:48*	*08/27/15 21:30*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.22**		1.00	0.70	mg/L			08/26/15 03:18	1
Sulfate	**11.6**		1.00	0.60	mg/L			08/26/15 03:18	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.27**		0.020	0.0096	mg/L		08/20/15 11:46	08/21/15 20:14	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:14	1
Arsenic	**0.0014**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:14	1
Barium	**0.010**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:14	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:14	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/20/15 11:46	08/21/15 20:14	1
Calcium	**54.7**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:14	1
Chromium	**0.0012**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:14	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:14	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	09/02/15 09:31	1
Iron	**0.36**		0.025	0.010	mg/L		08/20/15 11:46	08/26/15 00:26	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:14	1
Magnesium	**10.8**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:14	1
Manganese	**0.013**	**B**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:14	1

Client Sample ID: OB-18-081315

Date Collected: 08/13/15 14:25
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-6

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0014**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:14	1
Potassium	**0.53**	**J**	1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:14	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/20/15 11:46	08/21/15 20:14	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 00:26	1
Sodium	**6.2**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:14	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:14	1
Vanadium	**0.0026**	**B**	0.0020	0.00010	mg/L		08/20/15 11:46	08/26/15 00:26	1
Zinc	0.010	U	0.025	0.010	mg/L		08/20/15 11:46	08/21/15 20:14	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.017**	**J**	0.020	0.0096	mg/L		08/19/15 08:39	08/20/15 01:08	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:08	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:08	1
Barium	**0.0089**		0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:51	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:51	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:39	08/20/15 01:08	1
Calcium	**53.6**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:51	1
Chromium	**0.00067**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:08	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:51	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:08	1
Iron	**0.018**	**J**	0.025	0.010	mg/L		08/19/15 08:39	08/20/15 01:08	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:08	1
Magnesium	**11.0**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:51	1
Manganese	**0.00075**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:08	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:08	1
Potassium	**0.39**	**J**	1.0	0.13	mg/L		08/19/15 08:39	08/20/15 01:08	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/21/15 12:51	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:08	1
Sodium	**6.4**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:51	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:08	1
Vanadium	**0.0015**	**J B**	0.0020	0.00010	mg/L		08/19/15 08:39	08/20/15 01:08	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/21/15 12:51	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 17:54	08/25/15 14:07	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 20:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 13:18	08/20/15 15:55	1
Bicarbonate Alkalinity as CaCO3	**163**		10.0	5.0	mg/L			08/18/15 12:12	1
Total Alkalinity as CaCO3	**163**		10.0	5.0	mg/L			08/18/15 12:12	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-28-081315
Date Collected: 08/13/15 15:15
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/25/15 17:35	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/25/15 17:35	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/25/15 17:35	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/25/15 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*08/25/15 17:35*	*1*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*		*08/25/15 17:35*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/25/15 17:35*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/25/15 17:35*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 15:34	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/26/15 15:34	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 15:34	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 15:34	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/26/15 15:34	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/26/15 15:34	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/26/15 15:34	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/26/15 15:34	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/26/15 15:34	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/26/15 15:34	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 15:34	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/26/15 15:34	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/26/15 15:34	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/26/15 15:34	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/26/15 15:34	1
Acetone	2.7	U	25	2.7	ug/L			08/26/15 15:34	1
Benzene	0.20	U	1.0	0.20	ug/L			08/26/15 15:34	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/26/15 15:34	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/26/15 15:34	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/26/15 15:34	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/26/15 15:34	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 15:34	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/26/15 15:34	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/26/15 15:34	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/26/15 15:34	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/26/15 15:34	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/26/15 15:34	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 15:34	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/26/15 15:34	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/26/15 15:34	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/26/15 15:34	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/26/15 15:34	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/26/15 15:34	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/26/15 15:34	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/26/15 15:34	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/26/15 15:34	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/26/15 15:34	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-28-081315
Date Collected: 08/13/15 15:15
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/26/15 15:34	1
Styrene	0.28	U	1.0	0.28	ug/L			08/26/15 15:34	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/26/15 15:34	1
Toluene	0.17	U	1.0	0.17	ug/L			08/26/15 15:34	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/26/15 15:34	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 15:34	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/26/15 15:34	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/26/15 15:34	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/26/15 15:34	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/26/15 15:34	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/26/15 15:34	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/15 15:34*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/26/15 15:34*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/26/15 15:34*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*08/26/15 15:34*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*08/26/15 15:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/15 15:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 03:21	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 03:21	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 03:21	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/20/15 13:28	08/26/15 03:21	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/20/15 13:28	08/26/15 03:21	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/20/15 13:28	08/26/15 03:21	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/20/15 13:28	08/26/15 03:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*82*		*10 - 120*	*08/20/15 13:28*	*08/26/15 03:21*	*1*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*	*08/20/15 13:28*	*08/26/15 03:21*	*1*
Nitrobenzene-d5	*64*		*27 - 120*	*08/20/15 13:28*	*08/26/15 03:21*	*1*
Terphenyl-d14	*96*		*13 - 120*	*08/20/15 13:28*	*08/26/15 03:21*	*1*
2-Fluorophenol	*52*		*10 - 120*	*08/20/15 13:28*	*08/26/15 03:21*	*1*
Phenol-d5	*36*		*10 - 120*	*08/20/15 13:28*	*08/26/15 03:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 19:16	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/20/15 07:34	08/21/15 19:16	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/20/15 07:34	08/21/15 19:16	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/20/15 07:34	08/21/15 19:16	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/20/15 07:34	08/21/15 19:16	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/20/15 07:34	08/21/15 19:16	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 19:16	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/20/15 07:34	08/21/15 19:16	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/20/15 07:34	08/21/15 19:16	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-28-081315
Date Collected: 08/13/15 15:15
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 19:16	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 19:16	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/20/15 07:34	08/21/15 19:16	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/20/15 07:34	08/21/15 19:16	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 19:16	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/20/15 07:34	08/21/15 19:16	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/20/15 07:34	08/21/15 19:16	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/20/15 07:34	08/21/15 19:16	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 19:16	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/20/15 07:34	08/21/15 19:16	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/20/15 07:34	08/21/15 19:16	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 19:16	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/20/15 07:34	08/21/15 19:16	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 19:16	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 19:16	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/20/15 07:34	08/21/15 19:16	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/20/15 07:34	08/21/15 19:16	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 19:16	1
Acetophenone	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 19:16	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/20/15 07:34	08/21/15 19:16	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/20/15 07:34	08/21/15 19:16	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/20/15 07:34	08/21/15 19:16	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 19:16	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 19:16	1
Bis(2-chloroethyl)ether	2.8	U *	10	2.8	ug/L		08/20/15 07:34	08/21/15 19:16	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 19:16	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/20/15 07:34	08/21/15 19:16	1
Carbazole	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 19:16	1
Caprolactam	2.4	U	10	2.4	ug/L		08/20/15 07:34	08/21/15 19:16	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/20/15 07:34	08/21/15 19:16	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/20/15 07:34	08/21/15 19:16	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 19:16	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/20/15 07:34	08/21/15 19:16	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 19:16	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 19:16	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 19:16	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 19:16	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/20/15 07:34	08/21/15 19:16	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/20/15 07:34	08/21/15 19:16	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/20/15 07:34	08/21/15 19:16	1
Isophorone	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 19:16	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 19:16	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 19:16	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/20/15 07:34	08/21/15 19:16	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/20/15 07:34	08/21/15 19:16	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/20/15 07:34	08/21/15 19:16	1
Phenol	1.5	U	10	1.5	ug/L		08/20/15 07:34	08/21/15 19:16	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 19:16	1
Diphenyl	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 19:16	1

Client Sample ID: OB-28-081315
Date Collected: 08/13/15 15:15
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 19:16	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 19:16	1
Atrazine	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 19:16	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/20/15 07:34*	*08/21/15 19:16*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*128*	*X*	*10 - 120*	*08/20/15 07:34*	*08/21/15 19:16*	*1*
2-Fluorobiphenyl (Surr)	*103*		*29 - 120*	*08/20/15 07:34*	*08/21/15 19:16*	*1*
2-Fluorophenol (Surr)	*57*		*10 - 120*	*08/20/15 07:34*	*08/21/15 19:16*	*1*
Nitrobenzene-d5 (Surr)	*95*		*27 - 120*	*08/20/15 07:34*	*08/21/15 19:16*	*1*
Phenol-d5 (Surr)	*37*		*10 - 120*	*08/20/15 07:34*	*08/21/15 19:16*	*1*
Terphenyl-d14 (Surr)	*110*		*13 - 120*	*08/20/15 07:34*	*08/21/15 19:16*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 21:46	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/27/15 09:48	08/27/15 21:46	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/27/15 09:48	08/27/15 21:46	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/27/15 09:48	08/27/15 21:46	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/27/15 09:48	08/27/15 21:46	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/27/15 09:48	08/27/15 21:46	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/27/15 09:48	08/27/15 21:46	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 21:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*92*		*10 - 150*	*08/27/15 09:48*	*08/27/15 21:46*	*1*
Tetrachloro-m-xylene	*91*		*10 - 150*	*08/27/15 09:48*	*08/27/15 21:46*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**89.4**		1.00	0.70	mg/L			08/26/15 03:42	1
Sulfate	**18.1**		1.00	0.60	mg/L			08/26/15 03:42	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1.4**		0.020	0.0096	mg/L		08/20/15 11:46	08/26/15 01:53	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 01:53	1
Arsenic	**0.0015**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 01:53	1
Barium	**0.084**		0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 01:53	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	09/02/15 10:21	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/20/15 11:46	08/26/15 01:53	1
Calcium	**141**		10.0	1.3	mg/L		08/20/15 11:46	09/02/15 20:14	10
Chromium	**0.0024**		0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 01:53	1
Cobalt	**0.0028**		0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 01:53	1
Copper	**0.0060**		0.0020	0.00050	mg/L		08/20/15 11:46	09/02/15 10:21	1
Iron	**2.7**		0.025	0.010	mg/L		08/20/15 11:46	08/26/15 01:53	1
Lead	**0.0010**	**J**	0.0020	0.00020	mg/L		08/20/15 11:46	08/26/15 01:53	1
Magnesium	**31.6**		1.0	0.13	mg/L		08/20/15 11:46	08/26/15 01:53	1
Manganese	**4.4**	**B**	0.020	0.0050	mg/L		08/20/15 11:46	09/02/15 20:14	10

Client Sample ID: OB-28-081315
Date Collected: 08/13/15 15:15
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-7
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0027**		0.0020	0.00050	mg/L		08/20/15 11:46	09/02/15 10:21	1
Potassium	**4.6**		1.0	0.13	mg/L		08/20/15 11:46	08/26/15 01:53	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/20/15 11:46	09/02/15 10:21	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 01:53	1
Sodium	**24.4**		1.0	0.13	mg/L		08/20/15 11:46	09/02/15 10:21	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/26/15 01:53	1
Vanadium	**0.0055**	**B**	0.0020	0.00010	mg/L		08/20/15 11:46	08/26/15 01:53	1
Zinc	0.010	U	0.025	0.010	mg/L		08/20/15 11:46	08/26/15 01:53	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/19/15 08:39	08/20/15 01:14	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:14	1
Arsenic	**0.00082**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:14	1
Barium	**0.073**		0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:56	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:56	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:39	08/20/15 01:14	1
Calcium	**103**		20.0	2.5	mg/L		08/19/15 08:39	08/21/15 15:18	20
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:14	1
Cobalt	**0.0015**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 12:56	1
Copper	**0.0016**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:14	1
Iron	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/20/15 01:14	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:14	1
Magnesium	**29.5**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:56	1
Manganese	**0.54**		0.040	0.010	mg/L		08/19/15 08:39	08/21/15 15:18	20
Nickel	**0.0016**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:14	1
Potassium	**4.0**		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 01:14	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/21/15 12:56	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:14	1
Sodium	**24.2**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 12:56	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:14	1
Vanadium	**0.0017**	**J B**	0.0020	0.00010	mg/L		08/19/15 08:39	08/20/15 01:14	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/21/15 12:56	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 17:54	08/25/15 14:18	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 20:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 13:18	08/20/15 15:55	1
Bicarbonate Alkalinity as CaCO3	**362**		10.0	5.0	mg/L			08/18/15 12:17	1
Total Alkalinity as CaCO3	**362**		10.0	5.0	mg/L			08/18/15 12:17	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-17-081315
Date Collected: 08/13/15 14:05
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/25/15 20:55	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/25/15 20:55	1
1,4-Dioxane	**17**		10	0.27	ug/L			08/25/15 20:55	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/25/15 20:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*08/25/15 20:55*	*1*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*		*08/25/15 20:55*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/25/15 20:55*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/25/15 20:55*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 16:00	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/26/15 16:00	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 16:00	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 16:00	1
1,1-Dichloroethane	**0.78**	**J**	1.0	0.24	ug/L			08/26/15 16:00	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/26/15 16:00	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/26/15 16:00	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/26/15 16:00	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/26/15 16:00	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/26/15 16:00	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 16:00	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/26/15 16:00	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/26/15 16:00	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/26/15 16:00	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/26/15 16:00	1
Acetone	2.7	U	25	2.7	ug/L			08/26/15 16:00	1
Benzene	0.20	U	1.0	0.20	ug/L			08/26/15 16:00	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/26/15 16:00	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/26/15 16:00	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/26/15 16:00	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/26/15 16:00	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 16:00	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/26/15 16:00	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/26/15 16:00	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/26/15 16:00	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/26/15 16:00	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/26/15 16:00	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 16:00	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/26/15 16:00	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/26/15 16:00	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/26/15 16:00	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/26/15 16:00	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/26/15 16:00	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/26/15 16:00	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/26/15 16:00	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/26/15 16:00	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/26/15 16:00	1

Client Sample ID: OB-17-081315

Date Collected: 08/13/15 14:05
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/26/15 16:00	1
Styrene	0.28	U	1.0	0.28	ug/L			08/26/15 16:00	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/26/15 16:00	1
Toluene	0.17	U	1.0	0.17	ug/L			08/26/15 16:00	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/26/15 16:00	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 16:00	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/26/15 16:00	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/26/15 16:00	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/26/15 16:00	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/26/15 16:00	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/26/15 16:00	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/15 16:00*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/26/15 16:00*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*08/26/15 16:00*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*08/26/15 16:00*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/26/15 16:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/26/15 16:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 03:48	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 03:48	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 03:48	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/20/15 13:28	08/26/15 03:48	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/20/15 13:28	08/26/15 03:48	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/20/15 13:28	08/26/15 03:48	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/20/15 13:28	08/26/15 03:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*62*		*10 - 120*	*08/20/15 13:28*	*08/26/15 03:48*	*1*
2-Fluorobiphenyl (Surr)	*77*		*29 - 120*	*08/20/15 13:28*	*08/26/15 03:48*	*1*
Nitrobenzene-d5	*67*		*27 - 120*	*08/20/15 13:28*	*08/26/15 03:48*	*1*
Terphenyl-d14	*89*		*13 - 120*	*08/20/15 13:28*	*08/26/15 03:48*	*1*
2-Fluorophenol	*54*		*10 - 120*	*08/20/15 13:28*	*08/26/15 03:48*	*1*
Phenol-d5	*38*		*10 - 120*	*08/20/15 13:28*	*08/26/15 03:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 19:40	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/20/15 07:34	08/21/15 19:40	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/20/15 07:34	08/21/15 19:40	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/20/15 07:34	08/21/15 19:40	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/20/15 07:34	08/21/15 19:40	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/20/15 07:34	08/21/15 19:40	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 19:40	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/20/15 07:34	08/21/15 19:40	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/20/15 07:34	08/21/15 19:40	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-17-081315
Date Collected: 08/13/15 14:05
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 19:40	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 19:40	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/20/15 07:34	08/21/15 19:40	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/20/15 07:34	08/21/15 19:40	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 19:40	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/20/15 07:34	08/21/15 19:40	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/20/15 07:34	08/21/15 19:40	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/20/15 07:34	08/21/15 19:40	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 19:40	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/20/15 07:34	08/21/15 19:40	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/20/15 07:34	08/21/15 19:40	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 19:40	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/20/15 07:34	08/21/15 19:40	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 19:40	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 19:40	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/20/15 07:34	08/21/15 19:40	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/20/15 07:34	08/21/15 19:40	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 19:40	1
Acetophenone	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 19:40	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/20/15 07:34	08/21/15 19:40	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/20/15 07:34	08/21/15 19:40	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/20/15 07:34	08/21/15 19:40	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 19:40	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 19:40	1
Bis(2-chloroethyl)ether	2.8	U *	10	2.8	ug/L		08/20/15 07:34	08/21/15 19:40	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 19:40	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/20/15 07:34	08/21/15 19:40	1
Carbazole	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 19:40	1
Caprolactam	2.4	U	10	2.4	ug/L		08/20/15 07:34	08/21/15 19:40	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/20/15 07:34	08/21/15 19:40	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/20/15 07:34	08/21/15 19:40	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 19:40	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/20/15 07:34	08/21/15 19:40	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 19:40	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 19:40	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 19:40	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 19:40	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/20/15 07:34	08/21/15 19:40	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/20/15 07:34	08/21/15 19:40	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/20/15 07:34	08/21/15 19:40	1
Isophorone	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 19:40	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 19:40	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 19:40	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/20/15 07:34	08/21/15 19:40	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/20/15 07:34	08/21/15 19:40	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/20/15 07:34	08/21/15 19:40	1
Phenol	1.5	U	10	1.5	ug/L		08/20/15 07:34	08/21/15 19:40	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 19:40	1
Diphenyl	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 19:40	1

Client Sample ID: OB-17-081315
Date Collected: 08/13/15 14:05
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 19:40	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 19:40	1
Atrazine	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 19:40	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/20/15 07:34*	*08/21/15 19:40*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*105*		*10 - 120*	*08/20/15 07:34*	*08/21/15 19:40*	*1*
2-Fluorobiphenyl (Surr)	*87*		*29 - 120*	*08/20/15 07:34*	*08/21/15 19:40*	*1*
2-Fluorophenol (Surr)	*46*		*10 - 120*	*08/20/15 07:34*	*08/21/15 19:40*	*1*
Nitrobenzene-d5 (Surr)	*80*		*27 - 120*	*08/20/15 07:34*	*08/21/15 19:40*	*1*
Phenol-d5 (Surr)	*30*		*10 - 120*	*08/20/15 07:34*	*08/21/15 19:40*	*1*
Terphenyl-d14 (Surr)	*89*		*13 - 120*	*08/20/15 07:34*	*08/21/15 19:40*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 22:02	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/27/15 09:48	08/27/15 22:02	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/27/15 09:48	08/27/15 22:02	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/27/15 09:48	08/27/15 22:02	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/27/15 09:48	08/27/15 22:02	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/27/15 09:48	08/27/15 22:02	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/27/15 09:48	08/27/15 22:02	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*100*		*10 - 150*	*08/27/15 09:48*	*08/27/15 22:02*	*1*
Tetrachloro-m-xylene	*93*		*10 - 150*	*08/27/15 09:48*	*08/27/15 22:02*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.57**		1.00	0.70	mg/L			08/26/15 04:06	1
Sulfate	**38.5**		1.00	0.60	mg/L			08/26/15 04:06	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.051**		0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 19:58	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:58	1
Arsenic	**0.0050**	**B**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:58	1
Barium	**0.016**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:58	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:58	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 19:58	1
Calcium	**110**		10.0	1.3	mg/L		08/24/15 09:53	08/25/15 18:23	10
Chromium	**0.00073**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:58	1
Cobalt	**0.0010**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:58	1
Copper	**0.0011**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:58	1
Iron	**6.1**		0.025	0.010	mg/L		08/24/15 09:53	08/24/15 19:58	1
Lead	**0.00036**	**J**	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 19:58	1
Magnesium	**31.0**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:58	1
Manganese	**0.53**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:58	1

Client Sample ID: OB-17-081315

Date Collected: 08/13/15 14:05
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-8

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0014**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:58	1
Potassium	**0.91**	**J**	1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:58	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 19:58	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/25/15 23:36	1
Sodium	**14.8**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:58	1
Thallium	**0.00066**	**J**	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 19:58	1
Vanadium	**0.0028**	**B**	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 21:56	1
Zinc	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 19:58	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/19/15 08:39	08/20/15 01:20	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:20	1
Arsenic	**0.00058**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:20	1
Barium	**0.013**		0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 13:01	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 13:01	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:39	08/20/15 01:20	1
Calcium	**99.3**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 13:01	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:20	1
Cobalt	**0.00088**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 13:01	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:20	1
Iron	**0.11**		0.025	0.010	mg/L		08/19/15 08:39	08/20/15 01:20	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:20	1
Magnesium	**31.6**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 13:01	1
Manganese	**0.55**		0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:20	1
Nickel	**0.00063**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:20	1
Potassium	**0.81**	**J**	1.0	0.13	mg/L		08/19/15 08:39	08/20/15 01:20	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/21/15 13:01	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:20	1
Sodium	**14.9**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 13:01	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:20	1
Vanadium	**0.0017**	**J B**	0.0020	0.00010	mg/L		08/19/15 08:39	08/20/15 01:20	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/21/15 13:01	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 17:54	08/25/15 14:20	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 20:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 13:18	08/20/15 15:56	1
Bicarbonate Alkalinity as CaCO3	**328**		10.0	5.0	mg/L			08/18/15 12:23	1
Total Alkalinity as CaCO3	**328**		10.0	5.0	mg/L			08/18/15 12:23	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: TB-07-081415
Date Collected: 08/14/15 01:00
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/24/15 19:50	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/24/15 19:50	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/24/15 19:50	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/24/15 19:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/24/15 19:50*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*08/24/15 19:50*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/24/15 19:50*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/24/15 19:50*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 14:41	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/26/15 14:41	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 14:41	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 14:41	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/26/15 14:41	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/26/15 14:41	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/26/15 14:41	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/26/15 14:41	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/26/15 14:41	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/26/15 14:41	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 14:41	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/26/15 14:41	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/26/15 14:41	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/26/15 14:41	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/26/15 14:41	1
Acetone	2.7	U	25	2.7	ug/L			08/26/15 14:41	1
Benzene	0.20	U	1.0	0.20	ug/L			08/26/15 14:41	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/26/15 14:41	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/26/15 14:41	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/26/15 14:41	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/26/15 14:41	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 14:41	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/26/15 14:41	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/26/15 14:41	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/26/15 14:41	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/26/15 14:41	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/26/15 14:41	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 14:41	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/26/15 14:41	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/26/15 14:41	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/26/15 14:41	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/26/15 14:41	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/26/15 14:41	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/26/15 14:41	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/26/15 14:41	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/26/15 14:41	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/26/15 14:41	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: TB-07-081415
Date Collected: 08/14/15 01:00
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/26/15 14:41	1
Styrene	0.28	U	1.0	0.28	ug/L			08/26/15 14:41	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/26/15 14:41	1
Toluene	0.17	U	1.0	0.17	ug/L			08/26/15 14:41	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/26/15 14:41	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 14:41	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/26/15 14:41	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/26/15 14:41	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/26/15 14:41	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/26/15 14:41	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/26/15 14:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/15 14:41*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/26/15 14:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*		*08/26/15 14:41*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/26/15 14:41*	*1*
Toluene-d8 (Surr)	*86*		*70 - 130*		*08/26/15 14:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/26/15 14:41*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-10-081415
Date Collected: 08/14/15 10:20
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/25/15 18:03	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/25/15 18:03	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/25/15 18:03	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/25/15 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*08/25/15 18:03*	*1*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*		*08/25/15 18:03*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/25/15 18:03*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/25/15 18:03*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 16:26	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/26/15 16:26	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 16:26	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 16:26	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/26/15 16:26	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/26/15 16:26	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/26/15 16:26	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/26/15 16:26	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/26/15 16:26	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/26/15 16:26	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 16:26	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/26/15 16:26	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/26/15 16:26	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/26/15 16:26	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/26/15 16:26	1
Acetone	2.7	U	25	2.7	ug/L			08/26/15 16:26	1
Benzene	0.20	U	1.0	0.20	ug/L			08/26/15 16:26	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/26/15 16:26	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/26/15 16:26	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/26/15 16:26	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/26/15 16:26	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 16:26	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/26/15 16:26	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/26/15 16:26	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/26/15 16:26	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/26/15 16:26	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/26/15 16:26	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 16:26	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/26/15 16:26	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/26/15 16:26	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/26/15 16:26	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/26/15 16:26	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/26/15 16:26	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/26/15 16:26	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/26/15 16:26	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/26/15 16:26	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/26/15 16:26	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-10-081415
Date Collected: 08/14/15 10:20
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/26/15 16:26	1
Styrene	0.28	U	1.0	0.28	ug/L			08/26/15 16:26	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/26/15 16:26	1
Toluene	0.17	U	1.0	0.17	ug/L			08/26/15 16:26	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/26/15 16:26	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 16:26	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/26/15 16:26	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/26/15 16:26	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/26/15 16:26	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/26/15 16:26	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/26/15 16:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/15 16:26*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/26/15 16:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*		*08/26/15 16:26*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/26/15 16:26*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/26/15 16:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/26/15 16:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 04:13	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 04:13	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 04:13	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/20/15 13:28	08/26/15 04:13	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/20/15 13:28	08/26/15 04:13	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/20/15 13:28	08/26/15 04:13	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/20/15 13:28	08/26/15 04:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*84*		*10 - 120*	*08/20/15 13:28*	*08/26/15 04:13*	*1*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*	*08/20/15 13:28*	*08/26/15 04:13*	*1*
Nitrobenzene-d5	*62*		*27 - 120*	*08/20/15 13:28*	*08/26/15 04:13*	*1*
Terphenyl-d14	*92*		*13 - 120*	*08/20/15 13:28*	*08/26/15 04:13*	*1*
2-Fluorophenol	*56*		*10 - 120*	*08/20/15 13:28*	*08/26/15 04:13*	*1*
Phenol-d5	*40*		*10 - 120*	*08/20/15 13:28*	*08/26/15 04:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 20:04	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/20/15 07:34	08/21/15 20:04	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/20/15 07:34	08/21/15 20:04	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/20/15 07:34	08/21/15 20:04	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/20/15 07:34	08/21/15 20:04	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/20/15 07:34	08/21/15 20:04	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 20:04	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/20/15 07:34	08/21/15 20:04	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/20/15 07:34	08/21/15 20:04	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-10-081415
Date Collected: 08/14/15 10:20
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 20:04	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 20:04	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/20/15 07:34	08/21/15 20:04	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/20/15 07:34	08/21/15 20:04	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 20:04	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/20/15 07:34	08/21/15 20:04	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/20/15 07:34	08/21/15 20:04	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/20/15 07:34	08/21/15 20:04	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 20:04	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/20/15 07:34	08/21/15 20:04	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/20/15 07:34	08/21/15 20:04	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 20:04	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/20/15 07:34	08/21/15 20:04	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 20:04	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 20:04	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/20/15 07:34	08/21/15 20:04	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/20/15 07:34	08/21/15 20:04	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 20:04	1
Acetophenone	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 20:04	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/20/15 07:34	08/21/15 20:04	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/20/15 07:34	08/21/15 20:04	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/20/15 07:34	08/21/15 20:04	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 20:04	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 20:04	1
Bis(2-chloroethyl)ether	2.8	U *	10	2.8	ug/L		08/20/15 07:34	08/21/15 20:04	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 20:04	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/20/15 07:34	08/21/15 20:04	1
Carbazole	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 20:04	1
Caprolactam	2.4	U	10	2.4	ug/L		08/20/15 07:34	08/21/15 20:04	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/20/15 07:34	08/21/15 20:04	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/20/15 07:34	08/21/15 20:04	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 20:04	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/20/15 07:34	08/21/15 20:04	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 20:04	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 20:04	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 20:04	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 20:04	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/20/15 07:34	08/21/15 20:04	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/20/15 07:34	08/21/15 20:04	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/20/15 07:34	08/21/15 20:04	1
Isophorone	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 20:04	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 20:04	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 20:04	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/20/15 07:34	08/21/15 20:04	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/20/15 07:34	08/21/15 20:04	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/20/15 07:34	08/21/15 20:04	1
Phenol	1.5	U	10	1.5	ug/L		08/20/15 07:34	08/21/15 20:04	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 20:04	1
Diphenyl	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 20:04	1

Client Sample ID: OB-10-081415

Date Collected: 08/14/15 10:20
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 20:04	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 20:04	1
Atrazine	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 20:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	*29*	*J N*	*ug/L*		*3.94*	*2437-95-8*	*08/20/15 07:34*	*08/21/15 20:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*100*		*10 - 120*	*08/20/15 07:34*	*08/21/15 20:04*	*1*
2-Fluorobiphenyl (Surr)	*87*		*29 - 120*	*08/20/15 07:34*	*08/21/15 20:04*	*1*
2-Fluorophenol (Surr)	*52*		*10 - 120*	*08/20/15 07:34*	*08/21/15 20:04*	*1*
Nitrobenzene-d5 (Surr)	*83*		*27 - 120*	*08/20/15 07:34*	*08/21/15 20:04*	*1*
Phenol-d5 (Surr)	*34*		*10 - 120*	*08/20/15 07:34*	*08/21/15 20:04*	*1*
Terphenyl-d14 (Surr)	*83*		*13 - 120*	*08/20/15 07:34*	*08/21/15 20:04*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 22:17	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/27/15 09:48	08/27/15 22:17	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/27/15 09:48	08/27/15 22:17	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/27/15 09:48	08/27/15 22:17	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/27/15 09:48	08/27/15 22:17	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/27/15 09:48	08/27/15 22:17	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/27/15 09:48	08/27/15 22:17	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*97*		*10 - 150*	*08/27/15 09:48*	*08/27/15 22:17*	*1*
Tetrachloro-m-xylene	*90*		*10 - 150*	*08/27/15 09:48*	*08/27/15 22:17*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.43**		1.00	0.70	mg/L			08/26/15 20:56	1
Sulfate	**5.88**		1.00	0.60	mg/L			08/26/15 20:56	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 20:04	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:04	1
Arsenic	**0.0013**	**J B**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:04	1
Barium	**0.0068**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:04	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:04	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 20:04	1
Calcium	**13.4**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:04	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:04	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:04	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:04	1
Iron	**0.25**		0.025	0.010	mg/L		08/24/15 09:53	08/24/15 20:04	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:04	1
Magnesium	**3.8**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:04	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-10-081415
Date Collected: 08/14/15 10:20
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-10
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.029**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:04	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:04	1
Potassium	**1.2**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:04	1
Selenium	**0.00080**	**J**	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 20:04	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/25/15 23:41	1
Sodium	**3.1**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:04	1
Thallium	**0.00024**	**J**	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:04	1
Vanadium	**0.0010**	**J B**	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 22:01	1
Zinc	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 20:04	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/19/15 08:39	08/20/15 01:25	1
Antimony	**0.00051**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:25	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:25	1
Barium	**0.0065**		0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 13:06	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 13:06	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:39	08/20/15 01:25	1
Calcium	**14.0**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 13:06	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:25	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 13:06	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:25	1
Iron	**0.013**	**J**	0.025	0.010	mg/L		08/19/15 08:39	08/20/15 01:25	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:25	1
Magnesium	**4.1**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 13:06	1
Manganese	**0.00078**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:25	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:25	1
Potassium	**1.2**		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 01:25	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/21/15 13:06	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:25	1
Sodium	**3.4**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 13:06	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:25	1
Vanadium	**0.0016**	**J B**	0.0020	0.00010	mg/L		08/19/15 08:39	08/20/15 01:25	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/21/15 13:06	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 17:54	08/25/15 14:23	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 21:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 13:18	08/20/15 15:57	1
Bicarbonate Alkalinity as CaCO3	**43.9**		10.0	5.0	mg/L			08/18/15 12:28	1
Total Alkalinity as CaCO3	**43.9**		10.0	5.0	mg/L			08/18/15 12:28	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: DUP-03-081415
Date Collected: 08/14/15 12:00
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/25/15 18:32	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/25/15 18:32	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/25/15 18:32	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/25/15 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*08/25/15 18:32*	*1*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*08/25/15 18:32*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/25/15 18:32*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/25/15 18:32*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 16:52	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/26/15 16:52	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 16:52	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 16:52	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/26/15 16:52	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/26/15 16:52	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/26/15 16:52	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/26/15 16:52	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/26/15 16:52	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/26/15 16:52	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 16:52	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/26/15 16:52	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/26/15 16:52	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/26/15 16:52	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/26/15 16:52	1
Acetone	2.7	U	25	2.7	ug/L			08/26/15 16:52	1
Benzene	0.20	U	1.0	0.20	ug/L			08/26/15 16:52	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/26/15 16:52	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/26/15 16:52	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/26/15 16:52	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/26/15 16:52	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 16:52	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/26/15 16:52	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/26/15 16:52	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/26/15 16:52	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/26/15 16:52	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/26/15 16:52	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 16:52	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/26/15 16:52	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/26/15 16:52	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/26/15 16:52	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/26/15 16:52	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/26/15 16:52	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/26/15 16:52	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/26/15 16:52	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/26/15 16:52	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/26/15 16:52	1

Client Sample ID: DUP-03-081415
Date Collected: 08/14/15 12:00
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/26/15 16:52	1
Styrene	0.28	U	1.0	0.28	ug/L			08/26/15 16:52	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/26/15 16:52	1
Toluene	0.17	U	1.0	0.17	ug/L			08/26/15 16:52	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/26/15 16:52	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 16:52	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/26/15 16:52	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/26/15 16:52	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/26/15 16:52	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/26/15 16:52	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/26/15 16:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/15 16:52*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/26/15 16:52*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*08/26/15 16:52*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/26/15 16:52*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/26/15 16:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/26/15 16:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 04:39	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 04:39	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 04:39	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/20/15 13:28	08/26/15 04:39	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/20/15 13:28	08/26/15 04:39	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/20/15 13:28	08/26/15 04:39	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/20/15 13:28	08/26/15 04:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*86*		*10 - 120*	*08/20/15 13:28*	*08/26/15 04:39*	*1*
2-Fluorobiphenyl (Surr)	*76*		*29 - 120*	*08/20/15 13:28*	*08/26/15 04:39*	*1*
Nitrobenzene-d5	*65*		*27 - 120*	*08/20/15 13:28*	*08/26/15 04:39*	*1*
Terphenyl-d14	*98*		*13 - 120*	*08/20/15 13:28*	*08/26/15 04:39*	*1*
2-Fluorophenol	*53*		*10 - 120*	*08/20/15 13:28*	*08/26/15 04:39*	*1*
Phenol-d5	*38*		*10 - 120*	*08/20/15 13:28*	*08/26/15 04:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 20:28	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/20/15 07:34	08/21/15 20:28	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/20/15 07:34	08/21/15 20:28	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/20/15 07:34	08/21/15 20:28	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/20/15 07:34	08/21/15 20:28	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/20/15 07:34	08/21/15 20:28	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 20:28	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/20/15 07:34	08/21/15 20:28	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/20/15 07:34	08/21/15 20:28	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: DUP-03-081415
Date Collected: 08/14/15 12:00
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 20:28	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 20:28	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/20/15 07:34	08/21/15 20:28	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/20/15 07:34	08/21/15 20:28	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 20:28	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/20/15 07:34	08/21/15 20:28	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/20/15 07:34	08/21/15 20:28	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/20/15 07:34	08/21/15 20:28	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 20:28	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/20/15 07:34	08/21/15 20:28	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/20/15 07:34	08/21/15 20:28	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 20:28	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/20/15 07:34	08/21/15 20:28	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 20:28	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 20:28	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/20/15 07:34	08/21/15 20:28	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/20/15 07:34	08/21/15 20:28	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 20:28	1
Acetophenone	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 20:28	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/20/15 07:34	08/21/15 20:28	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/20/15 07:34	08/21/15 20:28	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/20/15 07:34	08/21/15 20:28	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 20:28	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 20:28	1
Bis(2-chloroethyl)ether	2.8	U *	10	2.8	ug/L		08/20/15 07:34	08/21/15 20:28	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 20:28	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/20/15 07:34	08/21/15 20:28	1
Carbazole	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 20:28	1
Caprolactam	2.4	U	10	2.4	ug/L		08/20/15 07:34	08/21/15 20:28	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/20/15 07:34	08/21/15 20:28	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/20/15 07:34	08/21/15 20:28	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 20:28	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/20/15 07:34	08/21/15 20:28	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 20:28	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 20:28	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 20:28	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 20:28	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/20/15 07:34	08/21/15 20:28	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/20/15 07:34	08/21/15 20:28	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/20/15 07:34	08/21/15 20:28	1
Isophorone	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 20:28	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 20:28	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 20:28	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/20/15 07:34	08/21/15 20:28	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/20/15 07:34	08/21/15 20:28	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/20/15 07:34	08/21/15 20:28	1
Phenol	1.5	U	10	1.5	ug/L		08/20/15 07:34	08/21/15 20:28	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 20:28	1
Diphenyl	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 20:28	1

Client Sample ID: DUP-03-081415

Date Collected: 08/14/15 12:00
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-11

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 20:28	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 20:28	1
Atrazine	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 20:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/20/15 07:34*	*08/21/15 20:28*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*107*		*10 - 120*	*08/20/15 07:34*	*08/21/15 20:28*	*1*
2-Fluorobiphenyl (Surr)	*98*		*29 - 120*	*08/20/15 07:34*	*08/21/15 20:28*	*1*
2-Fluorophenol (Surr)	*55*		*10 - 120*	*08/20/15 07:34*	*08/21/15 20:28*	*1*
Nitrobenzene-d5 (Surr)	*90*		*27 - 120*	*08/20/15 07:34*	*08/21/15 20:28*	*1*
Phenol-d5 (Surr)	*35*		*10 - 120*	*08/20/15 07:34*	*08/21/15 20:28*	*1*
Terphenyl-d14 (Surr)	*95*		*13 - 120*	*08/20/15 07:34*	*08/21/15 20:28*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 22:33	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/27/15 09:48	08/27/15 22:33	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/27/15 09:48	08/27/15 22:33	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/27/15 09:48	08/27/15 22:33	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/27/15 09:48	08/27/15 22:33	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/27/15 09:48	08/27/15 22:33	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/27/15 09:48	08/27/15 22:33	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 22:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*97*		*10 - 150*	*08/27/15 09:48*	*08/27/15 22:33*	*1*
Tetrachloro-m-xylene	*88*		*10 - 150*	*08/27/15 09:48*	*08/27/15 22:33*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.39**		1.00	0.70	mg/L			08/26/15 21:20	1
Sulfate	**5.85**		1.00	0.60	mg/L			08/26/15 21:20	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 20:19	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:19	1
Arsenic	**0.0013**	**J B**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:19	1
Barium	**0.0069**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:19	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:19	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 20:19	1
Calcium	**13.9**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:19	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:19	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:19	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:19	1
Iron	**0.29**		0.025	0.010	mg/L		08/24/15 09:53	08/24/15 20:19	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:19	1
Magnesium	**4.0**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:19	1
Manganese	**0.033**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:19	1

Client Sample ID: DUP-03-081415

Date Collected: 08/14/15 12:00
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-11

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0013**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:19	1
Potassium	**1.3**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:19	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 20:19	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/25/15 23:57	1
Sodium	**3.3**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:19	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:19	1
Vanadium	**0.0011**	**J B**	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 22:06	1
Zinc	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 20:19	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/19/15 08:39	08/20/15 01:31	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:31	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:31	1
Barium	**0.0062**		0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 13:11	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 13:11	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:39	08/20/15 01:31	1
Calcium	**13.7**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 13:11	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:31	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 13:11	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:31	1
Iron	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/20/15 01:31	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:31	1
Magnesium	**4.1**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 13:11	1
Manganese	**0.00064**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:31	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:31	1
Potassium	**1.2**		1.0	0.13	mg/L		08/19/15 08:39	08/20/15 01:31	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/21/15 13:11	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/20/15 01:31	1
Sodium	**3.3**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 13:11	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/20/15 01:31	1
Vanadium	**0.0016**	**J B**	0.0020	0.00010	mg/L		08/19/15 08:39	08/20/15 01:31	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/21/15 13:11	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 17:54	08/25/15 14:25	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 21:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 13:18	08/20/15 15:58	1
Bicarbonate Alkalinity as CaCO3	**43.6**		10.0	5.0	mg/L			08/18/15 12:33	1
Total Alkalinity as CaCO3	**43.6**		10.0	5.0	mg/L			08/18/15 12:33	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: CM-50-081415
Date Collected: 08/14/15 10:25
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/25/15 19:00	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/25/15 19:00	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/25/15 19:00	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/25/15 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*08/25/15 19:00*	*1*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*		*08/25/15 19:00*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*08/25/15 19:00*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/25/15 19:00*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 15:08	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/26/15 15:08	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 15:08	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 15:08	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/26/15 15:08	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/26/15 15:08	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/26/15 15:08	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/26/15 15:08	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/26/15 15:08	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/26/15 15:08	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 15:08	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/26/15 15:08	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/26/15 15:08	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/26/15 15:08	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/26/15 15:08	1
Acetone	2.7	U	25	2.7	ug/L			08/26/15 15:08	1
Benzene	0.20	U	1.0	0.20	ug/L			08/26/15 15:08	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/26/15 15:08	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/26/15 15:08	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/26/15 15:08	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/26/15 15:08	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 15:08	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/26/15 15:08	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/26/15 15:08	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/26/15 15:08	1
Chloromethane	**0.41**	**J**	1.0	0.36	ug/L			08/26/15 15:08	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/26/15 15:08	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 15:08	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/26/15 15:08	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/26/15 15:08	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/26/15 15:08	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/26/15 15:08	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/26/15 15:08	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/26/15 15:08	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/26/15 15:08	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/26/15 15:08	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/26/15 15:08	1

Client Sample ID: CM-50-081415
Date Collected: 08/14/15 10:25
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/26/15 15:08	1
Styrene	0.28	U	1.0	0.28	ug/L			08/26/15 15:08	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/26/15 15:08	1
Toluene	0.17	U	1.0	0.17	ug/L			08/26/15 15:08	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/26/15 15:08	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 15:08	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/26/15 15:08	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/26/15 15:08	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/26/15 15:08	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/26/15 15:08	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/26/15 15:08	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/15 15:08*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/26/15 15:08*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*		*08/26/15 15:08*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/26/15 15:08*	*1*
Toluene-d8 (Surr)	*87*		*70 - 130*		*08/26/15 15:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/26/15 15:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 05:05	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 05:05	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/26/15 05:05	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/20/15 13:28	08/26/15 05:05	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/20/15 13:28	08/26/15 05:05	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/20/15 13:28	08/26/15 05:05	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/20/15 13:28	08/26/15 05:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*86*		*10 - 120*	*08/20/15 13:28*	*08/26/15 05:05*	*1*
2-Fluorobiphenyl (Surr)	*130*	*X*	*29 - 120*	*08/20/15 13:28*	*08/26/15 05:05*	*1*
Nitrobenzene-d5	*67*		*27 - 120*	*08/20/15 13:28*	*08/26/15 05:05*	*1*
Terphenyl-d14	*127*	*X*	*13 - 120*	*08/20/15 13:28*	*08/26/15 05:05*	*1*
2-Fluorophenol	*45*		*10 - 120*	*08/20/15 13:28*	*08/26/15 05:05*	*1*
Phenol-d5	*33*		*10 - 120*	*08/20/15 13:28*	*08/26/15 05:05*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 20:51	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/20/15 07:34	08/21/15 20:51	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/20/15 07:34	08/21/15 20:51	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/20/15 07:34	08/21/15 20:51	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/20/15 07:34	08/21/15 20:51	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/20/15 07:34	08/21/15 20:51	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 20:51	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/20/15 07:34	08/21/15 20:51	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/20/15 07:34	08/21/15 20:51	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: CM-50-081415
Date Collected: 08/14/15 10:25
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 20:51	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 20:51	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/20/15 07:34	08/21/15 20:51	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/20/15 07:34	08/21/15 20:51	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 20:51	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/20/15 07:34	08/21/15 20:51	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/20/15 07:34	08/21/15 20:51	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/20/15 07:34	08/21/15 20:51	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 20:51	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/20/15 07:34	08/21/15 20:51	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/20/15 07:34	08/21/15 20:51	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 20:51	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/20/15 07:34	08/21/15 20:51	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/21/15 20:51	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 20:51	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/20/15 07:34	08/21/15 20:51	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/20/15 07:34	08/21/15 20:51	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 20:51	1
Acetophenone	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/21/15 20:51	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/20/15 07:34	08/21/15 20:51	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/20/15 07:34	08/21/15 20:51	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/20/15 07:34	08/21/15 20:51	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 20:51	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 20:51	1
Bis(2-chloroethyl)ether	2.8	U *	10	2.8	ug/L		08/20/15 07:34	08/21/15 20:51	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 20:51	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/20/15 07:34	08/21/15 20:51	1
Carbazole	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 20:51	1
Caprolactam	2.4	U	10	2.4	ug/L		08/20/15 07:34	08/21/15 20:51	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/20/15 07:34	08/21/15 20:51	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/20/15 07:34	08/21/15 20:51	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 20:51	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/20/15 07:34	08/21/15 20:51	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 20:51	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 20:51	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 20:51	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/21/15 20:51	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/20/15 07:34	08/21/15 20:51	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/20/15 07:34	08/21/15 20:51	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/20/15 07:34	08/21/15 20:51	1
Isophorone	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/21/15 20:51	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/21/15 20:51	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/21/15 20:51	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/20/15 07:34	08/21/15 20:51	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/20/15 07:34	08/21/15 20:51	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/20/15 07:34	08/21/15 20:51	1
Phenol	1.5	U	10	1.5	ug/L		08/20/15 07:34	08/21/15 20:51	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/21/15 20:51	1
Diphenyl	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/21/15 20:51	1

Client Sample ID: CM-50-081415

Date Collected: 08/14/15 10:25
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-12

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/21/15 20:51	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/21/15 20:51	1
Atrazine	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/21/15 20:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/20/15 07:34*	*08/21/15 20:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*106*		*10 - 120*	*08/20/15 07:34*	*08/21/15 20:51*	*1*
2-Fluorobiphenyl (Surr)	*91*		*29 - 120*	*08/20/15 07:34*	*08/21/15 20:51*	*1*
2-Fluorophenol (Surr)	*51*		*10 - 120*	*08/20/15 07:34*	*08/21/15 20:51*	*1*
Nitrobenzene-d5 (Surr)	*82*		*27 - 120*	*08/20/15 07:34*	*08/21/15 20:51*	*1*
Phenol-d5 (Surr)	*31*		*10 - 120*	*08/20/15 07:34*	*08/21/15 20:51*	*1*
Terphenyl-d14 (Surr)	*87*		*13 - 120*	*08/20/15 07:34*	*08/21/15 20:51*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 22:49	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/27/15 09:48	08/27/15 22:49	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/27/15 09:48	08/27/15 22:49	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/27/15 09:48	08/27/15 22:49	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/27/15 09:48	08/27/15 22:49	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/27/15 09:48	08/27/15 22:49	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/27/15 09:48	08/27/15 22:49	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 22:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*104*		*10 - 150*	*08/27/15 09:48*	*08/27/15 22:49*	*1*
Tetrachloro-m-xylene	*92*		*10 - 150*	*08/27/15 09:48*	*08/27/15 22:49*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**191**	**F1**	1.00	0.70	mg/L			08/26/15 22:32	1
Sulfate	**3.36**		1.00	0.60	mg/L			08/26/15 22:32	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 19:33	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:33	1
Arsenic	**0.0023**	**B**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:33	1
Barium	**0.12**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:33	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:33	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 19:33	1
Calcium	**81.3**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:33	1
Chromium	**0.0021**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:33	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:33	1
Copper	**0.0015**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:33	1
Iron	**20.0**		0.025	0.010	mg/L		08/24/15 09:53	08/24/15 19:33	1
Lead	**0.00039**	**J**	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 19:33	1
Magnesium	**22.7**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:33	1
Manganese	**1.2**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:33	1

Client Sample ID: CM-50-081415

Date Collected: 08/14/15 10:25
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-12

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0052**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:33	1
Potassium	**4.5**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:33	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 19:33	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/25/15 23:10	1
Sodium	**85.7**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:33	1
Thallium	**0.00051**	**J**	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 19:33	1
Vanadium	**0.0010**	**J B**	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 21:30	1
Zinc	**0.96**		0.025	0.010	mg/L		08/24/15 09:53	08/24/15 19:33	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/19/15 08:39	08/19/15 23:59	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/19/15 23:59	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/19/15 23:59	1
Barium	**0.083**		0.0020	0.00050	mg/L		08/19/15 08:39	08/19/15 23:59	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 11:49	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/19/15 08:39	08/19/15 23:59	1
Calcium	**83.7**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 11:49	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/19/15 23:59	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 11:49	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/19/15 23:59	1
Iron	**5.1**	**F2**	0.025	0.010	mg/L		08/19/15 08:39	08/19/15 23:59	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/19/15 08:39	08/19/15 23:59	1
Magnesium	**24.0**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 11:49	1
Manganese	**1.4**		0.040	0.010	mg/L		08/19/15 08:39	08/21/15 14:14	20
Nickel	**0.0013**	**J**	0.0020	0.00050	mg/L		08/19/15 08:39	08/19/15 23:59	1
Potassium	**4.6**		1.0	0.13	mg/L		08/19/15 08:39	08/19/15 23:59	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/21/15 11:49	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/19/15 23:59	1
Sodium	**90.4**		1.0	0.13	mg/L		08/19/15 08:39	08/21/15 11:49	1
Thallium	**0.00060**	**J**	0.0020	0.00020	mg/L		08/19/15 08:39	08/19/15 23:59	1
Vanadium	**0.0017**	**J B**	0.0020	0.00010	mg/L		08/19/15 08:39	08/19/15 23:59	1
Zinc	**0.48**		0.025	0.010	mg/L		08/19/15 08:39	08/21/15 11:49	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 17:54	08/25/15 13:51	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 20:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U F1	0.010	0.0070	mg/L		08/18/15 19:20	08/19/15 09:37	1
Bicarbonate Alkalinity as CaCO3	**229**		10.0	5.0	mg/L			08/18/15 12:38	1
Total Alkalinity as CaCO3	**229**		10.0	5.0	mg/L			08/18/15 12:38	1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-276265/7
Matrix: Water
Analysis Batch: 276265

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 13:22	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/26/15 13:22	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 13:22	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/26/15 13:22	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/26/15 13:22	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/26/15 13:22	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/26/15 13:22	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/26/15 13:22	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/26/15 13:22	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/26/15 13:22	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 13:22	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/26/15 13:22	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/26/15 13:22	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/26/15 13:22	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/26/15 13:22	1
Acetone	2.7	U	25	2.7	ug/L			08/26/15 13:22	1
Benzene	0.20	U	1.0	0.20	ug/L			08/26/15 13:22	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/26/15 13:22	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/26/15 13:22	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/26/15 13:22	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/26/15 13:22	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/26/15 13:22	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/26/15 13:22	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/26/15 13:22	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/26/15 13:22	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/26/15 13:22	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/26/15 13:22	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 13:22	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/26/15 13:22	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/26/15 13:22	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/26/15 13:22	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/26/15 13:22	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/26/15 13:22	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/26/15 13:22	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/26/15 13:22	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/26/15 13:22	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/26/15 13:22	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/26/15 13:22	1
Styrene	0.28	U	1.0	0.28	ug/L			08/26/15 13:22	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/26/15 13:22	1
Toluene	0.172	J	1.0	0.17	ug/L			08/26/15 13:22	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/26/15 13:22	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/26/15 13:22	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/26/15 13:22	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/26/15 13:22	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/26/15 13:22	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/26/15 13:22	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/26/15 13:22	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/26/15 13:22	1
Total Alkanes TIC	0.000	J	ug/L					08/26/15 13:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130		08/26/15 13:22	1
Dibromofluoromethane (Surr)	97		70 - 130		08/26/15 13:22	1
Toluene-d8 (Surr)	92		70 - 130		08/26/15 13:22	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 130		08/26/15 13:22	1

Lab Sample ID: LCS 490-276265/3
Matrix: Water
Analysis Batch: 276265

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	50.6		ug/L		101	78 - 135
Freon-113	50.0	52.5		ug/L		105	77 - 129
1,1,2,2-Tetrachloroethane	50.0	56.4		ug/L		113	69 - 131
1,1,2-Trichloroethane	50.0	49.7		ug/L		99	80 - 124
1,1-Dichloroethane	50.0	51.2		ug/L		102	78 - 125
1,1-Dichloroethene	50.0	52.7		ug/L		105	79 - 124
1,2,4-Trichlorobenzene	50.0	56.8		ug/L		114	63 - 133
1,2-Dibromo-3-Chloropropane	50.0	49.7		ug/L		99	54 - 125
1,2-Dichlorobenzene	50.0	56.3		ug/L		113	80 - 121
1,2-Dichloropropane	50.0	51.5		ug/L		103	75 - 120
1,3-Dichlorobenzene	50.0	55.8		ug/L		112	80 - 122
1,4-Dichlorobenzene	50.0	51.9		ug/L		104	80 - 120
2-Butanone (MEK)	250	258		ug/L		103	62 - 133
2-Hexanone	250	324		ug/L		130	60 - 142
4-Methyl-2-pentanone (MIBK)	250	234		ug/L		94	60 - 137
Acetone	250	257		ug/L		103	54 - 145
Benzene	50.0	51.4		ug/L		103	80 - 121
Bromoform	50.0	48.2		ug/L		96	46 - 145
Bromomethane	50.0	41.6		ug/L		83	41 - 150
Carbon disulfide	50.0	54.0		ug/L		108	77 - 126
Carbon tetrachloride	50.0	50.3		ug/L		101	64 - 147
Chlorobenzene	50.0	51.4		ug/L		103	80 - 120
Chlorodibromomethane	50.0	55.2		ug/L		110	69 - 133
Chloroethane	50.0	53.9		ug/L		108	72 - 120
Chloroform	50.0	50.4		ug/L		101	73 - 129
Chloromethane	50.0	49.5		ug/L		99	12 - 150
cis-1,2-Dichloroethene	50.0	51.0		ug/L		102	76 - 125
cis-1,3-Dichloropropene	50.0	47.4		ug/L		95	74 - 140
Cyclohexane	50.0	53.0		ug/L		106	73 - 122
Dichlorobromomethane	50.0	50.1		ug/L		100	75 - 129
Dichlorodifluoromethane	50.0	53.0		ug/L		106	37 - 127
Ethylbenzene	50.0	58.4		ug/L		117	80 - 130
1,2-Dibromoethane	50.0	54.7		ug/L		109	80 - 129
Isopropylbenzene	50.0	56.6		ug/L		113	80 - 141
Methyl acetate	250	252		ug/L		101	64 - 150
Methyl tert-butyl ether	50.0	47.9		ug/L		96	72 - 133
Methylcyclohexane	50.0	51.9		ug/L		104	71 - 129
Methylene Chloride	50.0	52.1		ug/L		104	79 - 123
Styrene	50.0	51.0		ug/L		102	80 - 127

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

Lab Sample ID: LCS 490-276265/3
Matrix: Water
Analysis Batch: 276265

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	50.0	55.7		ug/L		111	80 - 126
Toluene	50.0	48.9		ug/L		98	80 - 126
trans-1,2-Dichloroethene	50.0	51.1		ug/L		102	79 - 126
trans-1,3-Dichloropropene	50.0	46.5		ug/L		93	63 - 134
Trichloroethene	50.0	51.2		ug/L		102	80 - 123
Trichlorofluoromethane	50.0	51.3		ug/L		103	65 - 124
Vinyl chloride	50.0	53.5		ug/L		107	68 - 120
1,2-Dichloroethane	50.0	48.5		ug/L		97	77 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*

Lab Sample ID: LCSD 490-276265/4
Matrix: Water
Analysis Batch: 276265

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	50.0	49.7		ug/L		99	78 - 135	2	17
Freon-113	50.0	52.3		ug/L		105	77 - 129	0	18
1,1,2,2-Tetrachloroethane	50.0	55.6		ug/L		111	69 - 131	1	20
1,1,2-Trichloroethane	50.0	46.7		ug/L		93	80 - 124	6	15
1,1-Dichloroethane	50.0	50.6		ug/L		101	78 - 125	1	17
1,1-Dichloroethene	50.0	52.6		ug/L		105	79 - 124	0	17
1,2,4-Trichlorobenzene	50.0	56.4		ug/L		113	63 - 133	1	19
1,2-Dibromo-3-Chloropropane	50.0	49.9		ug/L		100	54 - 125	0	24
1,2-Dichlorobenzene	50.0	54.8		ug/L		110	80 - 121	3	15
1,2-Dichloropropane	50.0	50.8		ug/L		102	75 - 120	1	17
1,3-Dichlorobenzene	50.0	55.8		ug/L		112	80 - 122	0	15
1,4-Dichlorobenzene	50.0	51.2		ug/L		102	80 - 120	1	15
2-Butanone (MEK)	250	267		ug/L		107	62 - 133	4	19
2-Hexanone	250	316		ug/L		127	60 - 142	2	15
4-Methyl-2-pentanone (MIBK)	250	232		ug/L		93	60 - 137	1	17
Acetone	250	266		ug/L		107	54 - 145	4	21
Benzene	50.0	51.1		ug/L		102	80 - 121	1	17
Bromoform	50.0	46.7		ug/L		93	46 - 145	3	16
Bromomethane	50.0	42.6		ug/L		85	41 - 150	2	50
Carbon disulfide	50.0	54.2		ug/L		108	77 - 126	0	21
Carbon tetrachloride	50.0	48.8		ug/L		98	64 - 147	3	19
Chlorobenzene	50.0	50.6		ug/L		101	80 - 120	2	14
Chlorodibromomethane	50.0	51.1		ug/L		102	69 - 133	8	15
Chloroethane	50.0	54.8		ug/L		110	72 - 120	2	20
Chloroform	50.0	50.7		ug/L		101	73 - 129	0	18
Chloromethane	50.0	50.6		ug/L		101	12 - 150	2	31
cis-1,2-Dichloroethene	50.0	50.1		ug/L		100	76 - 125	2	17
cis-1,3-Dichloropropene	50.0	45.7		ug/L		91	74 - 140	4	15

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

Lab Sample ID: LCSD 490-276265/4
Matrix: Water
Analysis Batch: 276265

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyclohexane			50.0	51.7		ug/L		103	73 - 122	2	16
Dichlorobromomethane			50.0	50.1		ug/L		100	75 - 129	0	18
Dichlorodifluoromethane			50.0	54.2		ug/L		108	37 - 127	2	18
Ethylbenzene			50.0	56.6		ug/L		113	80 - 130	3	15
1,2-Dibromoethane			50.0	53.7		ug/L		107	80 - 129	2	15
Isopropylbenzene			50.0	53.4		ug/L		107	80 - 141	6	16
Methyl acetate			250	266		ug/L		107	64 - 150	6	31
Methyl tert-butyl ether			50.0	48.3		ug/L		97	72 - 133	1	16
Methylcyclohexane			50.0	50.7		ug/L		101	71 - 129	2	19
Methylene Chloride			50.0	53.8		ug/L		108	79 - 123	3	17
Styrene			50.0	49.0		ug/L		98	80 - 127	4	24
Tetrachloroethene			50.0	48.8		ug/L		98	80 - 126	13	16
Toluene			50.0	47.2		ug/L		94	80 - 126	4	15
trans-1,2-Dichloroethene			50.0	50.7		ug/L		101	79 - 126	1	16
trans-1,3-Dichloropropene			50.0	45.7		ug/L		91	63 - 134	2	14
Trichloroethene			50.0	50.5		ug/L		101	80 - 123	2	17
Trichlorofluoromethane			50.0	51.1		ug/L		102	65 - 124	1	18
Vinyl chloride			50.0	54.4		ug/L		109	68 - 120	2	17
1,2-Dichloroethane			50.0	48.5		ug/L		97	77 - 121	0	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*89*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 276265

Client Sample ID: CM-50-081415 MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.19	U	50.0	53.3		ug/L		107	76 - 149
Freon-113	0.15	U	50.0	59.0		ug/L		118	72 - 148
1,1,2,2-Tetrachloroethane	0.19	U	50.0	57.8		ug/L		116	56 - 143
1,1,2-Trichloroethane	0.19	U	50.0	48.0		ug/L		96	74 - 134
1,1-Dichloroethane	0.24	U	50.0	52.5		ug/L		105	71 - 139
1,1-Dichloroethene	0.25	U	50.0	57.4		ug/L		115	70 - 142
1,2,4-Trichlorobenzene	0.20	U	50.0	57.4		ug/L		115	60 - 136
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	50.9		ug/L		102	52 - 126
1,2-Dichlorobenzene	0.19	U	50.0	56.4		ug/L		113	79 - 128
1,2-Dichloropropane	0.25	U	50.0	53.3		ug/L		107	67 - 131
1,3-Dichlorobenzene	0.18	U	50.0	57.5		ug/L		115	77 - 131
1,4-Dichlorobenzene	0.17	U	50.0	53.9		ug/L		108	78 - 126
2-Butanone (MEK)	2.6	U	250	250		ug/L		100	50 - 138
2-Hexanone	1.3	U	250	313		ug/L		125	50 - 150
4-Methyl-2-pentanone (MIBK)	0.81	U	250	230		ug/L		92	50 - 147
Acetone	2.7	U	250	266		ug/L		106	45 - 141
Benzene	0.20	U	50.0	53.6		ug/L		107	75 - 133

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

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 276265

Client Sample ID: CM-50-081415 MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromoform	0.29	U	50.0	48.1		ug/L		96	42 - 147
Bromomethane	0.35	U	50.0	32.8		ug/L		66	16 - 163
Carbon disulfide	0.22	U	50.0	58.6		ug/L		117	48 - 152
Carbon tetrachloride	0.18	U	50.0	53.0		ug/L		106	62 - 164
Chlorobenzene	0.18	U	50.0	52.8		ug/L		106	80 - 129
Chlorodibromomethane	0.25	U	50.0	52.6		ug/L		105	66 - 140
Chloroethane	0.36	U	50.0	60.9		ug/L		122	58 - 137
Chloroform	0.23	U	50.0	51.7		ug/L		103	66 - 138
Chloromethane	0.41	J	50.0	54.6		ug/L		108	10 - 169
cis-1,2-Dichloroethene	0.21	U	50.0	52.2		ug/L		104	68 - 138
cis-1,3-Dichloropropene	0.17	U	50.0	46.9		ug/L		94	71 - 141
Cyclohexane	0.13	U	50.0	57.9		ug/L		116	58 - 144
Dichlorobromomethane	0.17	U	50.0	50.7		ug/L		101	70 - 140
Dichlorodifluoromethane	0.17	U	50.0	57.5		ug/L		115	40 - 127
Ethylbenzene	0.19	U	50.0	61.0		ug/L		122	79 - 139
1,2-Dibromoethane	0.21	U	50.0	54.8		ug/L		110	75 - 137
Isopropylbenzene	0.33	U	50.0	59.7		ug/L		119	80 - 153
Methyl acetate	0.58	U	250	250		ug/L		100	30 - 165
Methyl tert-butyl ether	0.17	U	50.0	47.8		ug/L		96	66 - 141
Methylcyclohexane	0.090	U	50.0	57.4		ug/L		115	59 - 151
Methylene Chloride	0.22	U	50.0	54.1		ug/L		108	64 - 139
Styrene	0.28	U	50.0	51.4		ug/L		103	61 - 148
Tetrachloroethene	0.14	U	50.0	54.2		ug/L		108	72 - 145
Toluene	0.17	U	50.0	50.3		ug/L		101	75 - 136
trans-1,2-Dichloroethene	0.23	U	50.0	54.2		ug/L		108	66 - 143
trans-1,3-Dichloropropene	0.17	U	50.0	46.1		ug/L		92	59 - 135
Trichloroethene	0.20	U	50.0	53.4		ug/L		107	73 - 144
Trichlorofluoromethane	0.21	U	50.0	58.3		ug/L		117	58 - 139
Vinyl chloride	0.18	U	50.0	60.9		ug/L		122	56 - 129
1,2-Dichloroethane	0.20	U	50.0	47.6		ug/L		95	64 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 276265

Client Sample ID: CM-50-081415 MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.19	U	50.0	52.4		ug/L		105	76 - 149	2	17
Freon-113	0.15	U	50.0	57.3		ug/L		115	72 - 148	3	18
1,1,2,2-Tetrachloroethane	0.19	U	50.0	52.9		ug/L		106	56 - 143	9	20
1,1,2-Trichloroethane	0.19	U	50.0	44.6		ug/L		89	74 - 134	7	15
1,1-Dichloroethane	0.24	U	50.0	51.4		ug/L		103	71 - 139	2	17
1,1-Dichloroethene	0.25	U	50.0	56.0		ug/L		112	70 - 142	2	17

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

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 276265

Client Sample ID: CM-50-081415 MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	0.20	U	50.0	55.5		ug/L		111	60 - 136	3	19
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	47.6		ug/L		95	52 - 126	7	24
1,2-Dichlorobenzene	0.19	U	50.0	53.8		ug/L		108	79 - 128	5	15
1,2-Dichloropropane	0.25	U	50.0	50.0		ug/L		100	67 - 131	6	17
1,3-Dichlorobenzene	0.18	U	50.0	55.8		ug/L		112	77 - 131	3	15
1,4-Dichlorobenzene	0.17	U	50.0	51.6		ug/L		103	78 - 126	4	15
2-Butanone (MEK)	2.6	U	250	240		ug/L		96	50 - 138	4	19
2-Hexanone	1.3	U	250	292		ug/L		117	50 - 150	7	15
4-Methyl-2-pentanone (MIBK)	0.81	U	250	212		ug/L		85	50 - 147	8	17
Acetone	2.7	U	250	252		ug/L		101	45 - 141	5	21
Benzene	0.20	U	50.0	52.4		ug/L		105	75 - 133	2	17
Bromoform	0.29	U	50.0	45.3		ug/L		91	42 - 147	6	16
Bromomethane	0.35	U	50.0	35.4		ug/L		71	16 - 163	8	50
Carbon disulfide	0.22	U	50.0	57.7		ug/L		115	48 - 152	2	21
Carbon tetrachloride	0.18	U	50.0	51.5		ug/L		103	62 - 164	3	19
Chlorobenzene	0.18	U	50.0	51.5		ug/L		103	80 - 129	3	14
Chlorodibromomethane	0.25	U	50.0	49.5		ug/L		99	66 - 140	6	15
Chloroethane	0.36	U	50.0	58.6		ug/L		117	58 - 137	4	20
Chloroform	0.23	U	50.0	50.4		ug/L		101	66 - 138	2	18
Chloromethane	0.41	J	50.0	52.0		ug/L		103	10 - 169	5	31
cis-1,2-Dichloroethene	0.21	U	50.0	49.7		ug/L		99	68 - 138	5	17
cis-1,3-Dichloropropene	0.17	U	50.0	45.3		ug/L		91	71 - 141	3	15
Cyclohexane	0.13	U	50.0	57.2		ug/L		114	58 - 144	1	16
Dichlorobromomethane	0.17	U	50.0	48.6		ug/L		97	70 - 140	4	18
Dichlorodifluoromethane	0.17	U	50.0	54.3		ug/L		109	40 - 127	6	18
Ethylbenzene	0.19	U	50.0	56.9		ug/L		114	79 - 139	7	15
1,2-Dibromoethane	0.21	U	50.0	51.3		ug/L		103	75 - 137	7	15
Isopropylbenzene	0.33	U	50.0	55.5		ug/L		111	80 - 153	7	16
Methyl acetate	0.58	U	250	232		ug/L		93	30 - 165	8	31
Methyl tert-butyl ether	0.17	U	50.0	46.1		ug/L		92	66 - 141	4	16
Methylcyclohexane	0.090	U	50.0	55.8		ug/L		112	59 - 151	3	19
Methylene Chloride	0.22	U	50.0	52.3		ug/L		105	64 - 139	4	17
Styrene	0.28	U	50.0	48.0		ug/L		96	61 - 148	7	24
Tetrachloroethene	0.14	U	50.0	51.4		ug/L		103	72 - 145	5	16
Toluene	0.17	U	50.0	48.2		ug/L		96	75 - 136	4	15
trans-1,2-Dichloroethene	0.23	U	50.0	52.9		ug/L		106	66 - 143	2	16
trans-1,3-Dichloropropene	0.17	U	50.0	43.7		ug/L		87	59 - 135	5	14
Trichloroethene	0.20	U	50.0	52.2		ug/L		104	73 - 144	2	17
Trichlorofluoromethane	0.21	U	50.0	56.4		ug/L		113	58 - 139	3	18
Vinyl chloride	0.18	U	50.0	57.3		ug/L		115	56 - 129	6	17
1,2-Dichloroethane	0.20	U	50.0	46.3		ug/L		93	64 - 136	3	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*

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

Lab Sample ID: MB 490-275705/11
Matrix: Water
Analysis Batch: 275705

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/24/15 19:22	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/24/15 19:22	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/24/15 19:22	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/24/15 19:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/24/15 19:22*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*08/24/15 19:22*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/24/15 19:22*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/24/15 19:22*	*1*

Lab Sample ID: LCS 490-275705/12
Matrix: Water
Analysis Batch: 275705

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.500	0.525		ug/L		105	70 - 131		
1,2-Dibromo-3-Chloropropane			0.500	0.527		ug/L		105	40 - 160		
1,4-Dioxane			10.0	13.6		ug/L		136	40 - 160		
Ethylene Dibromide			0.500	0.555		ug/L		111	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 490-275705/13
Matrix: Water
Analysis Batch: 275705

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.500	0.556		ug/L		111	70 - 131	6	19
1,2-Dibromo-3-Chloropropane			0.500	0.565		ug/L		113	40 - 160	7	20
1,4-Dioxane			10.0	13.3		ug/L		133	40 - 160	2	20
Ethylene Dibromide			0.500	0.544		ug/L		109	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*109*		*70 - 130*

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

Lab Sample ID: MB 490-275960/7
Matrix: Water
Analysis Batch: 275960

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/25/15 17:06	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/25/15 17:06	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/25/15 17:06	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/25/15 17:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*08/25/15 17:06*	*1*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*		*08/25/15 17:06*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/25/15 17:06*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/25/15 17:06*	*1*

Lab Sample ID: LCS 490-275960/3
Matrix: Water
Analysis Batch: 275960

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.500	0.489		ug/L		98	70 - 131		
1,2-Dibromo-3-Chloropropane			0.500	0.468		ug/L		94	40 - 160		
1,4-Dioxane			10.0	8.41	J	ug/L		84	40 - 160		
Ethylene Dibromide			0.500	0.443		ug/L		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*106*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 490-275960/11
Matrix: Water
Analysis Batch: 275960

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.500	0.474		ug/L		95	70 - 131	3	19
1,2-Dibromo-3-Chloropropane			0.500	0.451		ug/L		90	40 - 160	4	20
1,4-Dioxane			10.0	10.0		ug/L		100	40 - 160	18	20
Ethylene Dibromide			0.500	0.417		ug/L		83	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

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

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 275960

Client Sample ID: CM-50-081415 MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.010	U	0.500	0.466		ug/L		93	53 - 144
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.412		ug/L		82	40 - 160
1,4-Dioxane	0.27	U	10.0	10.1		ug/L		101	40 - 160
Ethylene Dibromide	0.010	U	0.500	0.425		ug/L		85	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 275960

Client Sample ID: CM-50-081415 MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.010	U	0.500	0.396		ug/L		79	53 - 144	16	19
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.380		ug/L		76	40 - 160	8	20
1,4-Dioxane	0.27	U	10.0	9.10	J	ug/L		91	40 - 160	10	20
Ethylene Dibromide	0.010	U	0.500	0.363		ug/L		73	70 - 130	16	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
Dibromofluoromethane (Surr)	*107*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 490-274736/1-A
Matrix: Water
Analysis Batch: 274915

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274736

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/20/15 16:47	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/20/15 07:34	08/20/15 16:47	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/20/15 07:34	08/20/15 16:47	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/20/15 07:34	08/20/15 16:47	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/20/15 07:34	08/20/15 16:47	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/20/15 07:34	08/20/15 16:47	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/20/15 16:47	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/20/15 07:34	08/20/15 16:47	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/20/15 07:34	08/20/15 16:47	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/20/15 16:47	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/20/15 16:47	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/20/15 07:34	08/20/15 16:47	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/20/15 07:34	08/20/15 16:47	1

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

Lab Sample ID: MB 490-274736/1-A
Matrix: Water
Analysis Batch: 274915

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274736

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/20/15 16:47	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/20/15 07:34	08/20/15 16:47	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/20/15 07:34	08/20/15 16:47	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/20/15 07:34	08/20/15 16:47	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/20/15 16:47	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/20/15 07:34	08/20/15 16:47	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/20/15 07:34	08/20/15 16:47	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/20/15 16:47	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/20/15 07:34	08/20/15 16:47	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/20/15 07:34	08/20/15 16:47	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/20/15 16:47	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/20/15 07:34	08/20/15 16:47	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/20/15 07:34	08/20/15 16:47	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/20/15 16:47	1
Acetophenone	2.3	U	10	2.3	ug/L		08/20/15 07:34	08/20/15 16:47	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/20/15 07:34	08/20/15 16:47	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/20/15 07:34	08/20/15 16:47	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/20/15 07:34	08/20/15 16:47	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/20/15 16:47	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/20/15 16:47	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/20/15 16:47	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/20/15 16:47	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/20/15 07:34	08/20/15 16:47	1
Carbazole	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/20/15 16:47	1
Caprolactam	2.4	U	10	2.4	ug/L		08/20/15 07:34	08/20/15 16:47	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/20/15 07:34	08/20/15 16:47	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/20/15 07:34	08/20/15 16:47	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/20/15 16:47	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/20/15 07:34	08/20/15 16:47	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/20/15 16:47	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/20/15 16:47	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/20/15 16:47	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/20/15 07:34	08/20/15 16:47	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/20/15 07:34	08/20/15 16:47	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/20/15 07:34	08/20/15 16:47	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/20/15 07:34	08/20/15 16:47	1
Isophorone	3.1	U	10	3.1	ug/L		08/20/15 07:34	08/20/15 16:47	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/20/15 07:34	08/20/15 16:47	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/20/15 07:34	08/20/15 16:47	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/20/15 07:34	08/20/15 16:47	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/20/15 07:34	08/20/15 16:47	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/20/15 07:34	08/20/15 16:47	1
Phenol	1.5	U	10	1.5	ug/L		08/20/15 07:34	08/20/15 16:47	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/20/15 07:34	08/20/15 16:47	1
Diphenyl	2.2	U	10	2.2	ug/L		08/20/15 07:34	08/20/15 16:47	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/20/15 07:34	08/20/15 16:47	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/20/15 07:34	08/20/15 16:47	1
Atrazine	2.9	U	10	2.9	ug/L		08/20/15 07:34	08/20/15 16:47	1

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

Lab Sample ID: MB 490-274736/1-A
Matrix: Water
Analysis Batch: 274915

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274736

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L				08/20/15 07:34	08/20/15 16:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	109		10 - 120	08/20/15 07:34	08/20/15 16:47	1
2-Fluorobiphenyl (Surr)	94		29 - 120	08/20/15 07:34	08/20/15 16:47	1
2-Fluorophenol (Surr)	54		10 - 120	08/20/15 07:34	08/20/15 16:47	1
Nitrobenzene-d5 (Surr)	88		27 - 120	08/20/15 07:34	08/20/15 16:47	1
Phenol-d5 (Surr)	36		10 - 120	08/20/15 07:34	08/20/15 16:47	1
Terphenyl-d14 (Surr)	89		13 - 120	08/20/15 07:34	08/20/15 16:47	1

Lab Sample ID: LCS 490-274736/2-A
Matrix: Water
Analysis Batch: 274915

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274736

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	40.0	34.6		ug/L		87	46 - 120
1,2,4,5-Tetrachlorobenzene	40.0	33.2		ug/L		83	25 - 120
2,3,4,6-Tetrachlorophenol	40.0	39.1		ug/L		98	31 - 148
2,4,5-Trichlorophenol	40.0	37.1		ug/L		93	40 - 129
2,4,6-Trichlorophenol	40.0	36.2		ug/L		91	39 - 135
2,4-Dichlorophenol	40.0	33.0		ug/L		83	38 - 120
2,4-Dimethylphenol	40.0	31.9		ug/L		80	21 - 126
2,4-Dinitrophenol	80.0	70.1		ug/L		88	20 - 150
2,4-Dinitrotoluene	40.0	36.4		ug/L		91	46 - 132
2,6-Dinitrotoluene	40.0	36.0		ug/L		90	54 - 128
2-Chloronaphthalene	40.0	33.8		ug/L		84	39 - 120
2-Chlorophenol	40.0	29.6		ug/L		74	40 - 120
2-Methylnaphthalene	40.0	31.0		ug/L		78	31 - 120
2-Methylphenol	40.0	29.7		ug/L		74	38 - 120
2-Nitroaniline	40.0	37.0		ug/L		92	46 - 131
2-Nitrophenol	40.0	34.2		ug/L		86	32 - 120
3,3'-Dichlorobenzidine	40.0	36.2		ug/L		91	46 - 129
3 & 4 Methylphenol	40.0	25.0		ug/L		62	33 - 120
3-Nitroaniline	40.0	32.7		ug/L		82	54 - 121
4,6-Dinitro-2-methylphenol	80.0	72.2		ug/L		90	19 - 150
4-Bromophenyl phenyl ether	40.0	35.6		ug/L		89	47 - 127
4-Chloro-3-methylphenol	40.0	34.0		ug/L		85	44 - 120
4-Chloroaniline	40.0	27.3		ug/L		68	44 - 120
4-Chlorophenyl phenyl ether	40.0	34.1		ug/L		85	50 - 120
4-Nitroaniline	40.0	34.7		ug/L		87	55 - 123
4-Nitrophenol	80.0	31.3		ug/L		39	10 - 120
Acenaphthylene	40.0	34.3		ug/L		86	48 - 120
Acetophenone	40.0	31.8		ug/L		79	52 - 133
Anthracene	40.0	36.4		ug/L		91	58 - 130
Benzaldehyde	40.0	47.6		ug/L		119	34 - 120
Benzo[g,h,i]perylene	40.0	28.1		ug/L		70	51 - 123
Benzo[k]fluoranthene	40.0	36.8		ug/L		92	51 - 120

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

Lab Sample ID: LCS 490-274736/2-A
Matrix: Water
Analysis Batch: 274915

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274736

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethoxy)methane	40.0	31.1		ug/L		78	44 - 120
Bis(2-chloroethyl)ether	40.0	52.7	*	ug/L		132	47 - 120
Butyl benzyl phthalate	40.0	32.9		ug/L		82	51 - 146
Bis(2-ethylhexyl) phthalate	40.0	36.1		ug/L		90	47 - 138
Carbazole	40.0	36.6		ug/L		91	54 - 123
Caprolactam	40.0	10.2		ug/L		25	10 - 120
Chrysene	40.0	33.9		ug/L		85	55 - 120
Dibenz(a,h)anthracene	40.0	31.4		ug/L		79	50 - 125
Dibenzofuran	40.0	33.5		ug/L		84	50 - 120
Diethyl phthalate	40.0	35.0		ug/L		87	54 - 128
Dimethyl phthalate	40.0	34.8		ug/L		87	53 - 127
Di-n-butyl phthalate	40.0	37.5		ug/L		94	54 - 140
Fluoranthene	40.0	39.3		ug/L		98	56 - 120
Fluorene	40.0	35.1		ug/L		88	52 - 120
Hexachlorocyclopentadiene	40.0	34.3		ug/L		86	17 - 120
Hexachloroethane	40.0	31.9		ug/L		80	30 - 120
Indeno[1,2,3-cd]pyrene	40.0	30.1		ug/L		75	54 - 125
Isophorone	40.0	33.2		ug/L		83	47 - 120
Naphthalene	40.0	31.9		ug/L		80	37 - 120
Nitrobenzene	40.0	32.3		ug/L		81	36 - 120
N-Nitrosodi-n-propylamine	40.0	32.3		ug/L		81	51 - 120
N-Nitrosodiphenylamine	80.0	70.2		ug/L		88	58 - 149
Phenanthrene	40.0	35.3		ug/L		88	56 - 120
Phenol	40.0	12.1		ug/L		30	14 - 120
Pyrene	40.0	29.9		ug/L		75	53 - 129
Diphenyl	40.0	34.2		ug/L		85	10 - 146
Di-n-octyl phthalate	40.0	35.4		ug/L		89	50 - 142
2,2'-oxybis[1-chloropropane]	40.0	30.2		ug/L		76	44 - 120
Atrazine	40.0	36.2		ug/L		90	24 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*110*		*10 - 120*
2-Fluorobiphenyl (Surr)	*93*		*29 - 120*
2-Fluorophenol (Surr)	*52*		*10 - 120*
Nitrobenzene-d5 (Surr)	*89*		*27 - 120*
Phenol-d5 (Surr)	*34*		*10 - 120*
Terphenyl-d14 (Surr)	*85*		*13 - 120*

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 275237

Client Sample ID: CM-50-081415 MS
Prep Type: Total/NA
Prep Batch: 274736

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*115*		*10 - 120*
2-Fluorobiphenyl (Surr)	*96*		*29 - 120*
2-Fluorophenol (Surr)	*55*		*10 - 120*
Nitrobenzene-d5 (Surr)	*90*		*27 - 120*

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

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 275237

Client Sample ID: CM-50-081415 MS
Prep Type: Total/NA
Prep Batch: 274736

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Phenol-d5 (Surr)	*37*		*10 - 120*
Terphenyl-d14 (Surr)	*87*		*13 - 120*

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 275237

Client Sample ID: CM-50-081415 MSD
Prep Type: Total/NA
Prep Batch: 274736

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*118*		*10 - 120*
2-Fluorobiphenyl (Surr)	*99*		*29 - 120*
2-Fluorophenol (Surr)	*58*		*10 - 120*
Nitrobenzene-d5 (Surr)	*93*		*27 - 120*
Phenol-d5 (Surr)	*38*		*10 - 120*
Terphenyl-d14 (Surr)	*88*		*13 - 120*

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

Lab Sample ID: MB 490-274921/1-A
Matrix: Water
Analysis Batch: 276024

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274921

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/25/15 23:52	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/25/15 23:52	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/20/15 13:28	08/25/15 23:52	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/20/15 13:28	08/25/15 23:52	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/20/15 13:28	08/25/15 23:52	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/20/15 13:28	08/25/15 23:52	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/20/15 13:28	08/25/15 23:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*65*		*10 - 120*	*08/20/15 13:28*	*08/25/15 23:52*	*1*
2-Fluorobiphenyl (Surr)	*67*		*29 - 120*	*08/20/15 13:28*	*08/25/15 23:52*	*1*
Nitrobenzene-d5	*58*		*27 - 120*	*08/20/15 13:28*	*08/25/15 23:52*	*1*
Terphenyl-d14	*75*		*13 - 120*	*08/20/15 13:28*	*08/25/15 23:52*	*1*
2-Fluorophenol	*50*		*10 - 120*	*08/20/15 13:28*	*08/25/15 23:52*	*1*
Phenol-d5	*35*		*10 - 120*	*08/20/15 13:28*	*08/25/15 23:52*	*1*

Lab Sample ID: LCS 490-274921/2-A
Matrix: Water
Analysis Batch: 276024

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274921

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.755		ug/L		94	57 - 120
Benzo[a]pyrene	0.800	0.656		ug/L		82	57 - 124
Benzo[b]fluoranthene	0.800	0.667		ug/L		83	51 - 125
Hexachlorobenzene	0.800	0.607		ug/L		76	48 - 131

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

Lab Sample ID: LCS 490-274921/2-A
Matrix: Water
Analysis Batch: 276024

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274921

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobutadiene	0.800	0.550		ug/L		69	28 - 120
N-Nitrosodimethylamine	0.800	0.408	J	ug/L		51	20 - 120
Pentachlorophenol	1.60	1.24		ug/L		77	21 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*86*		*10 - 120*
2-Fluorobiphenyl (Surr)	*78*		*29 - 120*
Nitrobenzene-d5	*78*		*27 - 120*
Terphenyl-d14	*93*		*13 - 120*
2-Fluorophenol	*57*		*10 - 120*
Phenol-d5	*40*		*10 - 120*

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 276024

Client Sample ID: CM-50-081415 MS
Prep Type: Total/NA
Prep Batch: 274921

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.025	U	0.800	0.646		ug/L		81	57 - 122
Benzo[a]pyrene	0.025	U	0.800	0.560		ug/L		70	46 - 138
Benzo[b]fluoranthene	0.025	U	0.800	0.567		ug/L		71	45 - 138
Hexachlorobenzene	0.014	U	0.800	0.500		ug/L		63	48 - 131
Hexachlorobutadiene	0.20	U	0.800	0.443		ug/L		55	28 - 120
N-Nitrosodimethylamine	0.20	U	0.800	0.335	J	ug/L		42	10 - 200
Pentachlorophenol	0.10	U	1.60	1.08		ug/L		67	21 - 159

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol	*81*		*10 - 120*
2-Fluorobiphenyl (Surr)	*64*		*29 - 120*
Nitrobenzene-d5	*64*		*27 - 120*
Terphenyl-d14	*80*		*13 - 120*
2-Fluorophenol	*48*		*10 - 120*
Phenol-d5	*33*		*10 - 120*

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 276024

Client Sample ID: CM-50-081415 MSD
Prep Type: Total/NA
Prep Batch: 274921

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.025	U	0.800	0.627		ug/L		78	57 - 122	3	27
Benzo[a]pyrene	0.025	U	0.800	0.541		ug/L		68	46 - 138	4	27
Benzo[b]fluoranthene	0.025	U	0.800	0.549		ug/L		69	45 - 138	3	39
Hexachlorobenzene	0.014	U	0.800	0.492		ug/L		62	48 - 131	2	28
Hexachlorobutadiene	0.20	U	0.800	0.440		ug/L		55	28 - 120	1	30
N-Nitrosodimethylamine	0.20	U	0.800	0.328	J	ug/L		41	10 - 200	2	32
Pentachlorophenol	0.10	U	1.60	1.11		ug/L		70	21 - 159	3	31

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

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 276024

Client Sample ID: CM-50-081415 MSD
Prep Type: Total/NA
Prep Batch: 274921

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*77*		*10 - 120*
2-Fluorobiphenyl (Surr)	*65*		*29 - 120*
Nitrobenzene-d5	*64*		*27 - 120*
Terphenyl-d14	*78*		*13 - 120*
2-Fluorophenol	*45*		*10 - 120*
Phenol-d5	*33*		*10 - 120*

Lab Sample ID: MB 490-277571/1-A
Matrix: Water
Analysis Batch: 277738

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277571

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/30/15 07:54	08/31/15 13:05	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/30/15 07:54	08/31/15 13:05	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/30/15 07:54	08/31/15 13:05	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/30/15 07:54	08/31/15 13:05	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/30/15 07:54	08/31/15 13:05	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/30/15 07:54	08/31/15 13:05	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/30/15 07:54	08/31/15 13:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*85*		*10 - 120*	*08/30/15 07:54*	*08/31/15 13:05*	*1*
2-Fluorobiphenyl (Surr)	*84*		*29 - 120*	*08/30/15 07:54*	*08/31/15 13:05*	*1*
Nitrobenzene-d5	*95*		*27 - 120*	*08/30/15 07:54*	*08/31/15 13:05*	*1*
Terphenyl-d14	*102*		*13 - 120*	*08/30/15 07:54*	*08/31/15 13:05*	*1*
2-Fluorophenol	*69*		*10 - 120*	*08/30/15 07:54*	*08/31/15 13:05*	*1*
Phenol-d5	*46*		*10 - 120*	*08/30/15 07:54*	*08/31/15 13:05*	*1*

Lab Sample ID: LCS 490-277571/2-A
Matrix: Water
Analysis Batch: 277738

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277571

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.628		ug/L		78	57 - 120
Benzo[a]pyrene	0.800	0.559		ug/L		70	57 - 124
Benzo[b]fluoranthene	0.800	0.633		ug/L		79	51 - 125
Hexachlorobenzene	0.800	0.514		ug/L		64	48 - 131
Hexachlorobutadiene	0.800	0.342	J	ug/L		43	28 - 120
N-Nitrosodimethylamine	0.800	0.401	J	ug/L		50	20 - 120
Pentachlorophenol	1.60	0.969		ug/L		61	21 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*83*		*10 - 120*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*
Nitrobenzene-d5	*103*		*27 - 120*
Terphenyl-d14	*90*		*13 - 120*
2-Fluorophenol	*62*		*10 - 120*

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

Lab Sample ID: LCS 490-277571/2-A
Matrix: Water
Analysis Batch: 277738

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277571

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Phenol-d5	*42*		*10 - 120*

Lab Sample ID: LCSD 490-277571/3-A
Matrix: Water
Analysis Batch: 277738

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 277571

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene			0.800	0.742		ug/L		93	57 - 120	17	27
Benzo[a]pyrene			0.800	0.705		ug/L		88	57 - 124	23	27
Benzo[b]fluoranthene			0.800	0.734		ug/L		92	51 - 125	15	39
Hexachlorobenzene			0.800	0.604		ug/L		76	48 - 131	16	28
Hexachlorobutadiene			0.800	0.364	J	ug/L		46	28 - 120	6	30
N-Nitrosodimethylamine			0.800	0.496	J	ug/L		62	20 - 120	21	32
Pentachlorophenol			1.60	1.05		ug/L		66	21 - 150	8	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*81*		*10 - 120*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*
Nitrobenzene-d5	*99*		*27 - 120*
Terphenyl-d14	*87*		*13 - 120*
2-Fluorophenol	*65*		*10 - 120*
Phenol-d5	*44*		*10 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-276614/1-A
Matrix: Water
Analysis Batch: 276694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276614

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 20:28	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/27/15 09:48	08/27/15 20:28	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/27/15 09:48	08/27/15 20:28	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/27/15 09:48	08/27/15 20:28	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/27/15 09:48	08/27/15 20:28	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/27/15 09:48	08/27/15 20:28	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/27/15 09:48	08/27/15 20:28	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/27/15 09:48	08/27/15 20:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*87*		*10 - 150*	*08/27/15 09:48*	*08/27/15 20:28*	*1*
Tetrachloro-m-xylene	*98*		*10 - 150*	*08/27/15 09:48*	*08/27/15 20:28*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 490-276614/2-A
Matrix: Water
Analysis Batch: 276694

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276614

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	3.51		ug/L		88	23 - 139		
PCB-1260			4.00	3.15		ug/L		79	36 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*79*		*10 - 150*
Tetrachloro-m-xylene	*92*		*10 - 150*

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 276694

Client Sample ID: CM-50-081415 MS
Prep Type: Total/NA
Prep Batch: 276614

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	0.43	U	4.00	3.46		ug/L		87	23 - 139		
PCB-1260	0.18	U	4.00	3.40		ug/L		85	36 - 144		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*101*		*10 - 150*
Tetrachloro-m-xylene	*83*		*10 - 150*

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 276694

Client Sample ID: CM-50-081415 MSD
Prep Type: Total/NA
Prep Batch: 276614

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.43	U	4.00	3.44		ug/L		86	23 - 139	1	50
PCB-1260	0.18	U	4.00	3.31		ug/L		83	36 - 144	3	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*99*		*10 - 150*
Tetrachloro-m-xylene	*85*		*10 - 150*

Lab Sample ID: MB 490-277885/1-A
Matrix: Water
Analysis Batch: 278119

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277885

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 14:50	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 16:18	09/01/15 14:50	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 16:18	09/01/15 14:50	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 16:18	09/01/15 14:50	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 16:18	09/01/15 14:50	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 16:18	09/01/15 14:50	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 16:18	09/01/15 14:50	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 16:18	09/01/15 14:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*51*		*10 - 150*	*08/31/15 16:18*	*09/01/15 14:50*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 490-277885/1-A
Matrix: Water
Analysis Batch: 278119

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277885

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	39		10 - 150	08/31/15 16:18	09/01/15 14:50	1

Lab Sample ID: LCS 490-277885/2-A
Matrix: Water
Analysis Batch: 278119

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277885

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	2.90		ug/L		73	23 - 139		
PCB-1260			4.00	2.58		ug/L		64	36 - 144		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	46		10 - 150
Tetrachloro-m-xylene	36	p	10 - 150

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 490-276233/6
Matrix: Water
Analysis Batch: 276233

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			08/25/15 18:54	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/25/15 18:54	1

Lab Sample ID: LCS 490-276233/7
Matrix: Water
Analysis Batch: 276233

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			100	96.66		mg/L		97	80 - 120		
Sulfate			100	98.06		mg/L		98	80 - 120		

Lab Sample ID: LCSD 490-276233/8
Matrix: Water
Analysis Batch: 276233

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	96.81		mg/L		97	80 - 120	0	20
Sulfate			100	97.68		mg/L		98	80 - 120	0	20

Lab Sample ID: 490-85225-D-1 MS
Matrix: Water
Analysis Batch: 276233

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	106	F1	100	183.8	F1	mg/L		78	80 - 120		
Sulfate	0.64	J	100	97.29		mg/L		97	80 - 120		

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 490-85225-D-1 MSD
Matrix: Water
Analysis Batch: 276233

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	106	F1	100	183.4	F1	mg/L		77	80 - 120	0	20
Sulfate	0.64	J	100	96.30		mg/L		96	80 - 120	1	20

Lab Sample ID: MB 490-276491/7
Matrix: Water
Analysis Batch: 276491

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			08/26/15 16:32	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/26/15 16:32	1

Lab Sample ID: LCS 490-276491/8
Matrix: Water
Analysis Batch: 276491

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	97.77		mg/L		98	80 - 120
Sulfate	100	101.0		mg/L		101	80 - 120

Lab Sample ID: LCSD 490-276491/9
Matrix: Water
Analysis Batch: 276491

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	97.65		mg/L		98	80 - 120	0	20
Sulfate	100	100.3		mg/L		100	80 - 120	1	20

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 276491

Client Sample ID: CM-50-081415 MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	191	F1	100	252.9	F1	mg/L		62	80 - 120
Sulfate	3.36		100	103.1		mg/L		100	80 - 120

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 276491

Client Sample ID: CM-50-081415 MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	191	F1	100	252.9	F1	mg/L		62	80 - 120	0	20
Sulfate	3.36		100	103.0		mg/L		100	80 - 120	0	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 490-274876/1-A
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/20/15 11:46	08/21/15 18:57	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 18:57	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 18:57	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 18:57	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 18:57	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/20/15 11:46	08/21/15 18:57	1
Calcium	0.13	U	1.0	0.13	mg/L		08/20/15 11:46	08/21/15 18:57	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 18:57	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 18:57	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 18:57	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/20/15 11:46	08/21/15 18:57	1
Manganese	0.000560	J	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 18:57	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 18:57	1
Potassium	0.13	U	1.0	0.13	mg/L		08/20/15 11:46	08/21/15 18:57	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/20/15 11:46	08/21/15 18:57	1
Sodium	0.13	U	1.0	0.13	mg/L		08/20/15 11:46	08/21/15 18:57	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 18:57	1
Zinc	0.010	U	0.025	0.010	mg/L		08/20/15 11:46	08/21/15 18:57	1

Lab Sample ID: MB 490-274876/1-A
Matrix: Water
Analysis Batch: 276337

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.010	U	0.025	0.010	mg/L		08/20/15 11:46	08/25/15 22:59	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/25/15 22:59	1
Vanadium	0.00162	J	0.0020	0.00010	mg/L		08/20/15 11:46	08/25/15 22:59	1

Lab Sample ID: MB 490-274876/1-A
Matrix: Water
Analysis Batch: 277874

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/31/15 15:36	1

Lab Sample ID: LCS 490-274876/2-A
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.11		mg/L		111	80 - 120
Antimony	0.100	0.0981		mg/L		98	80 - 120
Arsenic	0.100	0.101		mg/L		101	80 - 120
Barium	0.100	0.0946		mg/L		95	80 - 120
Beryllium	0.100	0.0926		mg/L		93	80 - 120
Cadmium	0.100	0.103		mg/L		103	80 - 120
Calcium	10.0	10.29		mg/L		103	80 - 120
Chromium	0.100	0.108		mg/L		108	80 - 120
Cobalt	0.100	0.108		mg/L		108	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-274876/2-A
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.100	0.0957		mg/L		96	80 - 120
Magnesium	10.0	10.14		mg/L		101	80 - 120
Manganese	0.100	0.113		mg/L		113	80 - 120
Nickel	0.100	0.108		mg/L		108	80 - 120
Potassium	10.0	10.66		mg/L		107	80 - 120
Selenium	0.100	0.0907		mg/L		91	80 - 120
Sodium	10.0	10.18		mg/L		102	80 - 120
Thallium	0.100	0.0860		mg/L		86	80 - 120
Zinc	0.100	0.0955		mg/L		95	80 - 120

Lab Sample ID: LCS 490-274876/2-A
Matrix: Water
Analysis Batch: 276337

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1.00	1.07		mg/L		107	80 - 120
Silver	0.100	0.113		mg/L		113	80 - 120
Vanadium	0.100	0.107		mg/L		107	80 - 120

Lab Sample ID: LCS 490-274876/2-A
Matrix: Water
Analysis Batch: 277874

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.100	0.106		mg/L		106	80 - 120

Lab Sample ID: LCSD 490-274876/3-A
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	1.00	1.11		mg/L		111	80 - 120	1	20
Antimony	0.100	0.107		mg/L		107	80 - 120	9	20
Arsenic	0.100	0.0987		mg/L		99	80 - 120	3	20
Barium	0.100	0.103		mg/L		103	80 - 120	9	20
Beryllium	0.100	0.102		mg/L		102	80 - 120	10	20
Cadmium	0.100	0.103		mg/L		103	80 - 120	1	20
Calcium	10.0	10.34		mg/L		103	80 - 120	0	20
Chromium	0.100	0.105		mg/L		105	80 - 120	2	20
Cobalt	0.100	0.106		mg/L		106	80 - 120	2	20
Lead	0.100	0.104		mg/L		104	80 - 120	9	20
Magnesium	10.0	10.14		mg/L		101	80 - 120	0	20
Manganese	0.100	0.112		mg/L		112	80 - 120	1	20
Nickel	0.100	0.108		mg/L		108	80 - 120	0	20
Potassium	10.0	10.76		mg/L		108	80 - 120	1	20
Selenium	0.100	0.0909		mg/L		91	80 - 120	0	20
Sodium	10.0	10.17		mg/L		102	80 - 120	0	20
Thallium	0.100	0.0934		mg/L		93	80 - 120	8	20
Zinc	0.100	0.0907		mg/L		91	80 - 120	5	20

Lab Sample ID: LCSD 490-274876/3-A
Matrix: Water
Analysis Batch: 276337

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 274876

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron			1.00	1.16		mg/L		116	80 - 120	8	20
Silver			0.100	0.111		mg/L		111	80 - 120	2	20
Vanadium			0.100	0.116		mg/L		116	80 - 120	8	20

Lab Sample ID: LCSD 490-274876/3-A
Matrix: Water
Analysis Batch: 277874

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 274876

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper			0.100	0.105		mg/L		105	80 - 120	1	20

Lab Sample ID: 490-85449-A-1-B MS
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.014	J	1.00	1.09		mg/L		107	75 - 125
Antimony	0.00050	U	0.100	0.107		mg/L		107	75 - 125
Arsenic	0.0070		0.100	0.105		mg/L		98	75 - 125
Barium	0.044		0.100	0.145		mg/L		100	75 - 125
Beryllium	0.00050	U	0.100	0.0852		mg/L		85	75 - 125
Cadmium	0.00040	U	0.100	0.101		mg/L		101	75 - 125
Calcium	142	E	10.0	153.4	E 4	mg/L		114	75 - 125
Chromium	0.00050	U	0.100	0.100		mg/L		100	75 - 125
Cobalt	0.0026		0.100	0.102		mg/L		99	75 - 125
Lead	0.00020	U	0.100	0.101		mg/L		101	75 - 125
Magnesium	21.7		10.0	31.35		mg/L		97	75 - 125
Manganese	0.94	B	0.100	1.06	E 4	mg/L		126	75 - 125
Nickel	0.0044		0.100	0.113		mg/L		109	75 - 125
Potassium	10.3		10.0	20.82		mg/L		106	75 - 125
Selenium	0.0017	J	0.100	0.0899		mg/L		88	75 - 125
Sodium	285	E	10.0	296.4	E 4	mg/L		110	75 - 125
Thallium	0.00083	J	0.100	0.0860		mg/L		85	75 - 125
Zinc	0.010	U	0.100	0.0857		mg/L		86	75 - 125

Lab Sample ID: 490-85449-A-1-B MS
Matrix: Water
Analysis Batch: 276337

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.16		1.00	1.18		mg/L		102	75 - 125
Silver	0.00050	U	0.100	0.105		mg/L		105	75 - 125
Vanadium	0.040	B	0.100	0.151		mg/L		111	75 - 125

Lab Sample ID: 490-85449-A-1-B MS
Matrix: Water
Analysis Batch: 277874

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.0011	J	0.100	0.0964		mg/L		95	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85449-A-1-C MSD
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.014	J	1.00	1.12		mg/L		111	75 - 125	3	20
Antimony	0.00050	U	0.100	0.109		mg/L		109	75 - 125	2	20
Arsenic	0.0070		0.100	0.105		mg/L		98	75 - 125	0	20
Barium	0.044		0.100	0.146		mg/L		102	75 - 125	1	20
Beryllium	0.00050	U	0.100	0.0870		mg/L		87	75 - 125	2	20
Cadmium	0.00040	U	0.100	0.104		mg/L		104	75 - 125	3	20
Calcium	142	E	10.0	157.1	E 4	mg/L		151	75 - 125	2	20
Chromium	0.00050	U	0.100	0.100		mg/L		100	75 - 125	0	20
Cobalt	0.0026		0.100	0.102		mg/L		99	75 - 125	0	20
Lead	0.00020	U	0.100	0.105		mg/L		105	75 - 125	3	20
Magnesium	21.7		10.0	32.14		mg/L		105	75 - 125	2	20
Manganese	0.94	B	0.100	1.05	E 4	mg/L		115	75 - 125	1	20
Nickel	0.0044		0.100	0.116		mg/L		112	75 - 125	2	20
Potassium	10.3		10.0	21.31		mg/L		111	75 - 125	2	20
Selenium	0.0017	J	0.100	0.0916		mg/L		90	75 - 125	2	20
Sodium	285	E	10.0	305.3	E 4	mg/L		199	75 - 125	3	20
Thallium	0.00083	J	0.100	0.0882		mg/L		87	75 - 125	3	20
Zinc	0.010	U	0.100	0.0859		mg/L		86	75 - 125	0	20

Lab Sample ID: 490-85449-A-1-C MSD
Matrix: Water
Analysis Batch: 276337

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	0.16		1.00	1.25		mg/L		108	75 - 125	5	20
Silver	0.00050	U	0.100	0.106		mg/L		106	75 - 125	1	20
Vanadium	0.040	B	0.100	0.160		mg/L		120	75 - 125	6	20

Lab Sample ID: 490-85449-A-1-C MSD
Matrix: Water
Analysis Batch: 277874

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	0.0011	J	0.100	0.0973		mg/L		96	75 - 125	1	20

Lab Sample ID: MB 490-275634/1-A
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 19:22	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Arsenic	0.00111	J	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 19:22	1
Calcium	0.13	U	1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:22	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 490-275634/1-A
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Iron	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 19:22	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 19:22	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:22	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Potassium	0.13	U	1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:22	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 19:22	1
Sodium	0.13	U	1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:22	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 19:22	1
Zinc	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 19:22	1

Lab Sample ID: MB 490-275634/1-A
Matrix: Water
Analysis Batch: 276307

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/25/15 22:59	1

Lab Sample ID: MB 490-275634/1-A
Matrix: Water
Analysis Batch: 279689

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	0.000997	J	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 14:38	1

Lab Sample ID: LCS 490-275634/2-A
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.03		mg/L		103	80 - 120
Antimony	0.100	0.106		mg/L		106	80 - 120
Arsenic	0.100	0.105		mg/L		105	80 - 120
Barium	0.100	0.107		mg/L		107	80 - 120
Beryllium	0.100	0.111		mg/L		111	80 - 120
Cadmium	0.100	0.0980		mg/L		98	80 - 120
Calcium	10.0	10.08		mg/L		101	80 - 120
Chromium	0.100	0.0996		mg/L		100	80 - 120
Cobalt	0.100	0.104		mg/L		104	80 - 120
Copper	0.100	0.0986		mg/L		99	80 - 120
Iron	1.00	1.13		mg/L		113	80 - 120
Lead	0.100	0.107		mg/L		107	80 - 120
Magnesium	10.0	9.98		mg/L		100	80 - 120
Manganese	0.100	0.108		mg/L		108	80 - 120
Nickel	0.100	0.102		mg/L		102	80 - 120
Potassium	10.0	10.38		mg/L		104	80 - 120
Selenium	0.100	0.0929		mg/L		93	80 - 120
Sodium	10.0	10.04		mg/L		100	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-275634/2-A
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	0.100	0.106		mg/L		106	80 - 120
Zinc	0.100	0.0915		mg/L		91	80 - 120

Lab Sample ID: LCS 490-275634/2-A
Matrix: Water
Analysis Batch: 276307

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.100	0.106		mg/L		106	80 - 120

Lab Sample ID: LCS 490-275634/2-A
Matrix: Water
Analysis Batch: 279689

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	0.100	0.104		mg/L		104	80 - 120

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 275984

Client Sample ID: CM-50-081415 MS
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0096	U	1.00	0.998		mg/L		100	75 - 125
Antimony	0.00050	U	0.100	0.106		mg/L		106	75 - 125
Arsenic	0.0023	B	0.100	0.0967		mg/L		94	75 - 125
Barium	0.12		0.100	0.223		mg/L		105	75 - 125
Beryllium	0.00050	U	0.100	0.112		mg/L		112	75 - 125
Cadmium	0.00040	U	0.100	0.0976		mg/L		98	75 - 125
Calcium	81.3		10.0	91.47	4	mg/L		102	75 - 125
Chromium	0.0021		0.100	0.0994		mg/L		97	75 - 125
Cobalt	0.00050	U	0.100	0.0992		mg/L		99	75 - 125
Copper	0.0015	J	0.100	0.0992		mg/L		98	75 - 125
Iron	20.0		1.00	22.04	4	mg/L		200	75 - 125
Lead	0.00039	J	0.100	0.106		mg/L		106	75 - 125
Magnesium	22.7		10.0	32.63		mg/L		100	75 - 125
Manganese	1.2		0.100	1.33	4	mg/L		93	75 - 125
Nickel	0.0052		0.100	0.103		mg/L		98	75 - 125
Potassium	4.5		10.0	14.52		mg/L		100	75 - 125
Selenium	0.00060	U	0.100	0.0900		mg/L		90	75 - 125
Sodium	85.7		10.0	98.57	4	mg/L		129	75 - 125
Thallium	0.00051	J	0.100	0.105		mg/L		104	75 - 125
Zinc	0.96		0.100	1.44	4	mg/L		474	75 - 125

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 276307

Client Sample ID: CM-50-081415 MS
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.00050	U	0.100	0.101		mg/L		101	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 279689

Client Sample ID: CM-50-081415 MS
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	0.0010	J B	0.100	0.101		mg/L		100	75 - 125

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 275984

Client Sample ID: CM-50-081415 MSD
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0096	U	1.00	1.00		mg/L		100	75 - 125	0	20
Antimony	0.00050	U	0.100	0.106		mg/L		106	75 - 125	0	20
Arsenic	0.0023	B	0.100	0.0989		mg/L		97	75 - 125	2	20
Barium	0.12		0.100	0.225		mg/L		107	75 - 125	1	20
Beryllium	0.00050	U	0.100	0.112		mg/L		112	75 - 125	0	20
Cadmium	0.00040	U	0.100	0.0982		mg/L		98	75 - 125	1	20
Calcium	81.3		10.0	92.06	4	mg/L		108	75 - 125	1	20
Chromium	0.0021		0.100	0.101		mg/L		99	75 - 125	1	20
Cobalt	0.00050	U	0.100	0.100		mg/L		100	75 - 125	1	20
Copper	0.0015	J	0.100	0.0997		mg/L		98	75 - 125	0	20
Iron	20.0		1.00	22.16	4	mg/L		212	75 - 125	1	20
Lead	0.00039	J	0.100	0.107		mg/L		107	75 - 125	1	20
Magnesium	22.7		10.0	32.49		mg/L		98	75 - 125	0	20
Manganese	1.2		0.100	1.36	4	mg/L		116	75 - 125	2	20
Nickel	0.0052		0.100	0.104		mg/L		99	75 - 125	1	20
Potassium	4.5		10.0	14.71		mg/L		102	75 - 125	1	20
Selenium	0.00060	U	0.100	0.0915		mg/L		91	75 - 125	2	20
Sodium	85.7		10.0	97.13	4	mg/L		114	75 - 125	1	20
Thallium	0.00051	J	0.100	0.106		mg/L		106	75 - 125	1	20
Zinc	0.96		0.100	1.32	4	mg/L		361	75 - 125	8	20

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 276307

Client Sample ID: CM-50-081415 MSD
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.00050	U	0.100	0.103		mg/L		103	75 - 125	2	20

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 279689

Client Sample ID: CM-50-081415 MSD
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	0.0010	J B	0.100	0.102		mg/L		101	75 - 125	1	20

Lab Sample ID: MB 490-274351/1-B
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 274354

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 11:38	1
Calcium	0.13	U	1.0	0.13	mg/L		08/19/15 08:39	08/21/15 11:38	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 490-274351/1-B
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 274354

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/19/15 08:39	08/21/15 11:38	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/19/15 08:39	08/21/15 11:38	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/19/15 08:39	08/21/15 11:38	1
Sodium	0.13	U	1.0	0.13	mg/L		08/19/15 08:39	08/21/15 11:38	1
Zinc	0.010	U	0.025	0.010	mg/L		08/19/15 08:39	08/21/15 11:38	1

Lab Sample ID: LCS 490-274351/2-B
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 274354

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.100	0.102		mg/L		102	80 - 120
Calcium	10.0	9.70		mg/L		97	80 - 120
Cobalt	0.100	0.107		mg/L		107	80 - 120
Magnesium	10.0	9.90		mg/L		99	80 - 120
Selenium	0.100	0.0930		mg/L		93	80 - 120
Sodium	10.0	9.89		mg/L		99	80 - 120
Zinc	0.100	0.0965		mg/L		96	80 - 120

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 274758

Client Sample ID: CM-50-081415 MS
Prep Type: Dissolved
Prep Batch: 274354

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0096	U	1.00	0.977		mg/L		98	75 - 125
Antimony	0.00050	U	0.100	0.100		mg/L		100	75 - 125
Arsenic	0.00050	U	0.100	0.0892		mg/L		89	75 - 125
Barium	0.083		0.100	0.175		mg/L		93	75 - 125
Cadmium	0.00040	U	0.100	0.0990		mg/L		99	75 - 125
Chromium	0.00050	U	0.100	0.0969		mg/L		97	75 - 125
Copper	0.00050	U	0.100	0.0874		mg/L		87	75 - 125
Iron	5.1	F2	1.00	6.25	4	mg/L		111	75 - 125
Lead	0.00020	U	0.100	0.0963		mg/L		96	75 - 125
Nickel	0.0013	J	0.100	0.0898		mg/L		89	75 - 125
Potassium	4.6		10.0	14.54		mg/L		100	75 - 125
Selenium	0.00060	U F1 *	0.100	0.0749		mg/L		75	75 - 125
Silver	0.00050	U	0.100	0.100		mg/L		100	75 - 125
Thallium	0.00060	J	0.100	0.0962		mg/L		96	75 - 125
Vanadium	0.0017	J B	0.100	0.102		mg/L		100	75 - 125

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 275699

Client Sample ID: CM-50-081415 MS
Prep Type: Dissolved
Prep Batch: 274354

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.00050	U	0.100	0.0986		mg/L		99	75 - 125
Calcium	83.7		10.0	93.66	4	mg/L		100	75 - 125
Cobalt	0.00050	U	0.100	0.0962		mg/L		96	75 - 125
Magnesium	24.0		10.0	33.83		mg/L		99	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 275699

Client Sample ID: CM-50-081415 MS
Prep Type: Dissolved
Prep Batch: 274354

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	0.48		0.100	0.638	4	mg/L		160	75 - 125

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 275699

Client Sample ID: CM-50-081415 MS
Prep Type: Dissolved
Prep Batch: 274354

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	1.4		0.100	1.44	4	mg/L		43	75 - 125
Sodium	92.5		10.0	102.3	4	mg/L		98	75 - 125

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 274758

Client Sample ID: CM-50-081415 MSD
Prep Type: Dissolved
Prep Batch: 274354

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0096	U	1.00	0.991		mg/L		99	75 - 125	1	20
Antimony	0.00050	U	0.100	0.101		mg/L		101	75 - 125	0	20
Arsenic	0.00050	U	0.100	0.0912		mg/L		91	75 - 125	2	20
Barium	0.083		0.100	0.174		mg/L		92	75 - 125	0	20
Cadmium	0.00040	U	0.100	0.0976		mg/L		98	75 - 125	1	20
Chromium	0.00050	U	0.100	0.0987		mg/L		99	75 - 125	2	20
Copper	0.00050	U	0.100	0.0871		mg/L		87	75 - 125	0	20
Iron	5.1	F2	1.00	7.72	4 F2	mg/L		259	75 - 125	21	20
Lead	0.00020	U	0.100	0.0967		mg/L		97	75 - 125	0	20
Nickel	0.0013	J	0.100	0.0919		mg/L		91	75 - 125	2	20
Potassium	4.6		10.0	14.54		mg/L		100	75 - 125	0	20
Selenium	0.00060	U F1 *	0.100	0.0736	F1	mg/L		74	75 - 125	2	20
Silver	0.00050	U	0.100	0.0992		mg/L		99	75 - 125	1	20
Thallium	0.00060	J	0.100	0.0979		mg/L		97	75 - 125	2	20
Vanadium	0.0017	J B	0.100	0.104		mg/L		102	75 - 125	2	20

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 275699

Client Sample ID: CM-50-081415 MSD
Prep Type: Dissolved
Prep Batch: 274354

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Beryllium	0.00050	U	0.100	0.100		mg/L		100	75 - 125	2	20
Calcium	83.7		10.0	89.46	4	mg/L		58	75 - 125	5	20
Cobalt	0.00050	U	0.100	0.0978		mg/L		98	75 - 125	2	20
Magnesium	24.0		10.0	32.68		mg/L		87	75 - 125	3	20
Sodium	90.4		10.0	98.44	4	mg/L		80	75 - 125	3	20
Zinc	0.48		0.100	0.703	4	mg/L		225	75 - 125	10	20

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 275699

Client Sample ID: CM-50-081415 MSD
Prep Type: Dissolved
Prep Batch: 274354

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	1.4		0.100	1.52	4	mg/L		126	75 - 125	6	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 490-275072/1-A
Matrix: Water
Analysis Batch: 275326

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275072

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/20/15 21:51	08/21/15 13:22	1

Lab Sample ID: LCS 490-275072/2-A
Matrix: Water
Analysis Batch: 275326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275072

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000854		mg/L		85	80 - 120

Lab Sample ID: LCSD 490-275072/3-A
Matrix: Water
Analysis Batch: 275326

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 275072

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00100	0.000862		mg/L		86	80 - 120	1	20

Lab Sample ID: 490-84543-J-5-C MS
Matrix: Water
Analysis Batch: 275326

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275072

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000816		mg/L		82	75 - 125

Lab Sample ID: 490-84543-J-5-D MSD
Matrix: Water
Analysis Batch: 275326

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275072

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000751		mg/L		75	75 - 125	8	20

Lab Sample ID: MB 490-275851/1-A
Matrix: Water
Analysis Batch: 276152

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275851

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 17:54	08/25/15 13:44	1

Lab Sample ID: LCS 490-275851/2-A
Matrix: Water
Analysis Batch: 276152

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275851

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000877		mg/L		88	80 - 120

Lab Sample ID: LCSD 490-275851/3-A
Matrix: Water
Analysis Batch: 276152

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 275851

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00100	0.000854		mg/L		85	80 - 120	3	20

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 276152

Client Sample ID: CM-50-081415 MS
Prep Type: Total/NA
Prep Batch: 275851

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000940		mg/L		94	75 - 125

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 276152

Client Sample ID: CM-50-081415 MSD
Prep Type: Total/NA
Prep Batch: 275851

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000953		mg/L		95	75 - 125	1	20

Lab Sample ID: MB 490-275791/1-B
Matrix: Water
Analysis Batch: 276250

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 275794

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 20:25	1

Lab Sample ID: LCS 490-275791/2-B
Matrix: Water
Analysis Batch: 276250

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 275794

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000803		mg/L		80	80 - 120

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 276250

Client Sample ID: CM-50-081415 MS
Prep Type: Dissolved
Prep Batch: 275794

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000880		mg/L		88	75 - 125

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 276250

Client Sample ID: CM-50-081415 MSD
Prep Type: Dissolved
Prep Batch: 275794

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000871		mg/L		87	75 - 125	1	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 490-274313/1-A
Matrix: Water
Analysis Batch: 274429

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274313

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/18/15 19:20	08/19/15 09:34	1

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: LCS 490-274313/2-A
Matrix: Water
Analysis Batch: 274429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274313

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total			0.100	0.0979		mg/L		98	90 - 110		

Lab Sample ID: 490-85229-12 MS
Matrix: Water
Analysis Batch: 274429

Client Sample ID: CM-50-081415 MS
Prep Type: Total/NA
Prep Batch: 274313

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	0.0070	U F1	0.100	0.0585	F1	mg/L		59	70 - 130		

Lab Sample ID: 490-85229-12 MSD
Matrix: Water
Analysis Batch: 274429

Client Sample ID: CM-50-081415 MSD
Prep Type: Total/NA
Prep Batch: 274313

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1	0.100	0.0612	F1	mg/L		61	70 - 130	5	46

Lab Sample ID: 490-85153-H-1-B DU
Matrix: Water
Analysis Batch: 274429

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 274313

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.0070	U	0.0070	U	mg/L		NC	20

Lab Sample ID: MB 490-274567/1-A
Matrix: Water
Analysis Batch: 275205

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 13:18	08/20/15 15:47	1

Lab Sample ID: LCS 490-274567/2-A
Matrix: Water
Analysis Batch: 275205

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274567

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total			0.100	0.0904		mg/L		90	90 - 110		

Lab Sample ID: 490-85229-1 MS
Matrix: Water
Analysis Batch: 275205

Client Sample ID: RW-13 (100-120) - 081315
Prep Type: Total/NA
Prep Batch: 274567

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	0.0070	U F2 F1	0.100	0.0284	F1	mg/L		28	70 - 130		

Lab Sample ID: 490-85229-1 MSD
Matrix: Water
Analysis Batch: 275205

Client Sample ID: RW-13 (100-120) - 081315
Prep Type: Total/NA
Prep Batch: 274567

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F2 F1	0.100	0.0633	F1 F2	mg/L		63	70 - 130	76	46

Lab Sample ID: 490-85229-11 DU
Matrix: Water
Analysis Batch: 275205

Client Sample ID: DUP-03-081415
Prep Type: Total/NA
Prep Batch: 274567

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.0070	U	0.0070	U	mg/L		NC	20

Lab Sample ID: MB 490-275318/1-A
Matrix: Water
Analysis Batch: 276908

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275318

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/21/15 14:56	08/26/15 21:14	1

Lab Sample ID: LCS 490-275318/2-A
Matrix: Water
Analysis Batch: 276908

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275318

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0985		mg/L		99	90 - 110

Lab Sample ID: 490-85529-H-3-B MS
Matrix: Water
Analysis Batch: 276908

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275318

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1 F2	0.100	0.0500	F1	mg/L		50	70 - 130

Lab Sample ID: 490-85529-H-3-C MSD
Matrix: Water
Analysis Batch: 276908

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275318

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1 F2	0.100	0.0278	F1 F2	mg/L		28	70 - 130	57	46

Lab Sample ID: 490-85529-H-5-B DU
Matrix: Water
Analysis Batch: 276908

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 275318

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.0070	U	0.0070	U	mg/L		NC	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 490-274134/33
Matrix: Water
Analysis Batch: 274134

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/15/15 17:40	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/15/15 17:40	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 490-274134/63
Matrix: Water
Analysis Batch: 274134

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/18/15 11:39	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/18/15 11:39	1

Lab Sample ID: LCS 490-274134/34
Matrix: Water
Analysis Batch: 274134

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	100	95.73		mg/L		96	90 - 110

Lab Sample ID: LCS 490-274134/64
Matrix: Water
Analysis Batch: 274134

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	100	91.97		mg/L		92	90 - 110

Lab Sample ID: 490-85157-D-5 DU
Matrix: Water
Analysis Batch: 274134

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	426		428.6		mg/L		0.6	20
Total Alkalinity as CaCO3	426		428.6		mg/L		0.6	20

Lab Sample ID: 490-85229-3 DU
Matrix: Water
Analysis Batch: 274134

Client Sample ID: OB-14A-081315
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	377		379.8		mg/L		0.8	20
Total Alkalinity as CaCO3	377		379.8		mg/L		0.8	20

Lab Sample ID: MB 490-274777/5
Matrix: Water
Analysis Batch: 274777

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/19/15 16:42	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/19/15 16:42	1

Lab Sample ID: LCS 490-274777/6
Matrix: Water
Analysis Batch: 274777

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	100	91.99		mg/L		92	90 - 110

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 490-85229-12 DU
Matrix: Water
Analysis Batch: 274777

Client Sample ID: CM-50-081415
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	229			226.3		mg/L				1	20
Total Alkalinity as CaCO3	229			226.3		mg/L				1	20

GC/MS VOA

Analysis Batch: 275705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	8260C SIM	
490-85229-2	OB-24-081315	Total/NA	Water	8260C SIM	
490-85229-3	OB-14A-081315	Total/NA	Water	8260C SIM	
490-85229-4	OB-14B-081315	Total/NA	Water	8260C SIM	
490-85229-5	OB-16-081315	Total/NA	Water	8260C SIM	
490-85229-6	OB-18-081315	Total/NA	Water	8260C SIM	
490-85229-9	TB-07-081415	Total/NA	Water	8260C SIM	
LCS 490-275705/12	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-275705/13	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-275705/11	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 275960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-7	OB-28-081315	Total/NA	Water	8260C SIM	
490-85229-8	OB-17-081315	Total/NA	Water	8260C SIM	
490-85229-10	OB-10-081415	Total/NA	Water	8260C SIM	
490-85229-11	DUP-03-081415	Total/NA	Water	8260C SIM	
490-85229-12	CM-50-081415	Total/NA	Water	8260C SIM	
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	8260C SIM	
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	8260C SIM	
LCS 490-275960/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-275960/11	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-275960/7	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 276265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	8260C	
490-85229-2	OB-24-081315	Total/NA	Water	8260C	
490-85229-3	OB-14A-081315	Total/NA	Water	8260C	
490-85229-4	OB-14B-081315	Total/NA	Water	8260C	
490-85229-5	OB-16-081315	Total/NA	Water	8260C	
490-85229-6	OB-18-081315	Total/NA	Water	8260C	
490-85229-7	OB-28-081315	Total/NA	Water	8260C	
490-85229-8	OB-17-081315	Total/NA	Water	8260C	
490-85229-9	TB-07-081415	Total/NA	Water	8260C	
490-85229-10	OB-10-081415	Total/NA	Water	8260C	
490-85229-11	DUP-03-081415	Total/NA	Water	8260C	
490-85229-12	CM-50-081415	Total/NA	Water	8260C	
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	8260C	
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	8260C	
LCS 490-276265/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-276265/4	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 490-276265/7	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 274736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	3510C	
490-85229-2	OB-24-081315	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 274736 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-3	OB-14A-081315	Total/NA	Water	3510C	
490-85229-4	OB-14B-081315	Total/NA	Water	3510C	
490-85229-5	OB-16-081315	Total/NA	Water	3510C	
490-85229-6	OB-18-081315	Total/NA	Water	3510C	
490-85229-7	OB-28-081315	Total/NA	Water	3510C	
490-85229-8	OB-17-081315	Total/NA	Water	3510C	
490-85229-10	OB-10-081415	Total/NA	Water	3510C	
490-85229-11	DUP-03-081415	Total/NA	Water	3510C	
490-85229-12	CM-50-081415	Total/NA	Water	3510C	
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	3510C	
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	3510C	
LCS 490-274736/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-274736/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 274915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-274736/2-A	Lab Control Sample	Total/NA	Water	8270D	274736
MB 490-274736/1-A	Method Blank	Total/NA	Water	8270D	274736

Prep Batch: 274921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	3510C	
490-85229-2	OB-24-081315	Total/NA	Water	3510C	
490-85229-3	OB-14A-081315	Total/NA	Water	3510C	
490-85229-4	OB-14B-081315	Total/NA	Water	3510C	
490-85229-5	OB-16-081315	Total/NA	Water	3510C	
490-85229-6	OB-18-081315	Total/NA	Water	3510C	
490-85229-7	OB-28-081315	Total/NA	Water	3510C	
490-85229-8	OB-17-081315	Total/NA	Water	3510C	
490-85229-10	OB-10-081415	Total/NA	Water	3510C	
490-85229-11	DUP-03-081415	Total/NA	Water	3510C	
490-85229-12	CM-50-081415	Total/NA	Water	3510C	
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	3510C	
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	3510C	
LCS 490-274921/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-274921/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 275237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	8270D	274736
490-85229-2	OB-24-081315	Total/NA	Water	8270D	274736
490-85229-3	OB-14A-081315	Total/NA	Water	8270D	274736
490-85229-4	OB-14B-081315	Total/NA	Water	8270D	274736
490-85229-5	OB-16-081315	Total/NA	Water	8270D	274736
490-85229-6	OB-18-081315	Total/NA	Water	8270D	274736
490-85229-7	OB-28-081315	Total/NA	Water	8270D	274736
490-85229-8	OB-17-081315	Total/NA	Water	8270D	274736
490-85229-10	OB-10-081415	Total/NA	Water	8270D	274736
490-85229-11	DUP-03-081415	Total/NA	Water	8270D	274736
490-85229-12	CM-50-081415	Total/NA	Water	8270D	274736
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	8270D	274736

GC/MS Semi VOA (Continued)

Analysis Batch: 275237 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	8270D	274736

Analysis Batch: 276024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	8270D SIM	274921
490-85229-2	OB-24-081315	Total/NA	Water	8270D SIM	274921
490-85229-3	OB-14A-081315	Total/NA	Water	8270D SIM	274921
490-85229-4	OB-14B-081315	Total/NA	Water	8270D SIM	274921
490-85229-5	OB-16-081315	Total/NA	Water	8270D SIM	274921
490-85229-6	OB-18-081315	Total/NA	Water	8270D SIM	274921
490-85229-7	OB-28-081315	Total/NA	Water	8270D SIM	274921
490-85229-8	OB-17-081315	Total/NA	Water	8270D SIM	274921
490-85229-10	OB-10-081415	Total/NA	Water	8270D SIM	274921
490-85229-11	DUP-03-081415	Total/NA	Water	8270D SIM	274921
490-85229-12	CM-50-081415	Total/NA	Water	8270D SIM	274921
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	8270D SIM	274921
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	8270D SIM	274921
LCS 490-274921/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	274921
MB 490-274921/1-A	Method Blank	Total/NA	Water	8270D SIM	274921

Prep Batch: 277571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-12 - RE	CM-50-081415	Total/NA	Water	3510C	
LCS 490-277571/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-277571/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 490-277571/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 277738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-12 - RE	CM-50-081415	Total/NA	Water	8270D SIM	277571
LCS 490-277571/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	277571
LCSD 490-277571/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	277571
MB 490-277571/1-A	Method Blank	Total/NA	Water	8270D SIM	277571

GC Semi VOA

Prep Batch: 276614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-4	OB-14B-081315	Total/NA	Water	3510C	
490-85229-5	OB-16-081315	Total/NA	Water	3510C	
490-85229-6	OB-18-081315	Total/NA	Water	3510C	
490-85229-7	OB-28-081315	Total/NA	Water	3510C	
490-85229-8	OB-17-081315	Total/NA	Water	3510C	
490-85229-10	OB-10-081415	Total/NA	Water	3510C	
490-85229-11	DUP-03-081415	Total/NA	Water	3510C	
490-85229-12	CM-50-081415	Total/NA	Water	3510C	
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	3510C	
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	3510C	
LCS 490-276614/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-276614/1-A	Method Blank	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Analysis Batch: 276694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-4	OB-14B-081315	Total/NA	Water	8082A	276614
490-85229-5	OB-16-081315	Total/NA	Water	8082A	276614
490-85229-6	OB-18-081315	Total/NA	Water	8082A	276614
490-85229-7	OB-28-081315	Total/NA	Water	8082A	276614
490-85229-8	OB-17-081315	Total/NA	Water	8082A	276614
490-85229-10	OB-10-081415	Total/NA	Water	8082A	276614
490-85229-11	DUP-03-081415	Total/NA	Water	8082A	276614
490-85229-12	CM-50-081415	Total/NA	Water	8082A	276614
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	8082A	276614
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	8082A	276614
LCS 490-276614/2-A	Lab Control Sample	Total/NA	Water	8082A	276614
MB 490-276614/1-A	Method Blank	Total/NA	Water	8082A	276614

Prep Batch: 277885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	3510C	
490-85229-2	OB-24-081315	Total/NA	Water	3510C	
490-85229-3	OB-14A-081315	Total/NA	Water	3510C	
LCS 490-277885/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-277885/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 278119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	8082A	277885
490-85229-2	OB-24-081315	Total/NA	Water	8082A	277885
490-85229-3	OB-14A-081315	Total/NA	Water	8082A	277885
LCS 490-277885/2-A	Lab Control Sample	Total/NA	Water	8082A	277885
MB 490-277885/1-A	Method Blank	Total/NA	Water	8082A	277885

HPLC/IC

Analysis Batch: 276233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85225-D-1 MS	Matrix Spike	Total/NA	Water	9056A	
490-85225-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	9056A	
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	9056A	
490-85229-2	OB-24-081315	Total/NA	Water	9056A	
490-85229-3	OB-14A-081315	Total/NA	Water	9056A	
490-85229-4	OB-14B-081315	Total/NA	Water	9056A	
490-85229-5	OB-16-081315	Total/NA	Water	9056A	
490-85229-6	OB-18-081315	Total/NA	Water	9056A	
490-85229-7	OB-28-081315	Total/NA	Water	9056A	
490-85229-8	OB-17-081315	Total/NA	Water	9056A	
LCS 490-276233/7	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-276233/8	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-276233/6	Method Blank	Total/NA	Water	9056A	

Analysis Batch: 276491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-10	OB-10-081415	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 276491 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-11	DUP-03-081415	Total/NA	Water	9056A	
490-85229-12	CM-50-081415	Total/NA	Water	9056A	
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	9056A	
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	9056A	
LCS 490-276491/8	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-276491/9	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-276491/7	Method Blank	Total/NA	Water	9056A	

Metals

Filtration Batch: 274351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Dissolved	Water	Filtration	
490-85229-2	OB-24-081315	Dissolved	Water	Filtration	
490-85229-3	OB-14A-081315	Dissolved	Water	Filtration	
490-85229-4	OB-14B-081315	Dissolved	Water	Filtration	
490-85229-5	OB-16-081315	Dissolved	Water	Filtration	
490-85229-6	OB-18-081315	Dissolved	Water	Filtration	
490-85229-7	OB-28-081315	Dissolved	Water	Filtration	
490-85229-8	OB-17-081315	Dissolved	Water	Filtration	
490-85229-10	OB-10-081415	Dissolved	Water	Filtration	
490-85229-11	DUP-03-081415	Dissolved	Water	Filtration	
490-85229-12	CM-50-081415	Dissolved	Water	Filtration	
490-85229-12 MS	CM-50-081415 MS	Dissolved	Water	Filtration	
490-85229-12 MSD	CM-50-081415 MSD	Dissolved	Water	Filtration	
LCS 490-274351/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-274351/1-B	Method Blank	Dissolved	Water	Filtration	

Prep Batch: 274354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Dissolved	Water	3005A	274351
490-85229-2	OB-24-081315	Dissolved	Water	3005A	274351
490-85229-3	OB-14A-081315	Dissolved	Water	3005A	274351
490-85229-4	OB-14B-081315	Dissolved	Water	3005A	274351
490-85229-5	OB-16-081315	Dissolved	Water	3005A	274351
490-85229-6	OB-18-081315	Dissolved	Water	3005A	274351
490-85229-7	OB-28-081315	Dissolved	Water	3005A	274351
490-85229-8	OB-17-081315	Dissolved	Water	3005A	274351
490-85229-10	OB-10-081415	Dissolved	Water	3005A	274351
490-85229-11	DUP-03-081415	Dissolved	Water	3005A	274351
490-85229-12	CM-50-081415	Dissolved	Water	3005A	274351
490-85229-12 MS	CM-50-081415 MS	Dissolved	Water	3005A	274351
490-85229-12 MSD	CM-50-081415 MSD	Dissolved	Water	3005A	274351
LCS 490-274351/2-B	Lab Control Sample	Dissolved	Water	3005A	274351
MB 490-274351/1-B	Method Blank	Dissolved	Water	3005A	274351

Analysis Batch: 274758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Dissolved	Water	6020A	274354
490-85229-2	OB-24-081315	Dissolved	Water	6020A	274354

Metals (Continued)

Analysis Batch: 274758 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-3	OB-14A-081315	Dissolved	Water	6020A	274354
490-85229-4	OB-14B-081315	Dissolved	Water	6020A	274354
490-85229-5	OB-16-081315	Dissolved	Water	6020A	274354
490-85229-6	OB-18-081315	Dissolved	Water	6020A	274354
490-85229-7	OB-28-081315	Dissolved	Water	6020A	274354
490-85229-8	OB-17-081315	Dissolved	Water	6020A	274354
490-85229-10	OB-10-081415	Dissolved	Water	6020A	274354
490-85229-11	DUP-03-081415	Dissolved	Water	6020A	274354
490-85229-12	CM-50-081415	Dissolved	Water	6020A	274354
490-85229-12 MS	CM-50-081415 MS	Dissolved	Water	6020A	274354
490-85229-12 MSD	CM-50-081415 MSD	Dissolved	Water	6020A	274354

Prep Batch: 274876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	3010A	
490-85229-2	OB-24-081315	Total/NA	Water	3010A	
490-85229-3	OB-14A-081315	Total/NA	Water	3010A	
490-85229-4	OB-14B-081315	Total/NA	Water	3010A	
490-85229-5	OB-16-081315	Total/NA	Water	3010A	
490-85229-6	OB-18-081315	Total/NA	Water	3010A	
490-85229-7	OB-28-081315	Total/NA	Water	3010A	
490-85449-A-1-B MS	Matrix Spike	Total/NA	Water	3010A	
490-85449-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
LCS 490-274876/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 490-274876/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 490-274876/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 275072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84543-J-5-C MS	Matrix Spike	Total/NA	Water	7470A	
490-84543-J-5-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	7470A	
490-85229-2	OB-24-081315	Total/NA	Water	7470A	
LCS 490-275072/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 490-275072/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 490-275072/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 275326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84543-J-5-C MS	Matrix Spike	Total/NA	Water	7470A	275072
490-84543-J-5-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	275072
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	7470A	275072
490-85229-2	OB-24-081315	Total/NA	Water	7470A	275072
LCS 490-275072/2-A	Lab Control Sample	Total/NA	Water	7470A	275072
LCSD 490-275072/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	275072
MB 490-275072/1-A	Method Blank	Total/NA	Water	7470A	275072

Prep Batch: 275634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-8	OB-17-081315	Total/NA	Water	3010A	
490-85229-10	OB-10-081415	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 275634 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-11	DUP-03-081415	Total/NA	Water	3010A	
490-85229-12	CM-50-081415	Total/NA	Water	3010A	
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	3010A	
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	3010A	
LCS 490-275634/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-275634/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 275699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Dissolved	Water	6020A	274354
490-85229-1	RW-13 (100-120) - 081315	Dissolved	Water	6020A	274354
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	6020A	274876
490-85229-2	OB-24-081315	Dissolved	Water	6020A	274354
490-85229-2	OB-24-081315	Total/NA	Water	6020A	274876
490-85229-3	OB-14A-081315	Dissolved	Water	6020A	274354
490-85229-3	OB-14A-081315	Dissolved	Water	6020A	274354
490-85229-3	OB-14A-081315	Total/NA	Water	6020A	274876
490-85229-4	OB-14B-081315	Dissolved	Water	6020A	274354
490-85229-4	OB-14B-081315	Dissolved	Water	6020A	274354
490-85229-4	OB-14B-081315	Total/NA	Water	6020A	274876
490-85229-5	OB-16-081315	Dissolved	Water	6020A	274354
490-85229-5	OB-16-081315	Dissolved	Water	6020A	274354
490-85229-5	OB-16-081315	Total/NA	Water	6020A	274876
490-85229-6	OB-18-081315	Dissolved	Water	6020A	274354
490-85229-6	OB-18-081315	Total/NA	Water	6020A	274876
490-85229-7	OB-28-081315	Dissolved	Water	6020A	274354
490-85229-7	OB-28-081315	Dissolved	Water	6020A	274354
490-85229-8	OB-17-081315	Dissolved	Water	6020A	274354
490-85229-10	OB-10-081415	Dissolved	Water	6020A	274354
490-85229-11	DUP-03-081415	Dissolved	Water	6020A	274354
490-85229-12	CM-50-081415	Dissolved	Water	6020A	274354
490-85229-12	CM-50-081415	Dissolved	Water	6020A	274354
490-85229-12 MS	CM-50-081415 MS	Dissolved	Water	6020A	274354
490-85229-12 MS	CM-50-081415 MS	Dissolved	Water	6020A	274354
490-85229-12 MSD	CM-50-081415 MSD	Dissolved	Water	6020A	274354
490-85229-12 MSD	CM-50-081415 MSD	Dissolved	Water	6020A	274354
490-85449-A-1-B MS	Matrix Spike	Total/NA	Water	6020A	274876
490-85449-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	274876
LCS 490-274351/2-B	Lab Control Sample	Dissolved	Water	6020A	274354
LCS 490-274876/2-A	Lab Control Sample	Total/NA	Water	6020A	274876
LCSD 490-274876/3-A	Lab Control Sample Dup	Total/NA	Water	6020A	274876
MB 490-274351/1-B	Method Blank	Dissolved	Water	6020A	274354
MB 490-274876/1-A	Method Blank	Total/NA	Water	6020A	274876

Filtration Batch: 275791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Dissolved	Water	Filtration	
490-85229-2	OB-24-081315	Dissolved	Water	Filtration	
490-85229-3	OB-14A-081315	Dissolved	Water	Filtration	
490-85229-4	OB-14B-081315	Dissolved	Water	Filtration	
490-85229-5	OB-16-081315	Dissolved	Water	Filtration	

Metals (Continued)

Filtration Batch: 275791 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-6	OB-18-081315	Dissolved	Water	Filtration	
490-85229-7	OB-28-081315	Dissolved	Water	Filtration	
490-85229-8	OB-17-081315	Dissolved	Water	Filtration	
490-85229-10	OB-10-081415	Dissolved	Water	Filtration	
490-85229-11	DUP-03-081415	Dissolved	Water	Filtration	
490-85229-12	CM-50-081415	Dissolved	Water	Filtration	
490-85229-12 MS	CM-50-081415 MS	Dissolved	Water	Filtration	
490-85229-12 MSD	CM-50-081415 MSD	Dissolved	Water	Filtration	
LCS 490-275791/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-275791/1-B	Method Blank	Dissolved	Water	Filtration	

Prep Batch: 275794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Dissolved	Water	7470A	275791
490-85229-2	OB-24-081315	Dissolved	Water	7470A	275791
490-85229-3	OB-14A-081315	Dissolved	Water	7470A	275791
490-85229-4	OB-14B-081315	Dissolved	Water	7470A	275791
490-85229-5	OB-16-081315	Dissolved	Water	7470A	275791
490-85229-6	OB-18-081315	Dissolved	Water	7470A	275791
490-85229-7	OB-28-081315	Dissolved	Water	7470A	275791
490-85229-8	OB-17-081315	Dissolved	Water	7470A	275791
490-85229-10	OB-10-081415	Dissolved	Water	7470A	275791
490-85229-11	DUP-03-081415	Dissolved	Water	7470A	275791
490-85229-12	CM-50-081415	Dissolved	Water	7470A	275791
490-85229-12 MS	CM-50-081415 MS	Dissolved	Water	7470A	275791
490-85229-12 MSD	CM-50-081415 MSD	Dissolved	Water	7470A	275791
LCS 490-275791/2-B	Lab Control Sample	Dissolved	Water	7470A	275791
MB 490-275791/1-B	Method Blank	Dissolved	Water	7470A	275791

Prep Batch: 275851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-3	OB-14A-081315	Total/NA	Water	7470A	
490-85229-4	OB-14B-081315	Total/NA	Water	7470A	
490-85229-5	OB-16-081315	Total/NA	Water	7470A	
490-85229-6	OB-18-081315	Total/NA	Water	7470A	
490-85229-7	OB-28-081315	Total/NA	Water	7470A	
490-85229-8	OB-17-081315	Total/NA	Water	7470A	
490-85229-10	OB-10-081415	Total/NA	Water	7470A	
490-85229-11	DUP-03-081415	Total/NA	Water	7470A	
490-85229-12	CM-50-081415	Total/NA	Water	7470A	
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	7470A	
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	7470A	
LCS 490-275851/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 490-275851/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 490-275851/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 275984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-8	OB-17-081315	Total/NA	Water	6020A	275634
490-85229-10	OB-10-081415	Total/NA	Water	6020A	275634
490-85229-11	DUP-03-081415	Total/NA	Water	6020A	275634

Metals (Continued)

Analysis Batch: 275984 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-12	CM-50-081415	Total/NA	Water	6020A	275634
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	6020A	275634
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	6020A	275634
LCS 490-275634/2-A	Lab Control Sample	Total/NA	Water	6020A	275634
MB 490-275634/1-A	Method Blank	Total/NA	Water	6020A	275634

Analysis Batch: 276152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-3	OB-14A-081315	Total/NA	Water	7470A	275851
490-85229-4	OB-14B-081315	Total/NA	Water	7470A	275851
490-85229-5	OB-16-081315	Total/NA	Water	7470A	275851
490-85229-6	OB-18-081315	Total/NA	Water	7470A	275851
490-85229-7	OB-28-081315	Total/NA	Water	7470A	275851
490-85229-8	OB-17-081315	Total/NA	Water	7470A	275851
490-85229-10	OB-10-081415	Total/NA	Water	7470A	275851
490-85229-11	DUP-03-081415	Total/NA	Water	7470A	275851
490-85229-12	CM-50-081415	Total/NA	Water	7470A	275851
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	7470A	275851
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	7470A	275851
LCS 490-275851/2-A	Lab Control Sample	Total/NA	Water	7470A	275851
LCSD 490-275851/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	275851
MB 490-275851/1-A	Method Blank	Total/NA	Water	7470A	275851

Analysis Batch: 276250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Dissolved	Water	7470A	275794
490-85229-2	OB-24-081315	Dissolved	Water	7470A	275794
490-85229-3	OB-14A-081315	Dissolved	Water	7470A	275794
490-85229-4	OB-14B-081315	Dissolved	Water	7470A	275794
490-85229-5	OB-16-081315	Dissolved	Water	7470A	275794
490-85229-6	OB-18-081315	Dissolved	Water	7470A	275794
490-85229-7	OB-28-081315	Dissolved	Water	7470A	275794
490-85229-8	OB-17-081315	Dissolved	Water	7470A	275794
490-85229-10	OB-10-081415	Dissolved	Water	7470A	275794
490-85229-11	DUP-03-081415	Dissolved	Water	7470A	275794
490-85229-12	CM-50-081415	Dissolved	Water	7470A	275794
490-85229-12 MS	CM-50-081415 MS	Dissolved	Water	7470A	275794
490-85229-12 MSD	CM-50-081415 MSD	Dissolved	Water	7470A	275794
LCS 490-275791/2-B	Lab Control Sample	Dissolved	Water	7470A	275794
MB 490-275791/1-B	Method Blank	Dissolved	Water	7470A	275794

Analysis Batch: 276307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-8	OB-17-081315	Total/NA	Water	6020A	275634
490-85229-8	OB-17-081315	Total/NA	Water	6020A	275634
490-85229-10	OB-10-081415	Total/NA	Water	6020A	275634
490-85229-11	DUP-03-081415	Total/NA	Water	6020A	275634
490-85229-12	CM-50-081415	Total/NA	Water	6020A	275634
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	6020A	275634
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	6020A	275634
LCS 490-275634/2-A	Lab Control Sample	Total/NA	Water	6020A	275634

Metals (Continued)

Analysis Batch: 276307 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-275634/1-A	Method Blank	Total/NA	Water	6020A	275634

Analysis Batch: 276337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	6020A	274876
490-85229-2	OB-24-081315	Total/NA	Water	6020A	274876
490-85229-3	OB-14A-081315	Total/NA	Water	6020A	274876
490-85229-4	OB-14B-081315	Total/NA	Water	6020A	274876
490-85229-5	OB-16-081315	Total/NA	Water	6020A	274876
490-85229-6	OB-18-081315	Total/NA	Water	6020A	274876
490-85229-7	OB-28-081315	Total/NA	Water	6020A	274876
490-85449-A-1-B MS	Matrix Spike	Total/NA	Water	6020A	274876
490-85449-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	274876
LCS 490-274876/2-A	Lab Control Sample	Total/NA	Water	6020A	274876
LCSD 490-274876/3-A	Lab Control Sample Dup	Total/NA	Water	6020A	274876
MB 490-274876/1-A	Method Blank	Total/NA	Water	6020A	274876

Analysis Batch: 277874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85449-A-1-B MS	Matrix Spike	Total/NA	Water	6020A	274876
490-85449-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	274876
LCS 490-274876/2-A	Lab Control Sample	Total/NA	Water	6020A	274876
LCSD 490-274876/3-A	Lab Control Sample Dup	Total/NA	Water	6020A	274876
MB 490-274876/1-A	Method Blank	Total/NA	Water	6020A	274876

Analysis Batch: 278563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	6020A	274876
490-85229-2	OB-24-081315	Total/NA	Water	6020A	274876
490-85229-3	OB-14A-081315	Total/NA	Water	6020A	274876
490-85229-4	OB-14B-081315	Total/NA	Water	6020A	274876
490-85229-5	OB-16-081315	Total/NA	Water	6020A	274876
490-85229-6	OB-18-081315	Total/NA	Water	6020A	274876
490-85229-7	OB-28-081315	Total/NA	Water	6020A	274876

Analysis Batch: 278759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	6020A	274876
490-85229-3	OB-14A-081315	Total/NA	Water	6020A	274876
490-85229-4	OB-14B-081315	Total/NA	Water	6020A	274876
490-85229-5	OB-16-081315	Total/NA	Water	6020A	274876
490-85229-7	OB-28-081315	Total/NA	Water	6020A	274876

Analysis Batch: 279689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-8	OB-17-081315	Total/NA	Water	6020A	275634
490-85229-10	OB-10-081415	Total/NA	Water	6020A	275634
490-85229-11	DUP-03-081415	Total/NA	Water	6020A	275634
490-85229-12	CM-50-081415	Total/NA	Water	6020A	275634
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	6020A	275634
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	6020A	275634

Metals (Continued)

Analysis Batch: 279689 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-275634/2-A	Lab Control Sample	Total/NA	Water	6020A	275634
MB 490-275634/1-A	Method Blank	Total/NA	Water	6020A	275634

General Chemistry

Analysis Batch: 274134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85157-D-5 DU	Duplicate	Total/NA	Water	SM 2320B	
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	SM 2320B	
490-85229-2	OB-24-081315	Total/NA	Water	SM 2320B	
490-85229-3	OB-14A-081315	Total/NA	Water	SM 2320B	
490-85229-3 DU	OB-14A-081315	Total/NA	Water	SM 2320B	
490-85229-4	OB-14B-081315	Total/NA	Water	SM 2320B	
490-85229-5	OB-16-081315	Total/NA	Water	SM 2320B	
490-85229-6	OB-18-081315	Total/NA	Water	SM 2320B	
490-85229-7	OB-28-081315	Total/NA	Water	SM 2320B	
490-85229-8	OB-17-081315	Total/NA	Water	SM 2320B	
490-85229-10	OB-10-081415	Total/NA	Water	SM 2320B	
490-85229-11	DUP-03-081415	Total/NA	Water	SM 2320B	
490-85229-12	CM-50-081415	Total/NA	Water	SM 2320B	
LCS 490-274134/34	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 490-274134/64	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 490-274134/33	Method Blank	Total/NA	Water	SM 2320B	
MB 490-274134/63	Method Blank	Total/NA	Water	SM 2320B	

Prep Batch: 274313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-H-1-B DU	Duplicate	Total/NA	Water	9012B	
490-85229-12	CM-50-081415	Total/NA	Water	9012B	
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	9012B	
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	9012B	
LCS 490-274313/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 490-274313/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 274429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85153-H-1-B DU	Duplicate	Total/NA	Water	9012B	274313
490-85229-12	CM-50-081415	Total/NA	Water	9012B	274313
490-85229-12 MS	CM-50-081415 MS	Total/NA	Water	9012B	274313
490-85229-12 MSD	CM-50-081415 MSD	Total/NA	Water	9012B	274313
LCS 490-274313/2-A	Lab Control Sample	Total/NA	Water	9012B	274313
MB 490-274313/1-A	Method Blank	Total/NA	Water	9012B	274313

Prep Batch: 274567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1 MS	RW-13 (100-120) - 081315	Total/NA	Water	9012B	
490-85229-1 MSD	RW-13 (100-120) - 081315	Total/NA	Water	9012B	
490-85229-2	OB-24-081315	Total/NA	Water	9012B	
490-85229-3	OB-14A-081315	Total/NA	Water	9012B	
490-85229-4	OB-14B-081315	Total/NA	Water	9012B	

General Chemistry (Continued)

Prep Batch: 274567 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-5	OB-16-081315	Total/NA	Water	9012B	
490-85229-6	OB-18-081315	Total/NA	Water	9012B	
490-85229-7	OB-28-081315	Total/NA	Water	9012B	
490-85229-8	OB-17-081315	Total/NA	Water	9012B	
490-85229-10	OB-10-081415	Total/NA	Water	9012B	
490-85229-11	DUP-03-081415	Total/NA	Water	9012B	
490-85229-11 DU	DUP-03-081415	Total/NA	Water	9012B	
LCS 490-274567/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 490-274567/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 274777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-12 DU	CM-50-081415	Total/NA	Water	SM 2320B	
LCS 490-274777/6	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 490-274777/5	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 275205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1 MS	RW-13 (100-120) - 081315	Total/NA	Water	9012B	274567
490-85229-1 MSD	RW-13 (100-120) - 081315	Total/NA	Water	9012B	274567
490-85229-2	OB-24-081315	Total/NA	Water	9012B	274567
490-85229-3	OB-14A-081315	Total/NA	Water	9012B	274567
490-85229-4	OB-14B-081315	Total/NA	Water	9012B	274567
490-85229-5	OB-16-081315	Total/NA	Water	9012B	274567
490-85229-6	OB-18-081315	Total/NA	Water	9012B	274567
490-85229-7	OB-28-081315	Total/NA	Water	9012B	274567
490-85229-8	OB-17-081315	Total/NA	Water	9012B	274567
490-85229-10	OB-10-081415	Total/NA	Water	9012B	274567
490-85229-11	DUP-03-081415	Total/NA	Water	9012B	274567
490-85229-11 DU	DUP-03-081415	Total/NA	Water	9012B	274567
LCS 490-274567/2-A	Lab Control Sample	Total/NA	Water	9012B	274567
MB 490-274567/1-A	Method Blank	Total/NA	Water	9012B	274567

Prep Batch: 275318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	9012B	
490-85529-H-3-B MS	Matrix Spike	Total/NA	Water	9012B	
490-85529-H-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	
490-85529-H-5-B DU	Duplicate	Total/NA	Water	9012B	
LCS 490-275318/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 490-275318/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 276908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-1	RW-13 (100-120) - 081315	Total/NA	Water	9012B	275318
490-85529-H-3-B MS	Matrix Spike	Total/NA	Water	9012B	275318
490-85529-H-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	275318
490-85529-H-5-B DU	Duplicate	Total/NA	Water	9012B	275318
LCS 490-275318/2-A	Lab Control Sample	Total/NA	Water	9012B	275318
MB 490-275318/1-A	Method Blank	Total/NA	Water	9012B	275318

Client Sample ID: RW-13 (100-120) - 081315

Lab Sample ID: 490-85229-1

Date Collected: 08/13/15 09:15

Matrix: Water

Date Received: 08/15/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	276265	08/26/15 17:18	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275705	08/24/15 22:42	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274736	08/20/15 07:34	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	275237	08/21/15 16:54	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274921	08/20/15 13:28	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276024	08/26/15 00:45	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277885	08/31/15 16:18	BGD	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278119	09/01/15 17:13	MGH	TAL NSH
Total/NA	Analysis	9056A		5	10 mL		276233	08/26/15 00:30	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 00:28	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 12:14	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		20	50 mL	50 mL	275699	08/21/15 14:50	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276337	08/25/15 23:46	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278563	09/02/15 08:52	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		10	50 mL	50 mL	278759	09/02/15 19:52	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 19:38	CME	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 20:37	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	275072	08/20/15 21:51	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	275326	08/21/15 14:05	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	275318	08/21/15 16:35	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276908	08/26/15 21:25	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/15/15 18:48	SMB	TAL NSH

Client Sample ID: OB-24-081315

Lab Sample ID: 490-85229-2

Date Collected: 08/13/15 09:50

Matrix: Water

Date Received: 08/15/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	276265	08/26/15 17:44	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275705	08/24/15 23:10	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274736	08/20/15 07:34	MRM	TAL NSH

Client Sample ID: OB-24-081315

Date Collected: 08/13/15 09:50
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D		1	250 mL	1 mL	275237	08/21/15 17:18	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274921	08/20/15 13:28	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276024	08/26/15 01:11	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277885	08/31/15 16:18	BGD	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278119	09/01/15 17:29	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		276233	08/26/15 01:42	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 00:34	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 12:19	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276337	08/26/15 00:03	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278563	09/02/15 08:57	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 19:43	CME	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 20:39	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	275072	08/20/15 21:51	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	275326	08/21/15 14:07	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274567	08/19/15 13:18	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	275205	08/20/15 15:52	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/15/15 18:54	SMB	TAL NSH

Client Sample ID: OB-14A-081315

Date Collected: 08/13/15 10:55
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	276265	08/26/15 18:10	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275705	08/24/15 23:39	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274736	08/20/15 07:34	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	275237	08/21/15 17:42	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274921	08/20/15 13:28	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276024	08/26/15 01:37	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277885	08/31/15 16:18	BGD	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278119	09/01/15 17:44	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		276233	08/26/15 02:06	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH

Client Sample ID: OB-14A-081315

Lab Sample ID: 490-85229-3

Date Collected: 08/13/15 10:55

Matrix: Water

Date Received: 08/15/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 00:39	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 12:25	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		20	50 mL	50 mL	275699	08/21/15 15:01	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276337	08/26/15 00:09	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278563	09/02/15 09:14	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		10	50 mL	50 mL	278759	09/02/15 19:58	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 19:59	CME	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 20:42	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	275851	08/24/15 17:54	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	276152	08/25/15 13:59	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274567	08/19/15 13:18	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	275205	08/20/15 15:52	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/18/15 11:50	SMB	TAL NSH

Client Sample ID: OB-14B-081315

Lab Sample ID: 490-85229-4

Date Collected: 08/13/15 10:20

Matrix: Water

Date Received: 08/15/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	276265	08/26/15 18:37	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275705	08/25/15 00:07	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274736	08/20/15 07:34	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	275237	08/21/15 18:05	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274921	08/20/15 13:28	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276024	08/26/15 02:03	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276614	08/27/15 09:48	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	276694	08/27/15 20:59	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		276233	08/26/15 02:30	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 00:57	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 12:40	CME	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		20	50 mL	50 mL	275699	08/21/15 15:06	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276337	08/26/15 00:14	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278563	09/02/15 09:19	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		10	50 mL	50 mL	278759	09/02/15 20:03	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 20:04	CME	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 20:44	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	275851	08/24/15 17:54	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	276152	08/25/15 14:02	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274567	08/19/15 13:18	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	275205	08/20/15 15:53	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/18/15 12:01	SMB	TAL NSH

Client Sample ID: OB-16-081315

Date Collected: 08/13/15 15:45
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	276265	08/26/15 19:03	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275705	08/25/15 00:36	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274736	08/20/15 07:34	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	275237	08/21/15 18:29	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274921	08/20/15 13:28	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276024	08/26/15 02:29	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276614	08/27/15 09:48	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	276694	08/27/15 21:15	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		276233	08/26/15 02:54	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 01:02	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 12:46	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		20	50 mL	50 mL	275699	08/21/15 15:13	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276337	08/26/15 00:20	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278563	09/02/15 09:25	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Client Sample ID: OB-16-081315

Date Collected: 08/13/15 15:45
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020A		10	50 mL	50 mL	278759	09/02/15 20:09	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 20:09	CME	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 20:51	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	275851	08/24/15 17:54	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	276152	08/25/15 14:04	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274567	08/19/15 13:18	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	275205	08/20/15 15:54	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/18/15 12:07	SMB	TAL NSH

Client Sample ID: OB-18-081315

Date Collected: 08/13/15 14:25
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	276265	08/26/15 19:29	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275705	08/25/15 01:04	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274736	08/20/15 07:34	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	275237	08/21/15 18:53	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274921	08/20/15 13:28	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276024	08/26/15 02:55	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276614	08/27/15 09:48	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	276694	08/27/15 21:30	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		276233	08/26/15 03:18	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 01:08	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 12:51	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276337	08/26/15 00:26	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278563	09/02/15 09:31	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 20:14	CME	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 20:54	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	275851	08/24/15 17:54	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	276152	08/25/15 14:07	BLG	TAL NSH

Client Sample ID: OB-18-081315

Date Collected: 08/13/15 14:25
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9012B			50 mL	50 mL	274567	08/19/15 13:18	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	275205	08/20/15 15:55	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/18/15 12:12	SMB	TAL NSH

Client Sample ID: OB-28-081315

Date Collected: 08/13/15 15:15
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	276265	08/26/15 15:34	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275960	08/25/15 17:35	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274736	08/20/15 07:34	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	275237	08/21/15 19:16	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274921	08/20/15 13:28	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276024	08/26/15 03:21	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276614	08/27/15 09:48	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	276694	08/27/15 21:46	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		276233	08/26/15 03:42	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 01:14	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 12:56	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		20	50 mL	50 mL	275699	08/21/15 15:18	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276337	08/26/15 01:53	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278563	09/02/15 10:21	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		10	50 mL	50 mL	278759	09/02/15 20:14	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 20:56	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	275851	08/24/15 17:54	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	276152	08/25/15 14:18	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274567	08/19/15 13:18	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	275205	08/20/15 15:55	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/18/15 12:17	SMB	TAL NSH

Client Sample ID: OB-17-081315

Lab Sample ID: 490-85229-8

Date Collected: 08/13/15 14:05

Matrix: Water

Date Received: 08/15/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	276265	08/26/15 16:00	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275960	08/25/15 20:55	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274736	08/20/15 07:34	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	275237	08/21/15 19:40	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274921	08/20/15 13:28	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276024	08/26/15 03:48	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276614	08/27/15 09:48	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	276694	08/27/15 22:02	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		276233	08/26/15 04:06	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 01:20	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 13:01	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 19:58	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		10	50 mL	50 mL	276307	08/25/15 18:23	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276307	08/25/15 23:36	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 21:56	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 20:59	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	275851	08/24/15 17:54	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	276152	08/25/15 14:20	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274567	08/19/15 13:18	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	275205	08/20/15 15:56	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/18/15 12:23	SMB	TAL NSH

Client Sample ID: TB-07-081415

Lab Sample ID: 490-85229-9

Date Collected: 08/14/15 01:00

Matrix: Water

Date Received: 08/15/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	276265	08/26/15 14:41	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275705	08/24/15 19:50	MJH	TAL NSH

Client Sample ID: OB-10-081415

Date Collected: 08/14/15 10:20
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	276265	08/26/15 16:26	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275960	08/25/15 18:03	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274736	08/20/15 07:34	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	275237	08/21/15 20:04	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274921	08/20/15 13:28	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276024	08/26/15 04:13	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276614	08/27/15 09:48	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	276694	08/27/15 22:17	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		276491	08/26/15 20:56	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 01:25	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 13:06	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 20:04	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276307	08/25/15 23:41	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 22:01	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 21:01	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	275851	08/24/15 17:54	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	276152	08/25/15 14:23	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274567	08/19/15 13:18	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	275205	08/20/15 15:57	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/18/15 12:28	SMB	TAL NSH

Client Sample ID: DUP-03-081415

Date Collected: 08/14/15 12:00
Date Received: 08/15/15 09:30

Lab Sample ID: 490-85229-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	276265	08/26/15 16:52	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275960	08/25/15 18:32	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274736	08/20/15 07:34	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	275237	08/21/15 20:28	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274921	08/20/15 13:28	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276024	08/26/15 04:39	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276614	08/27/15 09:48	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	276694	08/27/15 22:33	MGH	TAL NSH

Client Sample ID: DUP-03-081415

Lab Sample ID: 490-85229-11

Date Collected: 08/14/15 12:00

Matrix: Water

Date Received: 08/15/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	10 mL		276491	08/26/15 21:20	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/20/15 01:31	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 13:11	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 20:19	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276307	08/25/15 23:57	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 22:06	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 21:03	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	275851	08/24/15 17:54	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	276152	08/25/15 14:25	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274567	08/19/15 13:18	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	275205	08/20/15 15:58	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/18/15 12:33	SMB	TAL NSH

Client Sample ID: CM-50-081415

Lab Sample ID: 490-85229-12

Date Collected: 08/14/15 10:25

Matrix: Water

Date Received: 08/15/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	276265	08/26/15 15:08	EML	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275960	08/25/15 19:00	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274736	08/20/15 07:34	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	275237	08/21/15 20:51	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	274921	08/20/15 13:28	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276024	08/26/15 05:05	BES	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	277571	08/30/15 07:54	ET	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	277738	08/31/15 18:32	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276614	08/27/15 09:48	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	276694	08/27/15 22:49	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		276491	08/26/15 22:32	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	274758	08/19/15 23:59	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 11:49	CME	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	274354	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	274351	08/19/15 08:39	ZLN	TAL NSH
Dissolved	Analysis	6020A		20	50 mL	50 mL	275699	08/21/15 14:14	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 19:33	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276307	08/25/15 23:10	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 21:30	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 20:30	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	275851	08/24/15 17:54	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	276152	08/25/15 13:51	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274313	08/18/15 19:20	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	274429	08/19/15 09:37	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274134	08/18/15 12:38	SMB	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
9056A	Anions, Ion Chromatography	SW846	TAL NSH
6020A	Metals (ICP/MS)	SW846	TAL NSH
7470A	Mercury (CVAA)	SW846	TAL NSH
9012B	Cyanide, Total andor Amenable	SW846	TAL NSH
SM 2320B	Alkalinity	SM	TAL NSH

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85229-1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	TN965	09-30-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total
8260C		Water	Dichlorobromomethane
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	1,4-Dioxane
8260C SIM		Water	Ethylene Dibromide
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-85229 Chain of Custody

Cooler Received/Opened On 8/15/2015 @ 9:30

1. Tracking # 2530 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 3.7 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? (YES)...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) AOZ

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES..(NO)..NA

14. Was there a Trip Blank in this cooler? (YES)...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES..(NO)..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

BIS = Broken in shipment

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THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
85229

Cooler Received/Opened On 8/15/2015 @ 0930

1. Tracking # 2574 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960357

2. Temperature of rep. sample or temp blank when opened: 5.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? YES..(NO)..NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES..(NO)...NA

14. Was there a Trip Blank in this cooler? YES..(NO)..NA If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA

16. Was residual chlorine present? YES..(NO)..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES...(NO)..#_____

BIS = Broken in shipment

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Nashville, TN

COOLER RECEIPT FORM

Loc: 490
85229
#1
K

Cooler Received/Opened On 8/15/2015 @ 0930

1. Tracking # 2563 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960357

2. Temperature of rep. sample or temp blank when opened: 5.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO (NA)

4. Were custody seals on outside of cooler? YES (NO) NA

If yes, how many and where:

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? YES (NO) NA

I certify that I opened the cooler and answered questions 1-6 (intial) [signature]

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES (NO)...NA

14. Was there a Trip Blank in this cooler? YES (NO)..NA If multiple coolers, sequence # 3

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES..(NO)..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES...(NO) Was a NCM generated? YES...(NO)..#

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Nashville, TN

COOLER RECEIPT FORM

Loc: 490
85229
#1
L

Cooler Received/Opened On 8/15/2015 @ 0930

1. Tracking # 2541 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 2.6 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA

4. Were custody seals on outside of cooler? YES..NO..NA

If yes, how many and where:

5. Were the seals intact, signed, and dated correctly? YES...NO..NA

6. Were custody papers inside cooler? YES..NO..NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO..NA

Were these signed and dated correctly? YES...NO..NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO..NA

14. Was there a Trip Blank in this cooler? YES..NO...NA If multiple coolers, sequence # 4

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES..NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO..#

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Revised 11/28/12

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Nashville, TN

Loc: 490
85229
#1
M

COOLER RECEIPT FORM

Cooler Received/Opened On: 8/15/2015 @0930

1. Tracking # 2611 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 3.5 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO (NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where: Ø

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? YES...(NO)..NA

Ø

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES..(NO)..NA

14. Was there a Trip Blank in this cooler? YES..(NO)..NA If multiple coolers, sequence # 5

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA

16. Was residual chlorine present? YES..(NO)..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

BIS = Broken in shipment

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Nashville, TN

COOLER RECEIPT FORM

Loc: 490
85229
#1
N

Cooler Received/Opened On 8/15/2015 @0930

1. Tracking # 2585 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 97310166

2. Temperature of rep. sample or temp blank when opened: 3.9 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...(NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? YES..(NO)...NA

I certify that I opened the cooler and answered questions 1-6 (intial) HKG

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES..(NO)..NA

14. Was there a Trip Blank in this cooler? YES..(NO)..NA If multiple coolers, sequence # 6

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES..(NO)..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
85229
#2
K

Cooler Received/Opened On: 8/15/2015 @0930

1. Tracking # 2552 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 2.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA

4. Were custody seals on outside of cooler? YES..NO..NA

If yes, how many and where: 0

5. Were the seals intact, signed, and dated correctly? YES...NO..NA

6. Were custody papers inside cooler? YES..NO..NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO..NA

Were these signed and dated correctly? YES...NO..NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO...NA

b. Was there any observable headspace present in any VOA vial? YES..NO..NA

14. Was there a Trip Blank in this cooler? YES..NO..NA If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES..NO..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
85229
#2
L

Cooler Received/Opened On: 8/15/2015 @0930

1. Tracking # 2596 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 2.9 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES..NO..NA

If yes, how many and where: 0

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) [illegible]

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES..NO..NA

14. Was there a Trip Blank in this cooler? YES..NO..NA If multiple coolers, sequence # 8

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES..NO..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES...NO..#_____

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Revised 11/28/12

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
85229
#2
M

Cooler Received/Opened On 8/15/2015 @ 9:30

1. Tracking # 2600 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 4.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...(NA)

4. Were custody seals on outside of cooler? YES...(NO)...NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? YES...(NO)...NA

I certify that I opened the cooler and answered questions 1-6 (intial) AJH

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...(NO)...NA

14. Was there a Trip Blank in this cooler? YES...(NO)...NA If multiple coolers, sequence # 9

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES...(NO)...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES...(NO) Was a NCM generated? YES...(NO)...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
85229
#2
N

TestAmerica

9/21/2015

Client Information	Sampler: Robert Lautenberg	Lab PM: Brown, Shali	Carr	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 8456950200	E-Mail: shali.brown@testamericainc.com		Page: 1 of 2
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
				Preservation Code:																		
1	RW-13 (100-120)-081315	8/13/15	09:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
2	OB-24-081315	8/13/15	09:50	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
3	OB-14A-081315	8/13/15	10:55	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
4	OB-14B-081315	8/13/15	10:20	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
5	OB-16-081315	8/13/15	15:45	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
6	OB-18-081315	8/13/15	14:25	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
7	OB-28-081315	8/13/15	15:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
8	OB-17-081315	8/13/15	14:05	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
9	TB-07-081415	8/14/15	—	—	Water	N	N	✓	✓													
10	OB-10-081415	8/14/15	10:20	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
11	Dup-03-081415	8/14/15	12:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1					8/14 1440	
2		8/14 1715		3.4/2.5 2.9/1.2 3.7/5.8/5.8/2.6/3.5	8/15/15 0930	TAN
3						

Custody Seals Intact: ∆ Yes ∆ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
85229
#3
K

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Robert Lautenberg	Lab PM: Brown, Shali	Carrier T	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page: 2 of 2
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filterl)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
12 CM-50-081415 MS/MSD	8/14/15	10:25	G	Water	N	Y	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1					8/14 1440	TA
2		8/14 1715	TA	3.9/2.8/2.9/4.2 3.7/5.8/5.8/2.6/3.5		
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

9/21/2015

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 490-85229-1

Login Number: 85229
List Number: 1
Creator: Gundi, Hozar K

List Source: TestAmerica Nashville

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

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-85437-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Tim Roeper

Authorized for release by:
9/21/2015 10:15:57 AM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-85437-1	PM Air Shaft-180-081715	Water	08/17/15 12:05	08/19/15 09:10
490-85437-2	CM-100-081715	Water	08/17/15 15:10	08/19/15 09:10
490-85437-3	CM-160-081715	Water	08/17/15 16:45	08/19/15 09:10
490-85437-4	RW-12 (55-65)-081715	Water	08/17/15 11:11	08/19/15 09:10
490-85437-5	RW-11S (236-241)-081715	Water	08/17/15 15:15	08/19/15 09:10
490-85437-6	FB-03-081815	Water	08/18/15 08:00	08/19/15 09:10
490-85437-7	TB-08-081815	Water	08/18/15 00:01	08/19/15 09:10

Job ID: 490-85437-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 490-85437-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 8/19/2015 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.5º C, 0.6º C, 1.0º C and 2.9º C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples PM Air Shaft-180-081715 (490-85437-1), CM-100-081715 (490-85437-2), CM-160-081715 (490-85437-3), RW-12 (55-65) -081715 (490-85437-4), RW-11S (236-241)-081715 (490-85437-5), FB-03-081815 (490-85437-6) and TB-08-081815 (490-85437-7) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/28/2015.

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

VOLATILE ORGANIC COMPOUNDS (GC-MS SIM)

Samples PM Air Shaft-180-081715 (490-85437-1), CM-100-081715 (490-85437-2), CM-160-081715 (490-85437-3), RW-12 (55-65) -081715 (490-85437-4), RW-11S (236-241)-081715 (490-85437-5), FB-03-081815 (490-85437-6) and TB-08-081815 (490-85437-7) were analyzed for volatile organic compounds (GC-MS SIM) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/25/2015, 08/26/2015 and 08/29/2015.

Job ID: 490-85437-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

1,2-Dichloroethane-d4 (Surr) failed the surrogate recovery criteria high for CM-100-081715 (490-85437-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

1,4-Dioxane exceeded the RPD limit for LCSD 490-276290/4. Refer to the QC report for details.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 490-277393.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GC MS)

Samples PM Air Shaft-180-081715 (490-85437-1), CM-100-081715 (490-85437-2), CM-160-081715 (490-85437-3), RW-12 (55-65) -081715 (490-85437-4), RW-11S (236-241)-081715 (490-85437-5) and FB-03-081815 (490-85437-6) were analyzed for semivolatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/24/2015 and analyzed on 08/26/2015.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-275780 and analytical batch 490-276363.

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

POLYCHLORINATED BIPHENYLS (PCBS)

Samples PM Air Shaft-180-081715 (490-85437-1), CM-100-081715 (490-85437-2), CM-160-081715 (490-85437-3), RW-12 (55-65) -081715 (490-85437-4), RW-11S (236-241)-081715 (490-85437-5) and FB-03-081815 (490-85437-6) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 08/31/2015 and analyzed on 09/01/2015.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-277676.

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

POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

Samples PM Air Shaft-180-081715 (490-85437-1), CM-100-081715 (490-85437-2), CM-160-081715 (490-85437-3), RW-12 (55-65) -081715 (490-85437-4), RW-11S (236-241)-081715 (490-85437-5) and FB-03-081815 (490-85437-6) were analyzed for polycyclic aromatic hydrocarbons (PAHs) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/24/2015 and analyzed on 08/27/2015 and 08/28/2015.

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

DISSOLVED METALS (ICPMS)

Samples PM Air Shaft-180-081715 (490-85437-1), CM-100-081715 (490-85437-2), CM-160-081715 (490-85437-3), RW-12 (55-65) -081715 (490-85437-4), RW-11S (236-241)-081715 (490-85437-5) and FB-03-081815 (490-85437-6) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/26/2015 and analyzed on 08/26/2015 and 08/31/2015.

Vanadium was detected in method blank MB 490-276235/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

METALS (ICPMS)

Samples PM Air Shaft-180-081715 (490-85437-1), CM-100-081715 (490-85437-2), CM-160-081715 (490-85437-3), RW-12 (55-65)

Job ID: 490-85437-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

-081715 (490-85437-4), RW-11S (236-241)-081715 (490-85437-5) and FB-03-081815 (490-85437-6) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/20/2015 and analyzed on 08/21/2015, 08/26/2015, 08/31/2015 and 09/02/2015.

Manganese and Vanadium were detected in method blank MB 490-274876/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Samples PM Air Shaft-180-081715 (490-85437-1)[5X], CM-160-081715 (490-85437-3)[5X] and RW-12 (55-65)-081715 (490-85437-4)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

DISSOLVED MERCURY (CVAA)

Samples PM Air Shaft-180-081715 (490-85437-1), CM-100-081715 (490-85437-2), CM-160-081715 (490-85437-3), RW-12 (55-65) -081715 (490-85437-4), RW-11S (236-241)-081715 (490-85437-5) and FB-03-081815 (490-85437-6) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/24/2015 and analyzed on 08/25/2015.

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

TOTAL MERCURY

Samples PM Air Shaft-180-081715 (490-85437-1), CM-100-081715 (490-85437-2), CM-160-081715 (490-85437-3), RW-12 (55-65) -081715 (490-85437-4), RW-11S (236-241)-081715 (490-85437-5) and FB-03-081815 (490-85437-6) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/27/2015, 09/01/2015 and 09/02/2015 and analyzed on 08/28/2015 and 09/02/2015.

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

ALKALINITY

Samples PM Air Shaft-180-081715 (490-85437-1), CM-100-081715 (490-85437-2), CM-160-081715 (490-85437-3), RW-12 (55-65) -081715 (490-85437-4), RW-11S (236-241)-081715 (490-85437-5) and FB-03-081815 (490-85437-6) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/19/2015.

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

TOTAL CYANIDE

Samples PM Air Shaft-180-081715 (490-85437-1), CM-100-081715 (490-85437-2), CM-160-081715 (490-85437-3), RW-12 (55-65) -081715 (490-85437-4), RW-11S (236-241)-081715 (490-85437-5) and FB-03-081815 (490-85437-6) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared on 08/19/2015 and analyzed on 08/21/2015.

Cyanide, Total failed the recovery criteria low for the MS of sample PM Air Shaft-180-081715MS (490-85437-1) in batch 490-275204. Cyanide, Total failed the recovery criteria low for the MSD of sample PM Air Shaft-180-081715MSD (490-85437-1) in batch 490-275204. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

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

ANIONS

Samples PM Air Shaft-180-081715 (490-85437-1), CM-100-081715 (490-85437-2), CM-160-081715 (490-85437-3), RW-12 (55-65) -081715 (490-85437-4), RW-11S (236-241)-081715 (490-85437-5) and FB-03-081815 (490-85437-6) were analyzed for anions in

Job ID: 490-85437-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

accordance with SW-846 Method 9056. The samples were analyzed on 08/27/2015 and 08/28/2015.

Sample RW-12 (55-65)-081715 (490-85437-4)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
E	Result exceeded calibration range.
X	Surrogate is outside control limits
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: PM Air Shaft-180-081715
Date Collected: 08/17/15 12:05
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/25/15 19:29	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/25/15 19:29	1
1,4-Dioxane	**12**		10	0.27	ug/L			08/25/15 19:29	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/25/15 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*08/25/15 19:29*	*1*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*08/25/15 19:29*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*08/25/15 19:29*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/25/15 19:29*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 18:03	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/28/15 18:03	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 18:03	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 18:03	1
1,1-Dichloroethane	**0.39**	**J**	1.0	0.24	ug/L			08/28/15 18:03	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/28/15 18:03	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/28/15 18:03	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/28/15 18:03	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/28/15 18:03	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/28/15 18:03	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/28/15 18:03	1
1,4-Dichlorobenzene	**0.29**	**J**	1.0	0.17	ug/L			08/28/15 18:03	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/28/15 18:03	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/28/15 18:03	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/28/15 18:03	1
Acetone	2.7	U	25	2.7	ug/L			08/28/15 18:03	1
Benzene	**4.1**		1.0	0.20	ug/L			08/28/15 18:03	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/28/15 18:03	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/28/15 18:03	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/28/15 18:03	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/28/15 18:03	1
Chlorobenzene	**0.81**	**J**	1.0	0.18	ug/L			08/28/15 18:03	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/28/15 18:03	1
Chloroethane	**14**		1.0	0.36	ug/L			08/28/15 18:03	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/28/15 18:03	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/28/15 18:03	1
cis-1,2-Dichloroethene	**0.27**	**J**	1.0	0.21	ug/L			08/28/15 18:03	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/28/15 18:03	1
Cyclohexane	**0.79**	**J**	5.0	0.13	ug/L			08/28/15 18:03	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/28/15 18:03	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/28/15 18:03	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/28/15 18:03	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/28/15 18:03	1
Isopropylbenzene	**1.1**		1.0	0.33	ug/L			08/28/15 18:03	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/28/15 18:03	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/28/15 18:03	1
Methylcyclohexane	**0.17**	**J**	5.0	0.090	ug/L			08/28/15 18:03	1

Client Sample ID: PM Air Shaft-180-081715

Date Collected: 08/17/15 12:05
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/28/15 18:03	1
Styrene	0.28	U	1.0	0.28	ug/L			08/28/15 18:03	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/28/15 18:03	1
Toluene	**0.18**	**J**	1.0	0.17	ug/L			08/28/15 18:03	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/28/15 18:03	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/28/15 18:03	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/28/15 18:03	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/28/15 18:03	1
Vinyl chloride	**0.25**	**J**	1.0	0.18	ug/L			08/28/15 18:03	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/28/15 18:03	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/28/15 18:03	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Dichlorofluoromethane	*0.27*	*J*	*ug/L*		*2.12*	*75-43-4*		*08/28/15 18:03*	*1*
Hexane	*0.23*	*J*	*ug/L*		*3.12*	*110-54-3*		*08/28/15 18:03*	*1*
Tetrahydrofuran	*1.6*	*J*	*ug/L*		*3.80*	*109-99-9*		*08/28/15 18:03*	*1*
1,2,3-Trimethylbenzene	*0.17*	*J*	*ug/L*		*9.00*	*526-73-8*		*08/28/15 18:03*	*1*
Indane	*4.6*	*J N*	*ug/L*		*9.20*	*496-11-7*		*08/28/15 18:03*	*1*
Naphthalene	*0.58*	*J*	*ug/L*		*11.38*	*91-20-3*		*08/28/15 18:03*	*1*
Total Alkanes TIC	*0.23*	*J*	*ug/L*					*08/28/15 18:03*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/28/15 18:03*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/28/15 18:03*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/28/15 18:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*08/28/15 18:03*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/27/15 23:03	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/27/15 23:03	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/27/15 23:03	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/24/15 06:43	08/27/15 23:03	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/24/15 06:43	08/27/15 23:03	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/24/15 06:43	08/27/15 23:03	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/24/15 06:43	08/27/15 23:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*103*		*10 - 120*	*08/24/15 06:43*	*08/27/15 23:03*	*1*
2-Fluorobiphenyl (Surr)	*94*		*29 - 120*	*08/24/15 06:43*	*08/27/15 23:03*	*1*
Nitrobenzene-d5	*81*		*27 - 120*	*08/24/15 06:43*	*08/27/15 23:03*	*1*
Terphenyl-d14	*108*		*13 - 120*	*08/24/15 06:43*	*08/27/15 23:03*	*1*
2-Fluorophenol	*61*		*10 - 120*	*08/24/15 06:43*	*08/27/15 23:03*	*1*
Phenol-d5	*41*		*10 - 120*	*08/24/15 06:43*	*08/27/15 23:03*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 17:04	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/24/15 14:24	08/26/15 17:04	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/24/15 14:24	08/26/15 17:04	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/24/15 14:24	08/26/15 17:04	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: PM Air Shaft-180-081715
Date Collected: 08/17/15 12:05
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/24/15 14:24	08/26/15 17:04	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/24/15 14:24	08/26/15 17:04	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/24/15 14:24	08/26/15 17:04	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/24/15 14:24	08/26/15 17:04	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/24/15 14:24	08/26/15 17:04	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 17:04	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 17:04	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/24/15 14:24	08/26/15 17:04	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/24/15 14:24	08/26/15 17:04	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 17:04	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/24/15 14:24	08/26/15 17:04	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/24/15 14:24	08/26/15 17:04	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/24/15 14:24	08/26/15 17:04	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/24/15 14:24	08/26/15 17:04	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/24/15 14:24	08/26/15 17:04	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/24/15 14:24	08/26/15 17:04	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/24/15 14:24	08/26/15 17:04	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/24/15 14:24	08/26/15 17:04	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/24/15 14:24	08/26/15 17:04	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 17:04	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/24/15 14:24	08/26/15 17:04	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/24/15 14:24	08/26/15 17:04	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/24/15 14:24	08/26/15 17:04	1
Acetophenone	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 17:04	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/24/15 14:24	08/26/15 17:04	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/24/15 14:24	08/26/15 17:04	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/24/15 14:24	08/26/15 17:04	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/24/15 14:24	08/26/15 17:04	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 17:04	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 17:04	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 17:04	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/24/15 14:24	08/26/15 17:04	1
Carbazole	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 17:04	1
Caprolactam	2.4	U	10	2.4	ug/L		08/24/15 14:24	08/26/15 17:04	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/24/15 14:24	08/26/15 17:04	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/24/15 14:24	08/26/15 17:04	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/24/15 14:24	08/26/15 17:04	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/24/15 14:24	08/26/15 17:04	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 17:04	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 17:04	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 17:04	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 17:04	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/24/15 14:24	08/26/15 17:04	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/24/15 14:24	08/26/15 17:04	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/24/15 14:24	08/26/15 17:04	1
Isophorone	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 17:04	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/24/15 14:24	08/26/15 17:04	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/24/15 14:24	08/26/15 17:04	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/24/15 14:24	08/26/15 17:04	1

Client Sample ID: PM Air Shaft-180-081715

Lab Sample ID: 490-85437-1

Date Collected: 08/17/15 12:05

Matrix: Water

Date Received: 08/19/15 09:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/24/15 14:24	08/26/15 17:04	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/24/15 14:24	08/26/15 17:04	1
Phenol	1.5	U	10	1.5	ug/L		08/24/15 14:24	08/26/15 17:04	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/24/15 14:24	08/26/15 17:04	1
Diphenyl	2.2	U	10	2.2	ug/L		08/24/15 14:24	08/26/15 17:04	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 17:04	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 17:04	1
Atrazine	2.9	U	10	2.9	ug/L		08/24/15 14:24	08/26/15 17:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane	*6.7*	*J*	*ug/L*		*2.03*	*123-91-1*	*08/24/15 14:24*	*08/26/15 17:04*	*1*
Cyclohexanamine, N-cyclohexyl-	*4.0*	*J N*	*ug/L*		*6.12*	*101-83-7*	*08/24/15 14:24*	*08/26/15 17:04*	*1*
Benzenesulfonamide, N-cyclohexyl-4-methy	*3.5*	*J N*	*ug/L*		*8.57*	*80-30-8*	*08/24/15 14:24*	*08/26/15 17:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*114*		*10 - 120*	*08/24/15 14:24*	*08/26/15 17:04*	*1*
2-Fluorobiphenyl (Surr)	*93*		*29 - 120*	*08/24/15 14:24*	*08/26/15 17:04*	*1*
2-Fluorophenol (Surr)	*53*		*10 - 120*	*08/24/15 14:24*	*08/26/15 17:04*	*1*
Nitrobenzene-d5 (Surr)	*88*		*27 - 120*	*08/24/15 14:24*	*08/26/15 17:04*	*1*
Phenol-d5 (Surr)	*33*		*10 - 120*	*08/24/15 14:24*	*08/26/15 17:04*	*1*
Terphenyl-d14 (Surr)	*74*		*13 - 120*	*08/24/15 14:24*	*08/26/15 17:04*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 06:31	09/01/15 21:39	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 06:31	09/01/15 21:39	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 06:31	09/01/15 21:39	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 06:31	09/01/15 21:39	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 06:31	09/01/15 21:39	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 06:31	09/01/15 21:39	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 06:31	09/01/15 21:39	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 06:31	09/01/15 21:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*86*		*10 - 150*	*08/31/15 06:31*	*09/01/15 21:39*	*1*
Tetrachloro-m-xylene	*65*		*10 - 150*	*08/31/15 06:31*	*09/01/15 21:39*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.76**		1.00	0.70	mg/L			08/27/15 21:10	1
Sulfate	**1.99**		1.00	0.60	mg/L			08/27/15 21:10	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.050**		0.020	0.0096	mg/L		08/20/15 11:46	08/21/15 20:20	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:20	1
Arsenic	**0.0012**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:20	1
Barium	**0.41**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:20	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:20	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/20/15 11:46	08/21/15 20:20	1

Client Sample ID: PM Air Shaft-180-081715

Lab Sample ID: 490-85437-1

Date Collected: 08/17/15 12:05

Matrix: Water

Date Received: 08/19/15 09:10

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**44.5**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:20	1
Chromium	**0.0025**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:20	1
Cobalt	**0.00064**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:20	1
Copper	**0.0017**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	09/02/15 09:36	1
Iron	**79.3**		0.025	0.010	mg/L		08/20/15 11:46	08/26/15 00:32	1
Lead	**0.024**		0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:20	1
Magnesium	**4.4**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:20	1
Manganese	**0.81**	**B**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:20	1
Nickel	**0.0017**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:20	1
Potassium	**2.0**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:20	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/20/15 11:46	08/21/15 20:20	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 00:32	1
Sodium	**4.7**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:20	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:20	1
Vanadium	**0.010**	**B**	0.0020	0.00010	mg/L		08/20/15 11:46	08/26/15 00:32	1
Zinc	**4.0**		0.13	0.050	mg/L		08/20/15 11:46	08/26/15 00:38	5

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 18:26	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:26	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:26	1
Barium	**0.31**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:26	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:26	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 18:26	1
Calcium	**42.3**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:26	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:26	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:26	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:26	1
Iron	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 18:26	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 18:26	1
Magnesium	**4.4**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:26	1
Manganese	**0.75**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:26	1
Nickel	**0.00062**	**J**	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:26	1
Potassium	**1.9**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:26	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 18:26	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:26	1
Sodium	**4.8**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:26	1
Thallium	**0.00030**	**J**	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 18:26	1
Vanadium	**0.00084**	**J B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 18:26	1
Zinc	**2.8**		0.25	0.10	mg/L		08/26/15 09:20	08/31/15 16:48	10

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/01/15 18:33	09/02/15 13:21	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 21:13	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: PM Air Shaft-180-081715
Date Collected: 08/17/15 12:05
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-1
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U F1	0.010	0.0070	mg/L		08/19/15 16:13	08/21/15 11:50	1
Bicarbonate Alkalinity as CaCO3	**191**		10.0	5.0	mg/L			08/19/15 17:41	1
Total Alkalinity as CaCO3	**191**		10.0	5.0	mg/L			08/19/15 17:41	1

Client Sample ID: CM-100-081715
Date Collected: 08/17/15 15:10
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-2
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/25/15 19:58	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/25/15 19:58	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/25/15 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*140*	*X*	*70 - 130*		*08/25/15 19:58*	*1*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*08/25/15 19:58*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/25/15 19:58*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/25/15 19:58*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.47**	**J ***	10	0.27	ug/L			08/26/15 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/15 18:59*	*1*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*		*08/26/15 18:59*	*1*
Dibromofluoromethane (Surr)	*91*		*70 - 130*		*08/26/15 18:59*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/26/15 18:59*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 18:30	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/28/15 18:30	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 18:30	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 18:30	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/28/15 18:30	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/28/15 18:30	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/28/15 18:30	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/28/15 18:30	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/28/15 18:30	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/28/15 18:30	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/28/15 18:30	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/28/15 18:30	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/28/15 18:30	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/28/15 18:30	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/28/15 18:30	1
Acetone	2.7	U	25	2.7	ug/L			08/28/15 18:30	1
Benzene	0.20	U	1.0	0.20	ug/L			08/28/15 18:30	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/28/15 18:30	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/28/15 18:30	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/28/15 18:30	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/28/15 18:30	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/28/15 18:30	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/28/15 18:30	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/28/15 18:30	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/28/15 18:30	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/28/15 18:30	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/28/15 18:30	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/28/15 18:30	1

Client Sample ID: CM-100-081715
Date Collected: 08/17/15 15:10
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/28/15 18:30	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/28/15 18:30	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/28/15 18:30	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/28/15 18:30	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/28/15 18:30	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/28/15 18:30	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/28/15 18:30	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/28/15 18:30	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/28/15 18:30	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/28/15 18:30	1
Styrene	0.28	U	1.0	0.28	ug/L			08/28/15 18:30	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/28/15 18:30	1
Toluene	0.17	U	1.0	0.17	ug/L			08/28/15 18:30	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/28/15 18:30	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/28/15 18:30	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/28/15 18:30	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/28/15 18:30	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/28/15 18:30	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/28/15 18:30	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/28/15 18:30	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/28/15 18:30*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/28/15 18:30*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/28/15 18:30*	*1*
Dibromofluoromethane (Surr)	*89*		*70 - 130*		*08/28/15 18:30*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/28/15 18:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*08/28/15 18:30*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.023	U	0.046	0.023	ug/L		08/24/15 06:43	08/27/15 23:30	1
Benzo[a]pyrene	0.023	U	0.046	0.023	ug/L		08/24/15 06:43	08/27/15 23:30	1
Benzo[b]fluoranthene	0.023	U	0.046	0.023	ug/L		08/24/15 06:43	08/27/15 23:30	1
Hexachlorobenzene	0.013	U	0.019	0.013	ug/L		08/24/15 06:43	08/27/15 23:30	1
Hexachlorobutadiene	0.19	U	0.37	0.19	ug/L		08/24/15 06:43	08/27/15 23:30	1
N-Nitrosodimethylamine	0.19	U	0.74	0.19	ug/L		08/24/15 06:43	08/27/15 23:30	1
Pentachlorophenol	0.093	U	0.28	0.093	ug/L		08/24/15 06:43	08/27/15 23:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*98*		*10 - 120*	*08/24/15 06:43*	*08/27/15 23:30*	*1*
2-Fluorobiphenyl (Surr)	*94*		*29 - 120*	*08/24/15 06:43*	*08/27/15 23:30*	*1*
Nitrobenzene-d5	*85*		*27 - 120*	*08/24/15 06:43*	*08/27/15 23:30*	*1*
Terphenyl-d14	*111*		*13 - 120*	*08/24/15 06:43*	*08/27/15 23:30*	*1*
2-Fluorophenol	*68*		*10 - 120*	*08/24/15 06:43*	*08/27/15 23:30*	*1*
Phenol-d5	*47*		*10 - 120*	*08/24/15 06:43*	*08/27/15 23:30*	*1*

Client Sample ID: CM-100-081715
Date Collected: 08/17/15 15:10
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 17:28	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/24/15 14:24	08/26/15 17:28	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/24/15 14:24	08/26/15 17:28	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/24/15 14:24	08/26/15 17:28	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/24/15 14:24	08/26/15 17:28	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/24/15 14:24	08/26/15 17:28	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/24/15 14:24	08/26/15 17:28	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/24/15 14:24	08/26/15 17:28	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/24/15 14:24	08/26/15 17:28	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 17:28	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 17:28	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/24/15 14:24	08/26/15 17:28	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/24/15 14:24	08/26/15 17:28	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 17:28	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/24/15 14:24	08/26/15 17:28	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/24/15 14:24	08/26/15 17:28	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/24/15 14:24	08/26/15 17:28	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/24/15 14:24	08/26/15 17:28	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/24/15 14:24	08/26/15 17:28	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/24/15 14:24	08/26/15 17:28	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/24/15 14:24	08/26/15 17:28	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/24/15 14:24	08/26/15 17:28	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/24/15 14:24	08/26/15 17:28	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 17:28	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/24/15 14:24	08/26/15 17:28	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/24/15 14:24	08/26/15 17:28	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/24/15 14:24	08/26/15 17:28	1
Acetophenone	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 17:28	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/24/15 14:24	08/26/15 17:28	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/24/15 14:24	08/26/15 17:28	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/24/15 14:24	08/26/15 17:28	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/24/15 14:24	08/26/15 17:28	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 17:28	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 17:28	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 17:28	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/24/15 14:24	08/26/15 17:28	1
Carbazole	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 17:28	1
Caprolactam	2.4	U	10	2.4	ug/L		08/24/15 14:24	08/26/15 17:28	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/24/15 14:24	08/26/15 17:28	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/24/15 14:24	08/26/15 17:28	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/24/15 14:24	08/26/15 17:28	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/24/15 14:24	08/26/15 17:28	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 17:28	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 17:28	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 17:28	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 17:28	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/24/15 14:24	08/26/15 17:28	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/24/15 14:24	08/26/15 17:28	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/24/15 14:24	08/26/15 17:28	1

Client Sample ID: CM-100-081715

Date Collected: 08/17/15 15:10
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-2

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 17:28	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/24/15 14:24	08/26/15 17:28	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/24/15 14:24	08/26/15 17:28	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/24/15 14:24	08/26/15 17:28	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/24/15 14:24	08/26/15 17:28	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/24/15 14:24	08/26/15 17:28	1
Phenol	1.5	U	10	1.5	ug/L		08/24/15 14:24	08/26/15 17:28	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/24/15 14:24	08/26/15 17:28	1
Diphenyl	2.2	U	10	2.2	ug/L		08/24/15 14:24	08/26/15 17:28	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 17:28	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 17:28	1
Atrazine	2.9	U	10	2.9	ug/L		08/24/15 14:24	08/26/15 17:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Sulfur	*3.2*	*J N*	*ug/L*		*6.47*	*13798-23-7*	*08/24/15 14:24*	*08/26/15 17:28*	*1*
Cyclic octaatomic sulfur	*43*	*J N*	*ug/L*		*8.26*	*10544-50-0*	*08/24/15 14:24*	*08/26/15 17:28*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*99*		*10 - 120*	*08/24/15 14:24*	*08/26/15 17:28*	*1*
2-Fluorobiphenyl (Surr)	*81*		*29 - 120*	*08/24/15 14:24*	*08/26/15 17:28*	*1*
2-Fluorophenol (Surr)	*38*		*10 - 120*	*08/24/15 14:24*	*08/26/15 17:28*	*1*
Nitrobenzene-d5 (Surr)	*73*		*27 - 120*	*08/24/15 14:24*	*08/26/15 17:28*	*1*
Phenol-d5 (Surr)	*24*		*10 - 120*	*08/24/15 14:24*	*08/26/15 17:28*	*1*
Terphenyl-d14 (Surr)	*67*		*13 - 120*	*08/24/15 14:24*	*08/26/15 17:28*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.40	U	0.46	0.40	ug/L		08/31/15 06:31	09/01/15 21:55	1
PCB-1221	0.31	U	0.46	0.31	ug/L		08/31/15 06:31	09/01/15 21:55	1
PCB-1232	0.37	U	0.46	0.37	ug/L		08/31/15 06:31	09/01/15 21:55	1
PCB-1242	0.20	U	0.46	0.20	ug/L		08/31/15 06:31	09/01/15 21:55	1
PCB-1248	0.14	U	0.46	0.14	ug/L		08/31/15 06:31	09/01/15 21:55	1
PCB-1254	0.16	U	0.46	0.16	ug/L		08/31/15 06:31	09/01/15 21:55	1
PCB-1260	0.17	U	0.46	0.17	ug/L		08/31/15 06:31	09/01/15 21:55	1
Polychlorinated biphenyls, Total	0.40	U	0.46	0.40	ug/L		08/31/15 06:31	09/01/15 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*63*		*10 - 150*	*08/31/15 06:31*	*09/01/15 21:55*	*1*
Tetrachloro-m-xylene	*48*		*10 - 150*	*08/31/15 06:31*	*09/01/15 21:55*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**175**		1.00	0.70	mg/L			08/27/15 22:22	1
Sulfate	**3.46**		1.00	0.60	mg/L			08/27/15 22:22	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.014**	**J**	0.020	0.0096	mg/L		08/20/15 11:46	08/21/15 20:25	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:25	1
Arsenic	**0.0016**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:25	1
Barium	**0.11**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:25	1

Client Sample ID: CM-100-081715
Date Collected: 08/17/15 15:10
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-2
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:25	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/20/15 11:46	08/21/15 20:25	1
Calcium	**83.4**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:25	1
Chromium	**0.0018**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:25	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:25	1
Copper	**0.0021**		0.0020	0.00050	mg/L		08/20/15 11:46	09/02/15 09:42	1
Iron	**18.5**		0.025	0.010	mg/L		08/20/15 11:46	08/26/15 00:43	1
Lead	**0.00029**	**J**	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:25	1
Magnesium	**22.4**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:25	1
Manganese	**1.3**	**B**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:25	1
Nickel	**0.0025**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:25	1
Potassium	**5.0**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:25	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/20/15 11:46	08/21/15 20:25	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 00:43	1
Sodium	**79.6**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:25	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:25	1
Vanadium	**0.0024**	**B**	0.0020	0.00010	mg/L		08/20/15 11:46	08/26/15 00:43	1
Zinc	**0.86**		0.025	0.010	mg/L		08/20/15 11:46	08/21/15 20:25	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 18:31	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:31	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:31	1
Barium	**0.095**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:31	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:31	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 18:31	1
Calcium	**82.6**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:31	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:31	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:31	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:31	1
Iron	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 18:31	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 18:31	1
Magnesium	**23.3**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:31	1
Manganese	**1.2**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:31	1
Nickel	**0.0021**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:31	1
Potassium	**4.8**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:31	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 18:31	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:31	1
Sodium	**83.2**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:31	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 18:31	1
Vanadium	**0.00095**	**J B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 18:31	1
Zinc	**0.15**		0.025	0.010	mg/L		08/26/15 09:20	08/26/15 18:31	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/01/15 18:33	09/02/15 13:23	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: CM-100-081715
Date Collected: 08/17/15 15:10
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-2
Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 21:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 16:13	08/21/15 11:53	1
Bicarbonate Alkalinity as CaCO3	**240**		10.0	5.0	mg/L			08/19/15 17:58	1
Total Alkalinity as CaCO3	**240**		10.0	5.0	mg/L			08/19/15 17:58	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: CM-160-081715
Date Collected: 08/17/15 16:45
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-3
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/25/15 20:27	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/25/15 20:27	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/25/15 20:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*08/25/15 20:27*	*1*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*		*08/25/15 20:27*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/25/15 20:27*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/25/15 20:27*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.54**	**J ***	10	0.27	ug/L			08/26/15 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/15 19:28*	*1*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*		*08/26/15 19:28*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*08/26/15 19:28*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/26/15 19:28*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 18:57	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/28/15 18:57	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 18:57	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 18:57	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/28/15 18:57	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/28/15 18:57	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/28/15 18:57	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/28/15 18:57	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/28/15 18:57	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/28/15 18:57	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/28/15 18:57	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/28/15 18:57	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/28/15 18:57	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/28/15 18:57	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/28/15 18:57	1
Acetone	2.7	U	25	2.7	ug/L			08/28/15 18:57	1
Benzene	0.20	U	1.0	0.20	ug/L			08/28/15 18:57	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/28/15 18:57	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/28/15 18:57	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/28/15 18:57	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/28/15 18:57	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/28/15 18:57	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/28/15 18:57	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/28/15 18:57	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/28/15 18:57	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/28/15 18:57	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/28/15 18:57	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/28/15 18:57	1

Client Sample ID: CM-160-081715
Date Collected: 08/17/15 16:45
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/28/15 18:57	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/28/15 18:57	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/28/15 18:57	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/28/15 18:57	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/28/15 18:57	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/28/15 18:57	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/28/15 18:57	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/28/15 18:57	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/28/15 18:57	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/28/15 18:57	1
Styrene	0.28	U	1.0	0.28	ug/L			08/28/15 18:57	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/28/15 18:57	1
Toluene	0.17	U	1.0	0.17	ug/L			08/28/15 18:57	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/28/15 18:57	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/28/15 18:57	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/28/15 18:57	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/28/15 18:57	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/28/15 18:57	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/28/15 18:57	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/28/15 18:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/28/15 18:57*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/28/15 18:57*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*08/28/15 18:57*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*08/28/15 18:57*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*08/28/15 18:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*08/28/15 18:57*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/27/15 23:56	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/27/15 23:56	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/27/15 23:56	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/24/15 06:43	08/27/15 23:56	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/24/15 06:43	08/27/15 23:56	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/24/15 06:43	08/27/15 23:56	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/24/15 06:43	08/27/15 23:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*94*		*10 - 120*	*08/24/15 06:43*	*08/27/15 23:56*	*1*
2-Fluorobiphenyl (Surr)	*91*		*29 - 120*	*08/24/15 06:43*	*08/27/15 23:56*	*1*
Nitrobenzene-d5	*79*		*27 - 120*	*08/24/15 06:43*	*08/27/15 23:56*	*1*
Terphenyl-d14	*102*		*13 - 120*	*08/24/15 06:43*	*08/27/15 23:56*	*1*
2-Fluorophenol	*66*		*10 - 120*	*08/24/15 06:43*	*08/27/15 23:56*	*1*
Phenol-d5	*45*		*10 - 120*	*08/24/15 06:43*	*08/27/15 23:56*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: CM-160-081715
Date Collected: 08/17/15 16:45
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 17:52	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/24/15 14:24	08/26/15 17:52	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/24/15 14:24	08/26/15 17:52	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/24/15 14:24	08/26/15 17:52	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/24/15 14:24	08/26/15 17:52	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/24/15 14:24	08/26/15 17:52	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/24/15 14:24	08/26/15 17:52	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/24/15 14:24	08/26/15 17:52	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/24/15 14:24	08/26/15 17:52	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 17:52	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 17:52	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/24/15 14:24	08/26/15 17:52	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/24/15 14:24	08/26/15 17:52	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 17:52	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/24/15 14:24	08/26/15 17:52	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/24/15 14:24	08/26/15 17:52	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/24/15 14:24	08/26/15 17:52	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/24/15 14:24	08/26/15 17:52	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/24/15 14:24	08/26/15 17:52	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/24/15 14:24	08/26/15 17:52	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/24/15 14:24	08/26/15 17:52	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/24/15 14:24	08/26/15 17:52	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/24/15 14:24	08/26/15 17:52	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 17:52	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/24/15 14:24	08/26/15 17:52	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/24/15 14:24	08/26/15 17:52	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/24/15 14:24	08/26/15 17:52	1
Acetophenone	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 17:52	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/24/15 14:24	08/26/15 17:52	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/24/15 14:24	08/26/15 17:52	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/24/15 14:24	08/26/15 17:52	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/24/15 14:24	08/26/15 17:52	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 17:52	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 17:52	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 17:52	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/24/15 14:24	08/26/15 17:52	1
Carbazole	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 17:52	1
Caprolactam	2.4	U	10	2.4	ug/L		08/24/15 14:24	08/26/15 17:52	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/24/15 14:24	08/26/15 17:52	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/24/15 14:24	08/26/15 17:52	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/24/15 14:24	08/26/15 17:52	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/24/15 14:24	08/26/15 17:52	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 17:52	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 17:52	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 17:52	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 17:52	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/24/15 14:24	08/26/15 17:52	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/24/15 14:24	08/26/15 17:52	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/24/15 14:24	08/26/15 17:52	1

Client Sample ID: CM-160-081715

Date Collected: 08/17/15 16:45
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-3

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 17:52	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/24/15 14:24	08/26/15 17:52	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/24/15 14:24	08/26/15 17:52	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/24/15 14:24	08/26/15 17:52	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/24/15 14:24	08/26/15 17:52	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/24/15 14:24	08/26/15 17:52	1
Phenol	1.5	U	10	1.5	ug/L		08/24/15 14:24	08/26/15 17:52	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/24/15 14:24	08/26/15 17:52	1
Diphenyl	2.2	U	10	2.2	ug/L		08/24/15 14:24	08/26/15 17:52	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 17:52	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 17:52	1
Atrazine	2.9	U	10	2.9	ug/L		08/24/15 14:24	08/26/15 17:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/24/15 14:24*	*08/26/15 17:52*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*79*		*10 - 120*	*08/24/15 14:24*	*08/26/15 17:52*	*1*
2-Fluorobiphenyl (Surr)	*65*		*29 - 120*	*08/24/15 14:24*	*08/26/15 17:52*	*1*
2-Fluorophenol (Surr)	*35*		*10 - 120*	*08/24/15 14:24*	*08/26/15 17:52*	*1*
Nitrobenzene-d5 (Surr)	*63*		*27 - 120*	*08/24/15 14:24*	*08/26/15 17:52*	*1*
Phenol-d5 (Surr)	*21*		*10 - 120*	*08/24/15 14:24*	*08/26/15 17:52*	*1*
Terphenyl-d14 (Surr)	*51*		*13 - 120*	*08/24/15 14:24*	*08/26/15 17:52*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 06:31	09/01/15 22:11	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 06:31	09/01/15 22:11	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 06:31	09/01/15 22:11	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 06:31	09/01/15 22:11	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 06:31	09/01/15 22:11	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 06:31	09/01/15 22:11	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 06:31	09/01/15 22:11	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 06:31	09/01/15 22:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*97*		*10 - 150*	*08/31/15 06:31*	*09/01/15 22:11*	*1*
Tetrachloro-m-xylene	*75*		*10 - 150*	*08/31/15 06:31*	*09/01/15 22:11*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**172**		1.00	0.70	mg/L			08/27/15 22:46	1
Sulfate	**2.85**		1.00	0.60	mg/L			08/27/15 22:46	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.011**	**J**	0.020	0.0096	mg/L		08/20/15 11:46	08/21/15 20:30	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:30	1
Arsenic	**0.0017**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:30	1
Barium	**0.12**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:30	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:30	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: CM-160-081715
Date Collected: 08/17/15 16:45
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-3
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00085	J	0.0010	0.00040	mg/L		08/20/15 11:46	08/21/15 20:30	1
Calcium	85.0		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:30	1
Chromium	0.0026		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:30	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:30	1
Copper	0.0027		0.0020	0.00050	mg/L		08/20/15 11:46	09/02/15 09:47	1
Iron	19.0		0.025	0.010	mg/L		08/20/15 11:46	08/26/15 00:49	1
Lead	0.0078		0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:30	1
Magnesium	22.7		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:30	1
Manganese	1.4	B	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:30	1
Nickel	0.0023		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:30	1
Potassium	5.1		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:30	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/20/15 11:46	08/21/15 20:30	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 00:49	1
Sodium	79.8		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:30	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:30	1
Vanadium	0.0028	B	0.0020	0.00010	mg/L		08/20/15 11:46	08/26/15 00:49	1
Zinc	2.5		0.13	0.050	mg/L		08/20/15 11:46	08/26/15 01:07	5

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 18:46	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:46	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:46	1
Barium	0.092		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:46	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:46	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 18:46	1
Calcium	76.8		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:46	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:46	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:46	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:46	1
Iron	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 18:46	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 18:46	1
Magnesium	21.7		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:46	1
Manganese	1.2		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:46	1
Nickel	0.0012	J	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:46	1
Potassium	4.5		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:46	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 18:46	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:46	1
Sodium	77.3		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:46	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 18:46	1
Vanadium	0.00095	J B	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 18:46	1
Zinc	0.91		0.025	0.010	mg/L		08/26/15 09:20	08/26/15 18:46	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/02/15 18:12	09/02/15 22:47	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 21:23	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: CM-160-081715
Date Collected: 08/17/15 16:45
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 16:13	08/21/15 11:54	1
Bicarbonate Alkalinity as CaCO3	**248**		10.0	5.0	mg/L			08/19/15 18:03	1
Total Alkalinity as CaCO3	**248**		10.0	5.0	mg/L			08/19/15 18:03	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: RW-12 (55-65)-081715
Date Collected: 08/17/15 11:11
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-4
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/26/15 19:57	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/26/15 19:57	1
1,4-Dioxane	0.27	U *	10	0.27	ug/L			08/26/15 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*08/26/15 19:57*	*1*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*		*08/26/15 19:57*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*08/26/15 19:57*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/26/15 19:57*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/29/15 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/29/15 17:34*	*1*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*08/29/15 17:34*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/29/15 17:34*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/29/15 17:34*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 19:24	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/28/15 19:24	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 19:24	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 19:24	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/28/15 19:24	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/28/15 19:24	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/28/15 19:24	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/28/15 19:24	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/28/15 19:24	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/28/15 19:24	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/28/15 19:24	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/28/15 19:24	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/28/15 19:24	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/28/15 19:24	1
4-Methyl-2-pentanone (MIBK)	**1.0**	**J**	10	0.81	ug/L			08/28/15 19:24	1
Acetone	**8.3**	**J**	25	2.7	ug/L			08/28/15 19:24	1
Benzene	0.20	U	1.0	0.20	ug/L			08/28/15 19:24	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/28/15 19:24	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/28/15 19:24	1
Carbon disulfide	**3.4**		1.0	0.22	ug/L			08/28/15 19:24	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/28/15 19:24	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/28/15 19:24	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/28/15 19:24	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/28/15 19:24	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/28/15 19:24	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/28/15 19:24	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/28/15 19:24	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/28/15 19:24	1

Client Sample ID: RW-12 (55-65)-081715

Lab Sample ID: 490-85437-4

Date Collected: 08/17/15 11:11

Matrix: Water

Date Received: 08/19/15 09:10

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	**0.17**	**J**	5.0	0.13	ug/L			08/28/15 19:24	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/28/15 19:24	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/28/15 19:24	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/28/15 19:24	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/28/15 19:24	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/28/15 19:24	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/28/15 19:24	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/28/15 19:24	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/28/15 19:24	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/28/15 19:24	1
Styrene	0.28	U	1.0	0.28	ug/L			08/28/15 19:24	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/28/15 19:24	1
Toluene	**3.6**		1.0	0.17	ug/L			08/28/15 19:24	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/28/15 19:24	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/28/15 19:24	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/28/15 19:24	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/28/15 19:24	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/28/15 19:24	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/28/15 19:24	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/28/15 19:24	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Isopropyl alcohol	*20*	*J*	*ug/L*		*2.60*	*67-63-0*		*08/28/15 19:24*	*1*
Unknown	*14*	*J*	*ug/L*		*9.14*			*08/28/15 19:24*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/28/15 19:24*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/28/15 19:24*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*08/28/15 19:24*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/28/15 19:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*08/28/15 19:24*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/28/15 00:22	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/28/15 00:22	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/28/15 00:22	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/24/15 06:43	08/28/15 00:22	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/24/15 06:43	08/28/15 00:22	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/24/15 06:43	08/28/15 00:22	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/24/15 06:43	08/28/15 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*97*		*10 - 120*	*08/24/15 06:43*	*08/28/15 00:22*	*1*
2-Fluorobiphenyl (Surr)	*75*		*29 - 120*	*08/24/15 06:43*	*08/28/15 00:22*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*08/24/15 06:43*	*08/28/15 00:22*	*1*
Terphenyl-d14	*90*		*13 - 120*	*08/24/15 06:43*	*08/28/15 00:22*	*1*
2-Fluorophenol	*61*		*10 - 120*	*08/24/15 06:43*	*08/28/15 00:22*	*1*
Phenol-d5	*45*		*10 - 120*	*08/24/15 06:43*	*08/28/15 00:22*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: RW-12 (55-65)-081715
Date Collected: 08/17/15 11:11
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 18:15	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/24/15 14:24	08/26/15 18:15	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/24/15 14:24	08/26/15 18:15	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/24/15 14:24	08/26/15 18:15	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/24/15 14:24	08/26/15 18:15	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/24/15 14:24	08/26/15 18:15	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/24/15 14:24	08/26/15 18:15	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/24/15 14:24	08/26/15 18:15	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/24/15 14:24	08/26/15 18:15	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 18:15	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 18:15	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/24/15 14:24	08/26/15 18:15	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/24/15 14:24	08/26/15 18:15	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 18:15	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/24/15 14:24	08/26/15 18:15	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/24/15 14:24	08/26/15 18:15	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/24/15 14:24	08/26/15 18:15	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/24/15 14:24	08/26/15 18:15	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/24/15 14:24	08/26/15 18:15	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/24/15 14:24	08/26/15 18:15	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/24/15 14:24	08/26/15 18:15	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/24/15 14:24	08/26/15 18:15	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/24/15 14:24	08/26/15 18:15	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 18:15	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/24/15 14:24	08/26/15 18:15	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/24/15 14:24	08/26/15 18:15	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/24/15 14:24	08/26/15 18:15	1
Acetophenone	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 18:15	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/24/15 14:24	08/26/15 18:15	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/24/15 14:24	08/26/15 18:15	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/24/15 14:24	08/26/15 18:15	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/24/15 14:24	08/26/15 18:15	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 18:15	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 18:15	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 18:15	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/24/15 14:24	08/26/15 18:15	1
Carbazole	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 18:15	1
Caprolactam	2.4	U	10	2.4	ug/L		08/24/15 14:24	08/26/15 18:15	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/24/15 14:24	08/26/15 18:15	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/24/15 14:24	08/26/15 18:15	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/24/15 14:24	08/26/15 18:15	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/24/15 14:24	08/26/15 18:15	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 18:15	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 18:15	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 18:15	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 18:15	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/24/15 14:24	08/26/15 18:15	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/24/15 14:24	08/26/15 18:15	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/24/15 14:24	08/26/15 18:15	1

Client Sample ID: RW-12 (55-65)-081715
Date Collected: 08/17/15 11:11
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 18:15	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/24/15 14:24	08/26/15 18:15	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/24/15 14:24	08/26/15 18:15	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/24/15 14:24	08/26/15 18:15	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/24/15 14:24	08/26/15 18:15	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/24/15 14:24	08/26/15 18:15	1
Phenol	**3.0**	**J**	10	1.5	ug/L		08/24/15 14:24	08/26/15 18:15	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/24/15 14:24	08/26/15 18:15	1
Diphenyl	2.2	U	10	2.2	ug/L		08/24/15 14:24	08/26/15 18:15	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 18:15	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 18:15	1
Atrazine	2.9	U	10	2.9	ug/L		08/24/15 14:24	08/26/15 18:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethanol, 2-(2-butoxyethoxy)-	*28*	*J N*	*ug/L*		*5.00*	*112-34-5*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
Benzothiazole	*12*	*J N*	*ug/L*		*5.23*	*95-16-9*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
2(3H)-Furanone, 5-heptyldihydro-	*31*	*J N*	*ug/L*		*6.92*	*104-67-6*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
2H-Pyran-2-one, 6-heptyltetrahydro-	*36*	*J N*	*ug/L*		*7.03*	*713-95-1*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
2-Methyl-4-hydroxybenzoxazole	*27*	*J N*	*ug/L*		*7.16*	*51110-60-2*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
Benzenesulfonamide, N-butyl-	*18*	*J N*	*ug/L*		*7.32*	*3622-84-2*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca -6,	*9.0*	*J N*	*ug/L*		*7.71*	*82304-66-3*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
3,5-di-tert-Butyl-4-hydroxyphenylprop ion	*20*	*J N*	*ug/L*		*7.96*	*20170-32-5*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
2-Mercaptobenzothiazole	*30*	*J N*	*ug/L*		*8.05*	*149-30-4*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
2-Propanone, dimethylhydrazone	*18*	*J N*	*ug/L*		*8.26*	*13483-31-3*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
Octanoic acid, 8-[(tetrahydro-2H-pyran-2	*13*	*J N*	*ug/L*		*8.36*	*54699-43-3*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
Octadecanoic acid	*60*	*J N*	*ug/L*		*8.51*	*57-11-4*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
Acetamide, N-(1-dimethylaminomethylene-2	*29*	*J N*	*ug/L*		*8.82*	*220098-91-9*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	*27*	*J N*	*ug/L*		*9.38*	*1740-19-8*	*08/24/15 14:24*	*08/26/15 18:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*104*		*10 - 120*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
2-Fluorobiphenyl (Surr)	*88*		*29 - 120*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
2-Fluorophenol (Surr)	*45*		*10 - 120*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
Nitrobenzene-d5 (Surr)	*82*		*27 - 120*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
Phenol-d5 (Surr)	*28*		*10 - 120*	*08/24/15 14:24*	*08/26/15 18:15*	*1*
Terphenyl-d14 (Surr)	*71*		*13 - 120*	*08/24/15 14:24*	*08/26/15 18:15*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 06:31	09/01/15 22:26	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 06:31	09/01/15 22:26	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 06:31	09/01/15 22:26	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 06:31	09/01/15 22:26	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 06:31	09/01/15 22:26	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 06:31	09/01/15 22:26	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 06:31	09/01/15 22:26	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: RW-12 (55-65)-081715
Date Collected: 08/17/15 11:11
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-4
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 06:31	09/01/15 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*40*		*10 - 150*	*08/31/15 06:31*	*09/01/15 22:26*	*1*
Tetrachloro-m-xylene	*34*		*10 - 150*	*08/31/15 06:31*	*09/01/15 22:26*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**47.2**		1.00	0.70	mg/L			08/27/15 23:10	1
Sulfate	**299**		5.00	3.00	mg/L			08/27/15 23:34	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.28**		0.020	0.0096	mg/L		08/20/15 11:46	08/21/15 20:35	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:35	1
Arsenic	**0.013**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:35	1
Barium	**0.025**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:35	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:35	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/20/15 11:46	08/21/15 20:35	1
Calcium	**72.7**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:35	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:35	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:35	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	09/02/15 09:53	1
Iron	**0.019**	**J**	0.025	0.010	mg/L		08/20/15 11:46	08/26/15 01:12	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:35	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:35	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:35	1
Nickel	**0.0033**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:35	1
Potassium	**39.3**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:35	1
Selenium	**0.0099**		0.0020	0.00060	mg/L		08/20/15 11:46	08/21/15 20:35	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 01:12	1
Sodium	**170**		10.0	1.3	mg/L		08/20/15 11:46	08/31/15 17:19	10
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:35	1
Vanadium	**0.0068**	**B**	0.0020	0.00010	mg/L		08/20/15 11:46	08/26/15 01:12	1
Zinc	0.010	U	0.025	0.010	mg/L		08/20/15 11:46	08/21/15 20:35	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.24**		0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 18:52	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:52	1
Arsenic	**0.012**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:52	1
Barium	**0.024**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:52	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:52	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 18:52	1
Calcium	**57.7**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:52	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:52	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:52	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:52	1
Iron	**0.011**	**J**	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 18:52	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 18:52	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: RW-12 (55-65)-081715
Date Collected: 08/17/15 11:11
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-4
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:52	1
Manganese	**0.00071**	**J**	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:52	1
Nickel	**0.0022**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:52	1
Potassium	**34.8**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:52	1
Selenium	**0.0088**		0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 18:52	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:52	1
Sodium	**155**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:52	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 18:52	1
Vanadium	**0.0048**	**B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 18:52	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 18:52	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/02/15 18:12	09/02/15 22:49	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 21:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 16:13	08/21/15 11:54	1
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/19/15 18:12	1
Total Alkalinity as CaCO3	**101**		10.0	5.0	mg/L			08/19/15 18:12	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: RW-11S (236-241)-081715

Date Collected: 08/17/15 15:15
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-5

Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/26/15 20:25	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/26/15 20:25	1
1,4-Dioxane	**1.1**	**J ***	10	0.27	ug/L			08/26/15 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/26/15 20:25*	*1*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*		*08/26/15 20:25*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/26/15 20:25*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/26/15 20:25*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/29/15 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*08/29/15 18:03*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/29/15 18:03*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/29/15 18:03*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/29/15 18:03*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 19:51	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/28/15 19:51	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 19:51	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 19:51	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/28/15 19:51	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/28/15 19:51	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/28/15 19:51	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/28/15 19:51	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/28/15 19:51	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/28/15 19:51	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/28/15 19:51	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/28/15 19:51	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/28/15 19:51	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/28/15 19:51	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/28/15 19:51	1
Acetone	2.7	U	25	2.7	ug/L			08/28/15 19:51	1
Benzene	0.20	U	1.0	0.20	ug/L			08/28/15 19:51	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/28/15 19:51	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/28/15 19:51	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/28/15 19:51	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/28/15 19:51	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/28/15 19:51	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/28/15 19:51	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/28/15 19:51	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/28/15 19:51	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/28/15 19:51	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/28/15 19:51	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/28/15 19:51	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: RW-11S (236-241)-081715
Date Collected: 08/17/15 15:15
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/28/15 19:51	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/28/15 19:51	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/28/15 19:51	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/28/15 19:51	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/28/15 19:51	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/28/15 19:51	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/28/15 19:51	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/28/15 19:51	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/28/15 19:51	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/28/15 19:51	1
Styrene	0.28	U	1.0	0.28	ug/L			08/28/15 19:51	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/28/15 19:51	1
Toluene	0.17	U	1.0	0.17	ug/L			08/28/15 19:51	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/28/15 19:51	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/28/15 19:51	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/28/15 19:51	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/28/15 19:51	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/28/15 19:51	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/28/15 19:51	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/28/15 19:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/28/15 19:51*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/28/15 19:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*08/28/15 19:51*	*1*
Dibromofluoromethane (Surr)	*85*		*70 - 130*		*08/28/15 19:51*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*08/28/15 19:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*08/28/15 19:51*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/28/15 00:48	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/28/15 00:48	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/28/15 00:48	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/24/15 06:43	08/28/15 00:48	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/24/15 06:43	08/28/15 00:48	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/24/15 06:43	08/28/15 00:48	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/24/15 06:43	08/28/15 00:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*89*		*10 - 120*	*08/24/15 06:43*	*08/28/15 00:48*	*1*
2-Fluorobiphenyl (Surr)	*83*		*29 - 120*	*08/24/15 06:43*	*08/28/15 00:48*	*1*
Nitrobenzene-d5	*72*		*27 - 120*	*08/24/15 06:43*	*08/28/15 00:48*	*1*
Terphenyl-d14	*94*		*13 - 120*	*08/24/15 06:43*	*08/28/15 00:48*	*1*
2-Fluorophenol	*65*		*10 - 120*	*08/24/15 06:43*	*08/28/15 00:48*	*1*
Phenol-d5	*43*		*10 - 120*	*08/24/15 06:43*	*08/28/15 00:48*	*1*

Client Sample ID: RW-11S (236-241)-081715
Date Collected: 08/17/15 15:15
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 18:39	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/24/15 14:24	08/26/15 18:39	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/24/15 14:24	08/26/15 18:39	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/24/15 14:24	08/26/15 18:39	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/24/15 14:24	08/26/15 18:39	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/24/15 14:24	08/26/15 18:39	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/24/15 14:24	08/26/15 18:39	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/24/15 14:24	08/26/15 18:39	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/24/15 14:24	08/26/15 18:39	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 18:39	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 18:39	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/24/15 14:24	08/26/15 18:39	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/24/15 14:24	08/26/15 18:39	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 18:39	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/24/15 14:24	08/26/15 18:39	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/24/15 14:24	08/26/15 18:39	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/24/15 14:24	08/26/15 18:39	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/24/15 14:24	08/26/15 18:39	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/24/15 14:24	08/26/15 18:39	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/24/15 14:24	08/26/15 18:39	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/24/15 14:24	08/26/15 18:39	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/24/15 14:24	08/26/15 18:39	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/24/15 14:24	08/26/15 18:39	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 18:39	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/24/15 14:24	08/26/15 18:39	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/24/15 14:24	08/26/15 18:39	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/24/15 14:24	08/26/15 18:39	1
Acetophenone	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 18:39	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/24/15 14:24	08/26/15 18:39	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/24/15 14:24	08/26/15 18:39	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/24/15 14:24	08/26/15 18:39	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/24/15 14:24	08/26/15 18:39	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 18:39	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 18:39	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 18:39	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/24/15 14:24	08/26/15 18:39	1
Carbazole	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 18:39	1
Caprolactam	2.4	U	10	2.4	ug/L		08/24/15 14:24	08/26/15 18:39	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/24/15 14:24	08/26/15 18:39	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/24/15 14:24	08/26/15 18:39	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/24/15 14:24	08/26/15 18:39	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/24/15 14:24	08/26/15 18:39	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 18:39	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 18:39	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 18:39	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 18:39	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/24/15 14:24	08/26/15 18:39	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/24/15 14:24	08/26/15 18:39	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/24/15 14:24	08/26/15 18:39	1

Client Sample ID: RW-11S (236-241)-081715

Date Collected: 08/17/15 15:15
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-5

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 18:39	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/24/15 14:24	08/26/15 18:39	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/24/15 14:24	08/26/15 18:39	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/24/15 14:24	08/26/15 18:39	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/24/15 14:24	08/26/15 18:39	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/24/15 14:24	08/26/15 18:39	1
Phenol	1.5	U	10	1.5	ug/L		08/24/15 14:24	08/26/15 18:39	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/24/15 14:24	08/26/15 18:39	1
Diphenyl	2.2	U	10	2.2	ug/L		08/24/15 14:24	08/26/15 18:39	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 18:39	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 18:39	1
Atrazine	2.9	U	10	2.9	ug/L		08/24/15 14:24	08/26/15 18:39	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/24/15 14:24*	*08/26/15 18:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*92*		*10 - 120*	*08/24/15 14:24*	*08/26/15 18:39*	*1*
2-Fluorobiphenyl (Surr)	*76*		*29 - 120*	*08/24/15 14:24*	*08/26/15 18:39*	*1*
2-Fluorophenol (Surr)	*40*		*10 - 120*	*08/24/15 14:24*	*08/26/15 18:39*	*1*
Nitrobenzene-d5 (Surr)	*72*		*27 - 120*	*08/24/15 14:24*	*08/26/15 18:39*	*1*
Phenol-d5 (Surr)	*24*		*10 - 120*	*08/24/15 14:24*	*08/26/15 18:39*	*1*
Terphenyl-d14 (Surr)	*73*		*13 - 120*	*08/24/15 14:24*	*08/26/15 18:39*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 06:31	09/01/15 22:42	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 06:31	09/01/15 22:42	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 06:31	09/01/15 22:42	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 06:31	09/01/15 22:42	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 06:31	09/01/15 22:42	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 06:31	09/01/15 22:42	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 06:31	09/01/15 22:42	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 06:31	09/01/15 22:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*102*		*10 - 150*	*08/31/15 06:31*	*09/01/15 22:42*	*1*
Tetrachloro-m-xylene	*79*		*10 - 150*	*08/31/15 06:31*	*09/01/15 22:42*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**0.82**	**J**	1.00	0.70	mg/L			08/27/15 23:58	1
Sulfate	**7.21**		1.00	0.60	mg/L			08/27/15 23:58	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/20/15 11:46	08/21/15 20:40	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:40	1
Arsenic	**0.0010**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:40	1
Barium	**0.015**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:40	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:40	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: RW-11S (236-241)-081715
Date Collected: 08/17/15 15:15
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-5
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/20/15 11:46	08/21/15 20:40	1
Calcium	**16.1**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:40	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:40	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:40	1
Copper	**0.0070**		0.0020	0.00050	mg/L		08/20/15 11:46	09/02/15 09:59	1
Iron	**0.057**		0.025	0.010	mg/L		08/20/15 11:46	08/26/15 01:18	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:40	1
Magnesium	**2.2**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:40	1
Manganese	**0.22**	**B**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:40	1
Nickel	**0.0039**		0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:40	1
Potassium	**1.5**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:40	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/20/15 11:46	08/21/15 20:40	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 01:18	1
Sodium	**3.1**		1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:40	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:40	1
Vanadium	**0.0024**	**B**	0.0020	0.00010	mg/L		08/20/15 11:46	08/26/15 01:18	1
Zinc	**0.015**	**J**	0.025	0.010	mg/L		08/20/15 11:46	08/21/15 20:40	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 18:57	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:57	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:57	1
Barium	**0.015**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:57	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:57	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 18:57	1
Calcium	**15.2**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:57	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:57	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:57	1
Copper	**0.0041**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:57	1
Iron	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 18:57	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 18:57	1
Magnesium	**2.2**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:57	1
Manganese	**0.20**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:57	1
Nickel	**0.0027**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:57	1
Potassium	**1.4**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:57	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 18:57	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 18:57	1
Sodium	**3.0**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 18:57	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 18:57	1
Vanadium	**0.0011**	**J B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 18:57	1
Zinc	**0.013**	**J**	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 18:57	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00018**	**J**	0.00020	0.00015	mg/L		08/27/15 18:15	08/28/15 21:41	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 21:28	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: RW-11S (236-241)-081715
Date Collected: 08/17/15 15:15
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-5
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 16:13	08/21/15 11:55	1
Bicarbonate Alkalinity as CaCO3	**49.0**		10.0	5.0	mg/L			08/19/15 18:17	1
Total Alkalinity as CaCO3	**49.0**		10.0	5.0	mg/L			08/19/15 18:17	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: FB-03-081815
Date Collected: 08/18/15 08:00
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-6
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/26/15 20:54	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/26/15 20:54	1
1,4-Dioxane	0.27	U *	10	0.27	ug/L			08/26/15 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/26/15 20:54*	*1*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*		*08/26/15 20:54*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*08/26/15 20:54*	*1*
Toluene-d8 (Surr)	*109*		*70 - 130*		*08/26/15 20:54*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/29/15 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*08/29/15 18:31*	*1*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*08/29/15 18:31*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/29/15 18:31*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/29/15 18:31*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 17:36	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/28/15 17:36	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 17:36	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 17:36	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/28/15 17:36	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/28/15 17:36	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/28/15 17:36	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/28/15 17:36	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/28/15 17:36	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/28/15 17:36	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/28/15 17:36	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/28/15 17:36	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/28/15 17:36	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/28/15 17:36	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/28/15 17:36	1
Acetone	**13**	**J**	25	2.7	ug/L			08/28/15 17:36	1
Benzene	0.20	U	1.0	0.20	ug/L			08/28/15 17:36	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/28/15 17:36	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/28/15 17:36	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/28/15 17:36	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/28/15 17:36	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/28/15 17:36	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/28/15 17:36	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/28/15 17:36	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/28/15 17:36	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/28/15 17:36	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/28/15 17:36	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/28/15 17:36	1

Client Sample ID: FB-03-081815
Date Collected: 08/18/15 08:00
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/28/15 17:36	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/28/15 17:36	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/28/15 17:36	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/28/15 17:36	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/28/15 17:36	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/28/15 17:36	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/28/15 17:36	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/28/15 17:36	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/28/15 17:36	1
Methylene Chloride	**0.39**	**J**	5.0	0.22	ug/L			08/28/15 17:36	1
Styrene	0.28	U	1.0	0.28	ug/L			08/28/15 17:36	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/28/15 17:36	1
Toluene	0.17	U	1.0	0.17	ug/L			08/28/15 17:36	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/28/15 17:36	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/28/15 17:36	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/28/15 17:36	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/28/15 17:36	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/28/15 17:36	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/28/15 17:36	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/28/15 17:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Silanol, trimethyl-	*6.3*	*J N*	*ug/L*		*3.48*	*1066-40-6*		*08/28/15 17:36*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/28/15 17:36*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/28/15 17:36*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*08/28/15 17:36*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*08/28/15 17:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*		*08/28/15 17:36*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/28/15 01:14	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/28/15 01:14	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/28/15 01:14	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/24/15 06:43	08/28/15 01:14	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/24/15 06:43	08/28/15 01:14	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/24/15 06:43	08/28/15 01:14	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/24/15 06:43	08/28/15 01:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*93*		*10 - 120*	*08/24/15 06:43*	*08/28/15 01:14*	*1*
2-Fluorobiphenyl (Surr)	*80*		*29 - 120*	*08/24/15 06:43*	*08/28/15 01:14*	*1*
Nitrobenzene-d5	*72*		*27 - 120*	*08/24/15 06:43*	*08/28/15 01:14*	*1*
Terphenyl-d14	*99*		*13 - 120*	*08/24/15 06:43*	*08/28/15 01:14*	*1*
2-Fluorophenol	*62*		*10 - 120*	*08/24/15 06:43*	*08/28/15 01:14*	*1*
Phenol-d5	*41*		*10 - 120*	*08/24/15 06:43*	*08/28/15 01:14*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: FB-03-081815
Date Collected: 08/18/15 08:00
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-6
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 19:03	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/24/15 14:24	08/26/15 19:03	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/24/15 14:24	08/26/15 19:03	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/24/15 14:24	08/26/15 19:03	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/24/15 14:24	08/26/15 19:03	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/24/15 14:24	08/26/15 19:03	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/24/15 14:24	08/26/15 19:03	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/24/15 14:24	08/26/15 19:03	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/24/15 14:24	08/26/15 19:03	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 19:03	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 19:03	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/24/15 14:24	08/26/15 19:03	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/24/15 14:24	08/26/15 19:03	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 19:03	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/24/15 14:24	08/26/15 19:03	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/24/15 14:24	08/26/15 19:03	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/24/15 14:24	08/26/15 19:03	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/24/15 14:24	08/26/15 19:03	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/24/15 14:24	08/26/15 19:03	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/24/15 14:24	08/26/15 19:03	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/24/15 14:24	08/26/15 19:03	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/24/15 14:24	08/26/15 19:03	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/24/15 14:24	08/26/15 19:03	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 19:03	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/24/15 14:24	08/26/15 19:03	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/24/15 14:24	08/26/15 19:03	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/24/15 14:24	08/26/15 19:03	1
Acetophenone	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 19:03	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/24/15 14:24	08/26/15 19:03	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/24/15 14:24	08/26/15 19:03	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/24/15 14:24	08/26/15 19:03	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/24/15 14:24	08/26/15 19:03	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 19:03	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 19:03	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 19:03	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/24/15 14:24	08/26/15 19:03	1
Carbazole	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 19:03	1
Caprolactam	2.4	U	10	2.4	ug/L		08/24/15 14:24	08/26/15 19:03	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/24/15 14:24	08/26/15 19:03	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/24/15 14:24	08/26/15 19:03	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/24/15 14:24	08/26/15 19:03	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/24/15 14:24	08/26/15 19:03	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 19:03	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 19:03	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 19:03	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 19:03	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/24/15 14:24	08/26/15 19:03	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/24/15 14:24	08/26/15 19:03	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/24/15 14:24	08/26/15 19:03	1

Client Sample ID: FB-03-081815
Date Collected: 08/18/15 08:00
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-6
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 19:03	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/24/15 14:24	08/26/15 19:03	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/24/15 14:24	08/26/15 19:03	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/24/15 14:24	08/26/15 19:03	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/24/15 14:24	08/26/15 19:03	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/24/15 14:24	08/26/15 19:03	1
Phenol	1.5	U	10	1.5	ug/L		08/24/15 14:24	08/26/15 19:03	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/24/15 14:24	08/26/15 19:03	1
Diphenyl	2.2	U	10	2.2	ug/L		08/24/15 14:24	08/26/15 19:03	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 19:03	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 19:03	1
Atrazine	2.9	U	10	2.9	ug/L		08/24/15 14:24	08/26/15 19:03	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Dodecanoic acid	*11*	*J N*	*ug/L*		*6.43*	*143-07-7*	*08/24/15 14:24*	*08/26/15 19:03*	*1*
Diethyltoluamide	*8.7*	*J N*	*ug/L*		*6.54*	*134-62-3*	*08/24/15 14:24*	*08/26/15 19:03*	*1*
Tetradecanoic acid	*4.7*	*J N*	*ug/L*		*7.16*	*544-63-8*	*08/24/15 14:24*	*08/26/15 19:03*	*1*
Tridecanoic acid	*8.1*	*J N*	*ug/L*		*7.85*	*638-53-9*	*08/24/15 14:24*	*08/26/15 19:03*	*1*
Octadecanoic acid	*6.2*	*J N*	*ug/L*		*8.49*	*57-11-4*	*08/24/15 14:24*	*08/26/15 19:03*	*1*
Hexagol	*3.3*	*J N*	*ug/L*		*10.09*	*2615-15-8*	*08/24/15 14:24*	*08/26/15 19:03*	*1*
Tetraethylene glycol monododecyl ether	*3.6*	*J N*	*ug/L*		*10.50*	*5274-68-0*	*08/24/15 14:24*	*08/26/15 19:03*	*1*
Hexaethylene glycol monododecyl ether	*3.2*	*J N*	*ug/L*		*10.74*	*3055-96-7*	*08/24/15 14:24*	*08/26/15 19:03*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*103*		*10 - 120*	*08/24/15 14:24*	*08/26/15 19:03*	*1*
2-Fluorobiphenyl (Surr)	*87*		*29 - 120*	*08/24/15 14:24*	*08/26/15 19:03*	*1*
2-Fluorophenol (Surr)	*41*		*10 - 120*	*08/24/15 14:24*	*08/26/15 19:03*	*1*
Nitrobenzene-d5 (Surr)	*77*		*27 - 120*	*08/24/15 14:24*	*08/26/15 19:03*	*1*
Phenol-d5 (Surr)	*25*		*10 - 120*	*08/24/15 14:24*	*08/26/15 19:03*	*1*
Terphenyl-d14 (Surr)	*86*		*13 - 120*	*08/24/15 14:24*	*08/26/15 19:03*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 06:31	09/01/15 22:58	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 06:31	09/01/15 22:58	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 06:31	09/01/15 22:58	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 06:31	09/01/15 22:58	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 06:31	09/01/15 22:58	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 06:31	09/01/15 22:58	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 06:31	09/01/15 22:58	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 06:31	09/01/15 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*93*		*10 - 150*	*08/31/15 06:31*	*09/01/15 22:58*	*1*
Tetrachloro-m-xylene	*68*		*10 - 150*	*08/31/15 06:31*	*09/01/15 22:58*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			08/28/15 00:22	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: FB-03-081815
Date Collected: 08/18/15 08:00
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-6
Matrix: Water

Method: 9056A - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.60	U	1.00	0.60	mg/L			08/28/15 00:22	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/20/15 11:46	08/21/15 20:46	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:46	1
Arsenic	**0.00061**	**J**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:46	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:46	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:46	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/20/15 11:46	08/21/15 20:46	1
Calcium	0.13	U	1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:46	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:46	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:46	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	09/02/15 10:04	1
Iron	0.010	U	0.025	0.010	mg/L		08/20/15 11:46	08/26/15 01:24	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:46	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:46	1
Manganese	**0.00089**	**J B**	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:46	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 20:46	1
Potassium	0.13	U	1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:46	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/20/15 11:46	08/21/15 20:46	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/26/15 01:24	1
Sodium	0.13	U	1.0	0.13	mg/L		08/20/15 11:46	08/21/15 20:46	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 20:46	1
Vanadium	**0.0022**	**B**	0.0020	0.00010	mg/L		08/20/15 11:46	08/26/15 01:24	1
Zinc	0.010	U	0.025	0.010	mg/L		08/20/15 11:46	08/21/15 20:46	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 19:02	1
Antimony	**0.00084**	**J**	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:02	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:02	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:02	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:02	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 19:02	1
Calcium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:02	1
Chromium	**0.0036**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:02	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:02	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:02	1
Iron	**0.023**	**J**	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:02	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:02	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:02	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:02	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:02	1
Potassium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:02	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 19:02	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:02	1
Sodium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:02	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:02	1
Vanadium	**0.00090**	**J B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 19:02	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: FB-03-081815
Date Collected: 08/18/15 08:00
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-6
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:02	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 18:15	08/28/15 21:44	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 21:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 16:13	08/21/15 11:57	1
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/19/15 18:21	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/19/15 18:21	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: TB-08-081815
Date Collected: 08/18/15 00:01
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-7
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/26/15 21:23	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/26/15 21:23	1
1,4-Dioxane	0.27	U *	10	0.27	ug/L			08/26/15 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/15 21:23*	*1*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*		*08/26/15 21:23*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*08/26/15 21:23*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*08/26/15 21:23*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/29/15 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/29/15 16:08*	*1*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*08/29/15 16:08*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/29/15 16:08*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/29/15 16:08*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 17:09	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/28/15 17:09	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 17:09	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 17:09	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/28/15 17:09	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/28/15 17:09	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/28/15 17:09	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/28/15 17:09	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/28/15 17:09	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/28/15 17:09	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/28/15 17:09	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/28/15 17:09	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/28/15 17:09	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/28/15 17:09	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/28/15 17:09	1
Acetone	**3.7**	**J**	25	2.7	ug/L			08/28/15 17:09	1
Benzene	0.20	U	1.0	0.20	ug/L			08/28/15 17:09	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/28/15 17:09	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/28/15 17:09	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/28/15 17:09	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/28/15 17:09	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/28/15 17:09	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/28/15 17:09	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/28/15 17:09	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/28/15 17:09	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/28/15 17:09	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/28/15 17:09	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/28/15 17:09	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: TB-08-081815
Date Collected: 08/18/15 00:01
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/28/15 17:09	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/28/15 17:09	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/28/15 17:09	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/28/15 17:09	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/28/15 17:09	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/28/15 17:09	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/28/15 17:09	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/28/15 17:09	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/28/15 17:09	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/28/15 17:09	1
Styrene	0.28	U	1.0	0.28	ug/L			08/28/15 17:09	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/28/15 17:09	1
Toluene	0.17	U	1.0	0.17	ug/L			08/28/15 17:09	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/28/15 17:09	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/28/15 17:09	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/28/15 17:09	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/28/15 17:09	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/28/15 17:09	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/28/15 17:09	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/28/15 17:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Naphthalene	*0.37*	*J*	*ug/L*		*11.38*	*91-20-3*		*08/28/15 17:09*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/28/15 17:09*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/28/15 17:09*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/28/15 17:09*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*08/28/15 17:09*	*1*
Toluene-d8 (Surr)	*108*		*70 - 130*		*08/28/15 17:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*		*08/28/15 17:09*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-277121/6
Matrix: Water
Analysis Batch: 277121

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 14:27	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/28/15 14:27	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 14:27	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/28/15 14:27	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/28/15 14:27	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/28/15 14:27	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/28/15 14:27	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/28/15 14:27	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/28/15 14:27	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/28/15 14:27	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/28/15 14:27	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/28/15 14:27	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/28/15 14:27	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/28/15 14:27	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/28/15 14:27	1
Acetone	2.7	U	25	2.7	ug/L			08/28/15 14:27	1
Benzene	0.20	U	1.0	0.20	ug/L			08/28/15 14:27	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/28/15 14:27	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/28/15 14:27	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/28/15 14:27	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/28/15 14:27	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/28/15 14:27	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/28/15 14:27	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/28/15 14:27	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/28/15 14:27	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/28/15 14:27	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/28/15 14:27	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/28/15 14:27	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/28/15 14:27	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/28/15 14:27	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/28/15 14:27	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/28/15 14:27	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/28/15 14:27	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/28/15 14:27	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/28/15 14:27	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/28/15 14:27	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/28/15 14:27	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/28/15 14:27	1
Styrene	0.28	U	1.0	0.28	ug/L			08/28/15 14:27	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/28/15 14:27	1
Toluene	0.17	U	1.0	0.17	ug/L			08/28/15 14:27	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/28/15 14:27	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/28/15 14:27	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/28/15 14:27	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/28/15 14:27	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/28/15 14:27	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/28/15 14:27	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/28/15 14:27	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/28/15 14:27	1
Total Alkanes TIC	None		ug/L					08/28/15 14:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130		08/28/15 14:27	1
Dibromofluoromethane (Surr)	91		70 - 130		08/28/15 14:27	1
Toluene-d8 (Surr)	103		70 - 130		08/28/15 14:27	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 130		08/28/15 14:27	1

Lab Sample ID: LCS 490-277121/4
Matrix: Water
Analysis Batch: 277121

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	17.1		ug/L		85	78 - 135
Freon-113	20.0	19.9		ug/L		100	77 - 129
1,1,2,2-Tetrachloroethane	20.0	22.6		ug/L		113	69 - 131
1,1,2-Trichloroethane	20.0	20.2		ug/L		101	80 - 124
1,1-Dichloroethane	20.0	20.5		ug/L		103	78 - 125
1,1-Dichloroethene	20.0	17.9		ug/L		90	79 - 124
1,2,4-Trichlorobenzene	20.0	21.8		ug/L		109	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	17.3		ug/L		87	54 - 125
1,2-Dichlorobenzene	20.0	21.1		ug/L		106	80 - 121
1,2-Dichloropropane	20.0	18.3		ug/L		91	75 - 120
1,3-Dichlorobenzene	20.0	20.5		ug/L		103	80 - 122
1,4-Dichlorobenzene	20.0	20.8		ug/L		104	80 - 120
2-Butanone (MEK)	100	94.0		ug/L		94	62 - 133
2-Hexanone	100	97.7		ug/L		98	60 - 142
4-Methyl-2-pentanone (MIBK)	100	99.5		ug/L		100	60 - 137
Acetone	100	84.0		ug/L		84	54 - 145
Benzene	20.0	19.2		ug/L		96	80 - 121
Bromoform	20.0	19.9		ug/L		99	46 - 145
Bromomethane	20.0	18.7		ug/L		93	41 - 150
Carbon disulfide	20.0	20.0		ug/L		100	77 - 126
Carbon tetrachloride	20.0	17.5		ug/L		87	64 - 147
Chlorobenzene	20.0	20.4		ug/L		102	80 - 120
Chlorodibromomethane	20.0	19.9		ug/L		99	69 - 133
Chloroethane	20.0	21.4		ug/L		107	72 - 120
Chloroform	20.0	17.7		ug/L		89	73 - 129
Chloromethane	20.0	18.2		ug/L		91	12 - 150
cis-1,2-Dichloroethene	20.0	19.5		ug/L		98	76 - 125
cis-1,3-Dichloropropene	20.0	19.8		ug/L		99	74 - 140
Cyclohexane	20.0	21.2		ug/L		106	73 - 122
Dichlorobromomethane	20.0	17.3		ug/L		87	75 - 129
Dichlorodifluoromethane	20.0	20.2		ug/L		101	37 - 127
Ethylbenzene	20.0	19.6		ug/L		98	80 - 130
1,2-Dibromoethane	20.0	19.5		ug/L		98	80 - 129
Isopropylbenzene	20.0	20.7		ug/L		104	80 - 141
Methyl acetate	100	100		ug/L		100	64 - 150
Methyl tert-butyl ether	20.0	15.7		ug/L		79	72 - 133
Methylcyclohexane	20.0	21.0		ug/L		105	71 - 129
Methylene Chloride	20.0	16.9		ug/L		84	79 - 123
Styrene	20.0	20.0		ug/L		100	80 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 490-277121/4
Matrix: Water
Analysis Batch: 277121

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	20.0	19.5		ug/L		97	80 - 126
Toluene	20.0	19.7		ug/L		98	80 - 126
trans-1,2-Dichloroethene	20.0	18.3		ug/L		92	79 - 126
trans-1,3-Dichloropropene	20.0	20.2		ug/L		101	63 - 134
Trichloroethene	20.0	19.1		ug/L		96	80 - 123
Trichlorofluoromethane	20.0	20.1		ug/L		101	65 - 124
Vinyl chloride	20.0	22.4		ug/L		112	68 - 120
1,2-Dichloroethane	20.0	16.1		ug/L		80	77 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*

Lab Sample ID: 490-85437-1 MS
Matrix: Water
Analysis Batch: 277121

Client Sample ID: PM Air Shaft-180-081715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.19	U	50.0	44.7		ug/L		89	76 - 149
Freon-113	0.15	U	50.0	46.9		ug/L		94	72 - 148
1,1,2,2-Tetrachloroethane	0.19	U	50.0	50.3		ug/L		101	56 - 143
1,1,2-Trichloroethane	0.19	U	50.0	49.7		ug/L		99	74 - 134
1,1-Dichloroethane	0.39	J	50.0	50.0		ug/L		99	71 - 139
1,1-Dichloroethene	0.25	U	50.0	48.0		ug/L		96	70 - 142
1,2,4-Trichlorobenzene	0.20	U	50.0	50.2		ug/L		100	60 - 136
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	54.1	E	ug/L		108	52 - 126
1,2-Dichlorobenzene	0.19	U	50.0	47.8		ug/L		96	79 - 128
1,2-Dichloropropane	0.25	U	50.0	44.3		ug/L		89	67 - 131
1,3-Dichlorobenzene	0.18	U	50.0	46.2		ug/L		92	77 - 131
1,4-Dichlorobenzene	0.29	J	50.0	47.7		ug/L		95	78 - 126
2-Butanone (MEK)	2.6	U	250	218		ug/L		87	50 - 138
2-Hexanone	1.3	U	250	248		ug/L		99	50 - 150
4-Methyl-2-pentanone (MIBK)	0.81	U	250	247		ug/L		99	50 - 147
Acetone	2.7	U	250	194		ug/L		77	45 - 141
Benzene	4.1		50.0	47.0		ug/L		86	75 - 133
Bromoform	0.29	U	50.0	62.8	E	ug/L		126	42 - 147
Bromomethane	0.35	U	50.0	32.1		ug/L		64	16 - 163
Carbon disulfide	0.22	U	50.0	43.2		ug/L		86	48 - 152
Carbon tetrachloride	0.18	U	50.0	49.0		ug/L		98	62 - 164
Chlorobenzene	0.81	J	50.0	50.3		ug/L		99	80 - 129
Chlorodibromomethane	0.25	U	50.0	61.5	E	ug/L		123	66 - 140
Chloroethane	14		50.0	61.0		ug/L		94	58 - 137
Chloroform	0.23	U	50.0	44.2		ug/L		88	66 - 138
Chloromethane	0.36	U	50.0	36.8		ug/L		74	10 - 169
cis-1,2-Dichloroethene	0.27	J	50.0	46.1		ug/L		92	68 - 138
cis-1,3-Dichloropropene	0.17	U	50.0	53.9		ug/L		108	71 - 141

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-85437-1 MS
Matrix: Water
Analysis Batch: 277121

Client Sample ID: PM Air Shaft-180-081715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	0.79	J	50.0	48.0		ug/L		94	58 - 144
Dichlorobromomethane	0.17	U	50.0	47.7		ug/L		95	70 - 140
Dichlorodifluoromethane	0.17	U	50.0	37.0		ug/L		74	40 - 127
Ethylbenzene	0.19	U	50.0	46.7		ug/L		93	79 - 139
1,2-Dibromoethane	0.21	U	50.0	50.7		ug/L		101	75 - 137
Isopropylbenzene	1.1		50.0	51.0		ug/L		100	80 - 153
Methyl acetate	0.58	U	250	215		ug/L		86	30 - 165
Methyl tert-butyl ether	0.17	U	50.0	35.6		ug/L		71	66 - 141
Methylcyclohexane	0.17	J	50.0	49.2		ug/L		98	59 - 151
Methylene Chloride	0.22	U	50.0	38.2		ug/L		76	64 - 139
Styrene	0.28	U	50.0	49.7		ug/L		99	61 - 148
Tetrachloroethene	0.14	U	50.0	49.8		ug/L		100	72 - 145
Toluene	0.18	J	50.0	47.3		ug/L		94	75 - 136
trans-1,2-Dichloroethene	0.23	U	50.0	43.8		ug/L		88	66 - 143
trans-1,3-Dichloropropene	0.17	U	50.0	60.6	E	ug/L		121	59 - 135
Trichloroethene	0.20	U	50.0	46.1		ug/L		92	73 - 144
Trichlorofluoromethane	0.21	U	50.0	45.4		ug/L		91	58 - 139
Vinyl chloride	0.25	J	50.0	44.5		ug/L		89	56 - 129
1,2-Dichloroethane	0.20	U	50.0	37.5		ug/L		75	64 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*

Lab Sample ID: 490-85437-1 MSD
Matrix: Water
Analysis Batch: 277121

Client Sample ID: PM Air Shaft-180-081715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.19	U	50.0	43.2		ug/L		86	76 - 149	3	17
Freon-113	0.15	U	50.0	44.3		ug/L		89	72 - 148	6	18
1,1,2,2-Tetrachloroethane	0.19	U	50.0	48.3		ug/L		97	56 - 143	4	20
1,1,2-Trichloroethane	0.19	U	50.0	49.3		ug/L		99	74 - 134	1	15
1,1-Dichloroethane	0.39	J	50.0	49.1		ug/L		97	71 - 139	2	17
1,1-Dichloroethene	0.25	U	50.0	48.2		ug/L		96	70 - 142	0	17
1,2,4-Trichlorobenzene	0.20	U	50.0	52.9		ug/L		106	60 - 136	5	19
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	54.8	E	ug/L		110	52 - 126	1	24
1,2-Dichlorobenzene	0.19	U	50.0	46.8		ug/L		94	79 - 128	2	15
1,2-Dichloropropane	0.25	U	50.0	42.5		ug/L		85	67 - 131	4	17
1,3-Dichlorobenzene	0.18	U	50.0	45.1		ug/L		90	77 - 131	2	15
1,4-Dichlorobenzene	0.29	J	50.0	46.6		ug/L		93	78 - 126	2	15
2-Butanone (MEK)	2.6	U	250	221		ug/L		88	50 - 138	1	19
2-Hexanone	1.3	U	250	246		ug/L		98	50 - 150	1	15
4-Methyl-2-pentanone (MIBK)	0.81	U	250	247		ug/L		99	50 - 147	0	17
Acetone	2.7	U	250	229		ug/L		92	45 - 141	17	21
Benzene	4.1		50.0	45.9		ug/L		84	75 - 133	2	17

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-85437-1 MSD
Matrix: Water
Analysis Batch: 277121

Client Sample ID: PM Air Shaft-180-081715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	0.29	U	50.0	60.8	E	ug/L		122	42 - 147	3	16
Bromomethane	0.35	U	50.0	41.7		ug/L		83	16 - 163	26	50
Carbon disulfide	0.22	U	50.0	41.3		ug/L		83	48 - 152	5	21
Carbon tetrachloride	0.18	U	50.0	46.1		ug/L		92	62 - 164	6	19
Chlorobenzene	0.81	J	50.0	48.9		ug/L		96	80 - 129	3	14
Chlorodibromomethane	0.25	U	50.0	60.0	E	ug/L		120	66 - 140	2	15
Chloroethane	14		50.0	62.5		ug/L		97	58 - 137	2	20
Chloroform	0.23	U	50.0	43.5		ug/L		87	66 - 138	2	18
Chloromethane	0.36	U	50.0	36.3		ug/L		73	10 - 169	1	31
cis-1,2-Dichloroethene	0.27	J	50.0	44.9		ug/L		89	68 - 138	3	17
cis-1,3-Dichloropropene	0.17	U	50.0	54.6		ug/L		109	71 - 141	1	15
Cyclohexane	0.79	J	50.0	45.3		ug/L		89	58 - 144	6	16
Dichlorobromomethane	0.17	U	50.0	46.7		ug/L		93	70 - 140	2	18
Dichlorodifluoromethane	0.17	U	50.0	34.1		ug/L		68	40 - 127	8	18
Ethylbenzene	0.19	U	50.0	45.0		ug/L		90	79 - 139	4	15
1,2-Dibromoethane	0.21	U	50.0	50.2		ug/L		100	75 - 137	1	15
Isopropylbenzene	1.1		50.0	49.0		ug/L		96	80 - 153	4	16
Methyl acetate	0.58	U	250	212		ug/L		85	30 - 165	1	31
Methyl tert-butyl ether	0.17	U	50.0	38.2		ug/L		76	66 - 141	7	16
Methylcyclohexane	0.17	J	50.0	46.4		ug/L		92	59 - 151	6	19
Methylene Chloride	0.22	U	50.0	38.4		ug/L		77	64 - 139	1	17
Styrene	0.28	U	50.0	48.6		ug/L		97	61 - 148	2	24
Tetrachloroethene	0.14	U	50.0	46.7		ug/L		93	72 - 145	6	16
Toluene	0.18	J	50.0	46.6		ug/L		93	75 - 136	2	15
trans-1,2-Dichloroethene	0.23	U	50.0	44.0		ug/L		88	66 - 143	1	16
trans-1,3-Dichloropropene	0.17	U	50.0	61.5	E	ug/L		123	59 - 135	1	14
Trichloroethene	0.20	U	50.0	44.2		ug/L		88	73 - 144	4	17
Trichlorofluoromethane	0.21	U	50.0	43.1		ug/L		86	58 - 139	5	18
Vinyl chloride	0.25	J	50.0	45.4		ug/L		90	56 - 129	2	17
1,2-Dichloroethane	0.20	U	50.0	36.8		ug/L		74	64 - 136	2	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-275960/7
Matrix: Water
Analysis Batch: 275960

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/25/15 17:06	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/25/15 17:06	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/25/15 17:06	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/25/15 17:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 130		08/25/15 17:06	1
4-Bromofluorobenzene (Surr)	113		70 - 130		08/25/15 17:06	1
Dibromofluoromethane (Surr)	101		70 - 130		08/25/15 17:06	1
Toluene-d8 (Surr)	100		70 - 130		08/25/15 17:06	1

Lab Sample ID: LCS 490-275960/3
Matrix: Water
Analysis Batch: 275960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.500	0.489		ug/L		98	70 - 131		
1,2-Dibromo-3-Chloropropane			0.500	0.468		ug/L		94	40 - 160		
1,4-Dioxane			10.0	8.41	J	ug/L		84	40 - 160		
Ethylene Dibromide			0.500	0.443		ug/L		89	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		70 - 130
4-Bromofluorobenzene (Surr)	106		70 - 130
Dibromofluoromethane (Surr)	106		70 - 130
Toluene-d8 (Surr)	98		70 - 130

Lab Sample ID: LCSD 490-275960/11
Matrix: Water
Analysis Batch: 275960

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.500	0.474		ug/L		95	70 - 131	3	19
1,2-Dibromo-3-Chloropropane			0.500	0.451		ug/L		90	40 - 160	4	20
1,4-Dioxane			10.0	10.0		ug/L		100	40 - 160	18	20
Ethylene Dibromide			0.500	0.417		ug/L		83	70 - 130	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		70 - 130
4-Bromofluorobenzene (Surr)	105		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130
Toluene-d8 (Surr)	105		70 - 130

Lab Sample ID: 490-85229-L-12 MS
Matrix: Water
Analysis Batch: 275960

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane	0.010	U	0.500	0.466		ug/L		93	53 - 144		
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.412		ug/L		82	40 - 160		
1,4-Dioxane	0.27	U	10.0	10.1		ug/L		101	40 - 160		
Ethylene Dibromide	0.010	U	0.500	0.425		ug/L		85	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		70 - 130
4-Bromofluorobenzene (Surr)	105		70 - 130
Dibromofluoromethane (Surr)	100		70 - 130
Toluene-d8 (Surr)	99		70 - 130

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-85229-L-12 MSD
Matrix: Water
Analysis Batch: 275960

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.010	U	0.500	0.396		ug/L		79	53 - 144	16	19
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.380		ug/L		76	40 - 160	8	20
1,4-Dioxane	0.27	U	10.0	9.10	J	ug/L		91	40 - 160	10	20
Ethylene Dibromide	0.010	U	0.500	0.363		ug/L		73	70 - 130	16	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
Dibromofluoromethane (Surr)	*107*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 490-276290/7
Matrix: Water
Analysis Batch: 276290

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/26/15 18:02	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/26/15 18:02	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/26/15 18:02	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/26/15 18:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/15 18:02*	*1*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*		*08/26/15 18:02*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*08/26/15 18:02*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/26/15 18:02*	*1*

Lab Sample ID: LCS 490-276290/3
Matrix: Water
Analysis Batch: 276290

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.500	0.380		ug/L		76	70 - 131
1,2-Dibromo-3-Chloropropane	0.500	0.366		ug/L		73	40 - 160
1,4-Dioxane	10.0	7.63	J	ug/L		76	40 - 160
Ethylene Dibromide	0.500	0.348		ug/L		70	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
Dibromofluoromethane (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-276290/4
Matrix: Water
Analysis Batch: 276290

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.500	0.408		ug/L		82	70 - 131	7	19
1,2-Dibromo-3-Chloropropane	0.500	0.400		ug/L		80	40 - 160	9	20
1,4-Dioxane	10.0	10.3	*	ug/L		103	40 - 160	30	20
Ethylene Dibromide	0.500	0.354		ug/L		71	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 490-277393/7
Matrix: Water
Analysis Batch: 277393

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/29/15 15:11	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/29/15 15:11	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/29/15 15:11	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/29/15 15:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/29/15 15:11*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/29/15 15:11*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/29/15 15:11*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/29/15 15:11*	*1*

Lab Sample ID: LCS 490-277393/3
Matrix: Water
Analysis Batch: 277393

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.500	0.501		ug/L		100	70 - 131
1,2-Dibromo-3-Chloropropane	0.500	0.499		ug/L		100	40 - 160
1,4-Dioxane	10.0	10.9		ug/L		109	40 - 160
Ethylene Dibromide	0.500	0.489		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-277393/4
Matrix: Water
Analysis Batch: 277393

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.500	0.517		ug/L		103	70 - 131	3	19
1,2-Dibromo-3-Chloropropane	0.500	0.496		ug/L		99	40 - 160	0	20
1,4-Dioxane	10.0	12.2		ug/L		122	40 - 160	12	20
Ethylene Dibromide	0.500	0.489		ug/L		98	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-275780/1-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275780

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 16:17	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/24/15 14:24	08/26/15 16:17	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/24/15 14:24	08/26/15 16:17	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/24/15 14:24	08/26/15 16:17	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/24/15 14:24	08/26/15 16:17	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/24/15 14:24	08/26/15 16:17	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/24/15 14:24	08/26/15 16:17	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/24/15 14:24	08/26/15 16:17	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/24/15 14:24	08/26/15 16:17	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 16:17	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 16:17	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/24/15 14:24	08/26/15 16:17	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/24/15 14:24	08/26/15 16:17	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 16:17	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/24/15 14:24	08/26/15 16:17	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/24/15 14:24	08/26/15 16:17	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/24/15 14:24	08/26/15 16:17	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/24/15 14:24	08/26/15 16:17	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/24/15 14:24	08/26/15 16:17	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/24/15 14:24	08/26/15 16:17	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/24/15 14:24	08/26/15 16:17	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/24/15 14:24	08/26/15 16:17	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/24/15 14:24	08/26/15 16:17	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 16:17	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/24/15 14:24	08/26/15 16:17	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/24/15 14:24	08/26/15 16:17	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/24/15 14:24	08/26/15 16:17	1
Acetophenone	2.3	U	10	2.3	ug/L		08/24/15 14:24	08/26/15 16:17	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/24/15 14:24	08/26/15 16:17	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-275780/1-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275780

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzaldehyde	5.7	U	10	5.7	ug/L		08/24/15 14:24	08/26/15 16:17	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/24/15 14:24	08/26/15 16:17	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/24/15 14:24	08/26/15 16:17	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 16:17	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 16:17	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 16:17	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/24/15 14:24	08/26/15 16:17	1
Carbazole	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 16:17	1
Caprolactam	2.4	U	10	2.4	ug/L		08/24/15 14:24	08/26/15 16:17	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/24/15 14:24	08/26/15 16:17	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/24/15 14:24	08/26/15 16:17	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/24/15 14:24	08/26/15 16:17	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/24/15 14:24	08/26/15 16:17	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 16:17	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 16:17	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 16:17	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/24/15 14:24	08/26/15 16:17	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/24/15 14:24	08/26/15 16:17	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/24/15 14:24	08/26/15 16:17	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/24/15 14:24	08/26/15 16:17	1
Isophorone	3.1	U	10	3.1	ug/L		08/24/15 14:24	08/26/15 16:17	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/24/15 14:24	08/26/15 16:17	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/24/15 14:24	08/26/15 16:17	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/24/15 14:24	08/26/15 16:17	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/24/15 14:24	08/26/15 16:17	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/24/15 14:24	08/26/15 16:17	1
Phenol	1.5	U	10	1.5	ug/L		08/24/15 14:24	08/26/15 16:17	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/24/15 14:24	08/26/15 16:17	1
Diphenyl	2.2	U	10	2.2	ug/L		08/24/15 14:24	08/26/15 16:17	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/24/15 14:24	08/26/15 16:17	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/24/15 14:24	08/26/15 16:17	1
Atrazine	2.9	U	10	2.9	ug/L		08/24/15 14:24	08/26/15 16:17	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/24/15 14:24*	*08/26/15 16:17*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*101*		*10 - 120*	*08/24/15 14:24*	*08/26/15 16:17*	*1*
2-Fluorobiphenyl (Surr)	*81*		*29 - 120*	*08/24/15 14:24*	*08/26/15 16:17*	*1*
2-Fluorophenol (Surr)	*46*		*10 - 120*	*08/24/15 14:24*	*08/26/15 16:17*	*1*
Nitrobenzene-d5 (Surr)	*75*		*27 - 120*	*08/24/15 14:24*	*08/26/15 16:17*	*1*
Phenol-d5 (Surr)	*29*		*10 - 120*	*08/24/15 14:24*	*08/26/15 16:17*	*1*
Terphenyl-d14 (Surr)	*90*		*13 - 120*	*08/24/15 14:24*	*08/26/15 16:17*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-275780/2-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275780

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	40.0	32.0		ug/L		80	46 - 120
1,2,4,5-Tetrachlorobenzene	40.0	34.1		ug/L		85	25 - 120
2,3,4,6-Tetrachlorophenol	40.0	37.8		ug/L		95	31 - 148
2,4,5-Trichlorophenol	40.0	34.7		ug/L		87	40 - 129
2,4,6-Trichlorophenol	40.0	33.4		ug/L		83	39 - 135
2,4-Dichlorophenol	40.0	30.3		ug/L		76	38 - 120
2,4-Dimethylphenol	40.0	29.1		ug/L		73	21 - 126
2,4-Dinitrophenol	80.0	51.1		ug/L		64	20 - 150
2,4-Dinitrotoluene	40.0	35.1		ug/L		88	46 - 132
2,6-Dinitrotoluene	40.0	34.0		ug/L		85	54 - 128
2-Chloronaphthalene	40.0	31.1		ug/L		78	39 - 120
2-Chlorophenol	40.0	27.8		ug/L		69	40 - 120
2-Methylnaphthalene	40.0	30.0		ug/L		75	31 - 120
2-Methylphenol	40.0	27.0		ug/L		68	38 - 120
2-Nitroaniline	40.0	32.9		ug/L		82	46 - 131
2-Nitrophenol	40.0	31.6		ug/L		79	32 - 120
3,3'-Dichlorobenzidine	40.0	31.4		ug/L		78	46 - 129
3 & 4 Methylphenol	40.0	22.7		ug/L		57	33 - 120
3-Nitroaniline	40.0	29.1		ug/L		73	54 - 121
4,6-Dinitro-2-methylphenol	80.0	65.3		ug/L		82	19 - 150
4-Bromophenyl phenyl ether	40.0	34.0		ug/L		85	47 - 127
4-Chloro-3-methylphenol	40.0	31.3		ug/L		78	44 - 120
4-Chloroaniline	40.0	25.2		ug/L		63	44 - 120
4-Chlorophenyl phenyl ether	40.0	33.9		ug/L		85	50 - 120
4-Nitroaniline	40.0	32.2		ug/L		80	55 - 123
4-Nitrophenol	80.0	28.3		ug/L		35	10 - 120
Acenaphthylene	40.0	31.7		ug/L		79	48 - 120
Acetophenone	40.0	31.3		ug/L		78	52 - 133
Anthracene	40.0	33.5		ug/L		84	58 - 130
Benzaldehyde	40.0	47.9		ug/L		120	34 - 120
Benzo[g,h,i]perylene	40.0	35.7		ug/L		89	51 - 123
Benzo[k]fluoranthene	40.0	30.3		ug/L		76	51 - 120
Bis(2-chloroethoxy)methane	40.0	27.8		ug/L		70	44 - 120
Bis(2-chloroethyl)ether	40.0	27.0		ug/L		68	47 - 120
Butyl benzyl phthalate	40.0	30.8		ug/L		77	51 - 146
Bis(2-ethylhexyl) phthalate	40.0	34.6		ug/L		87	47 - 138
Carbazole	40.0	33.2		ug/L		83	54 - 123
Caprolactam	40.0	7.95	J	ug/L		20	10 - 120
Chrysene	40.0	30.6		ug/L		76	55 - 120
Dibenz(a,h)anthracene	40.0	38.4		ug/L		96	50 - 125
Dibenzofuran	40.0	32.1		ug/L		80	50 - 120
Diethyl phthalate	40.0	35.9		ug/L		90	54 - 128
Dimethyl phthalate	40.0	34.1		ug/L		85	53 - 127
Di-n-butyl phthalate	40.0	36.2		ug/L		90	54 - 140
Fluoranthene	40.0	35.3		ug/L		88	56 - 120
Fluorene	40.0	33.4		ug/L		83	52 - 120
Hexachlorocyclopentadiene	40.0	34.1		ug/L		85	17 - 120
Hexachloroethane	40.0	30.9		ug/L		77	30 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-275780/2-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275780

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Indeno[1,2,3-cd]pyrene	40.0	37.2		ug/L		93	54 - 125
Isophorone	40.0	30.6		ug/L		77	47 - 120
Naphthalene	40.0	30.0		ug/L		75	37 - 120
Nitrobenzene	40.0	29.8		ug/L		74	36 - 120
N-Nitrosodi-n-propylamine	40.0	30.1		ug/L		75	51 - 120
N-Nitrosodiphenylamine	80.0	66.1		ug/L		83	58 - 149
Phenanthrene	40.0	31.9		ug/L		80	56 - 120
Phenol	40.0	13.1		ug/L		33	14 - 120
Pyrene	40.0	27.8		ug/L		70	53 - 129
Diphenyl	40.0	31.4		ug/L		79	10 - 146
Di-n-octyl phthalate	40.0	34.4		ug/L		86	50 - 142
2,2'-oxybis[1-chloropropane]	40.0	26.2		ug/L		65	44 - 120
Atrazine	40.0	36.2		ug/L		90	24 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*106*		*10 - 120*
2-Fluorobiphenyl (Surr)	*86*		*29 - 120*
2-Fluorophenol (Surr)	*49*		*10 - 120*
Nitrobenzene-d5 (Surr)	*79*		*27 - 120*
Phenol-d5 (Surr)	*33*		*10 - 120*
Terphenyl-d14 (Surr)	*82*		*13 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 490-275595/1-A
Matrix: Water
Analysis Batch: 276817

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275595

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/27/15 21:18	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/27/15 21:18	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/24/15 06:43	08/27/15 21:18	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/24/15 06:43	08/27/15 21:18	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/24/15 06:43	08/27/15 21:18	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/24/15 06:43	08/27/15 21:18	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/24/15 06:43	08/27/15 21:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*69*		*10 - 120*	*08/24/15 06:43*	*08/27/15 21:18*	*1*
2-Fluorobiphenyl (Surr)	*71*		*29 - 120*	*08/24/15 06:43*	*08/27/15 21:18*	*1*
Nitrobenzene-d5	*67*		*27 - 120*	*08/24/15 06:43*	*08/27/15 21:18*	*1*
Terphenyl-d14	*97*		*13 - 120*	*08/24/15 06:43*	*08/27/15 21:18*	*1*
2-Fluorophenol	*53*		*10 - 120*	*08/24/15 06:43*	*08/27/15 21:18*	*1*
Phenol-d5	*37*		*10 - 120*	*08/24/15 06:43*	*08/27/15 21:18*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 490-275595/2-A
Matrix: Water
Analysis Batch: 276817

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275595

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.821		ug/L		103	57 - 120
Benzo[a]pyrene	0.800	0.752		ug/L		94	57 - 124
Benzo[b]fluoranthene	0.800	0.793		ug/L		99	51 - 125
Hexachlorobenzene	0.800	0.695		ug/L		87	48 - 131
Hexachlorobutadiene	0.800	0.671		ug/L		84	28 - 120
N-Nitrosodimethylamine	0.800	0.461	J	ug/L		58	20 - 120
Pentachlorophenol	1.60	1.11		ug/L		70	21 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*102*		*10 - 120*
2-Fluorobiphenyl (Surr)	*96*		*29 - 120*
Nitrobenzene-d5	*92*		*27 - 120*
Terphenyl-d14	*115*		*13 - 120*
2-Fluorophenol	*66*		*10 - 120*
Phenol-d5	*46*		*10 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-277676/1-A
Matrix: Water
Analysis Batch: 278119

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277676

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 06:31	09/01/15 20:06	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 06:31	09/01/15 20:06	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 06:31	09/01/15 20:06	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 06:31	09/01/15 20:06	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 06:31	09/01/15 20:06	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 06:31	09/01/15 20:06	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 06:31	09/01/15 20:06	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 06:31	09/01/15 20:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*59*		*10 - 150*	*08/31/15 06:31*	*09/01/15 20:06*	*1*
Tetrachloro-m-xylene	*58*		*10 - 150*	*08/31/15 06:31*	*09/01/15 20:06*	*1*

Lab Sample ID: LCS 490-277676/2-A
Matrix: Water
Analysis Batch: 278119

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277676

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	2.66		ug/L		66	23 - 139
PCB-1260	4.00	2.84		ug/L		71	36 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*90*		*10 - 150*
Tetrachloro-m-xylene	*72*		*10 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 490-277170/6
Matrix: Water
Analysis Batch: 277170

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			08/27/15 19:58	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/27/15 19:58	1

Lab Sample ID: LCS 490-277170/7
Matrix: Water
Analysis Batch: 277170

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			100	97.56		mg/L		98	80 - 120		
Sulfate			100	99.24		mg/L		99	80 - 120		

Lab Sample ID: LCSD 490-277170/8
Matrix: Water
Analysis Batch: 277170

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	97.19		mg/L		97	80 - 120	0	20
Sulfate			100	98.56		mg/L		99	80 - 120	1	20

Lab Sample ID: 490-85437-1 MS
Matrix: Water
Analysis Batch: 277170

Client Sample ID: PM Air Shaft-180-081715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	1.76		100	99.91		mg/L		98	80 - 120		
Sulfate	1.99		100	105.8		mg/L		104	80 - 120		

Lab Sample ID: 490-85437-1 MSD
Matrix: Water
Analysis Batch: 277170

Client Sample ID: PM Air Shaft-180-081715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.76		100	96.64		mg/L		95	80 - 120	3	20
Sulfate	1.99		100	102.5		mg/L		100	80 - 120	3	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 490-274876/1-A
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/20/15 11:46	08/21/15 18:57	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 18:57	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 18:57	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 18:57	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 18:57	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/20/15 11:46	08/21/15 18:57	1
Calcium	0.13	U	1.0	0.13	mg/L		08/20/15 11:46	08/21/15 18:57	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 490-274876/1-A
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 18:57	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 18:57	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 18:57	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/20/15 11:46	08/21/15 18:57	1
Manganese	0.000560	J	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 18:57	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/21/15 18:57	1
Potassium	0.13	U	1.0	0.13	mg/L		08/20/15 11:46	08/21/15 18:57	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/20/15 11:46	08/21/15 18:57	1
Sodium	0.13	U	1.0	0.13	mg/L		08/20/15 11:46	08/21/15 18:57	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/20/15 11:46	08/21/15 18:57	1
Zinc	0.010	U	0.025	0.010	mg/L		08/20/15 11:46	08/21/15 18:57	1

Lab Sample ID: MB 490-274876/1-A
Matrix: Water
Analysis Batch: 276337

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.010	U	0.025	0.010	mg/L		08/20/15 11:46	08/25/15 22:59	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/25/15 22:59	1
Vanadium	0.00162	J	0.0020	0.00010	mg/L		08/20/15 11:46	08/25/15 22:59	1

Lab Sample ID: MB 490-274876/1-A
Matrix: Water
Analysis Batch: 277874

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00050	U	0.0020	0.00050	mg/L		08/20/15 11:46	08/31/15 15:36	1

Lab Sample ID: LCS 490-274876/2-A
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.11		mg/L		111	80 - 120
Antimony	0.100	0.0981		mg/L		98	80 - 120
Arsenic	0.100	0.101		mg/L		101	80 - 120
Barium	0.100	0.0946		mg/L		95	80 - 120
Beryllium	0.100	0.0926		mg/L		93	80 - 120
Cadmium	0.100	0.103		mg/L		103	80 - 120
Calcium	10.0	10.29		mg/L		103	80 - 120
Chromium	0.100	0.108		mg/L		108	80 - 120
Cobalt	0.100	0.108		mg/L		108	80 - 120
Lead	0.100	0.0957		mg/L		96	80 - 120
Magnesium	10.0	10.14		mg/L		101	80 - 120
Manganese	0.100	0.113		mg/L		113	80 - 120
Nickel	0.100	0.108		mg/L		108	80 - 120
Potassium	10.0	10.66		mg/L		107	80 - 120
Selenium	0.100	0.0907		mg/L		91	80 - 120
Sodium	10.0	10.18		mg/L		102	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-274876/2-A
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	0.100	0.0860		mg/L		86	80 - 120
Zinc	0.100	0.0955		mg/L		95	80 - 120

Lab Sample ID: LCS 490-274876/2-A
Matrix: Water
Analysis Batch: 276337

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1.00	1.07		mg/L		107	80 - 120
Silver	0.100	0.113		mg/L		113	80 - 120
Vanadium	0.100	0.107		mg/L		107	80 - 120

Lab Sample ID: LCS 490-274876/2-A
Matrix: Water
Analysis Batch: 277874

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.100	0.106		mg/L		106	80 - 120

Lab Sample ID: LCSD 490-274876/3-A
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	1.00	1.11		mg/L		111	80 - 120	1	20
Antimony	0.100	0.107		mg/L		107	80 - 120	9	20
Arsenic	0.100	0.0987		mg/L		99	80 - 120	3	20
Barium	0.100	0.103		mg/L		103	80 - 120	9	20
Beryllium	0.100	0.102		mg/L		102	80 - 120	10	20
Cadmium	0.100	0.103		mg/L		103	80 - 120	1	20
Calcium	10.0	10.34		mg/L		103	80 - 120	0	20
Chromium	0.100	0.105		mg/L		105	80 - 120	2	20
Cobalt	0.100	0.106		mg/L		106	80 - 120	2	20
Lead	0.100	0.104		mg/L		104	80 - 120	9	20
Magnesium	10.0	10.14		mg/L		101	80 - 120	0	20
Manganese	0.100	0.112		mg/L		112	80 - 120	1	20
Nickel	0.100	0.108		mg/L		108	80 - 120	0	20
Potassium	10.0	10.76		mg/L		108	80 - 120	1	20
Selenium	0.100	0.0909		mg/L		91	80 - 120	0	20
Sodium	10.0	10.17		mg/L		102	80 - 120	0	20
Thallium	0.100	0.0934		mg/L		93	80 - 120	8	20
Zinc	0.100	0.0907		mg/L		91	80 - 120	5	20

Lab Sample ID: LCSD 490-274876/3-A
Matrix: Water
Analysis Batch: 276337

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	1.00	1.16		mg/L		116	80 - 120	8	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 490-274876/3-A
Matrix: Water
Analysis Batch: 276337

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 274876

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver			0.100	0.111		mg/L		111	80 - 120	2	20
Vanadium			0.100	0.116		mg/L		116	80 - 120	8	20

Lab Sample ID: LCSD 490-274876/3-A
Matrix: Water
Analysis Batch: 277874

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 274876

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper			0.100	0.105		mg/L		105	80 - 120	1	20

Lab Sample ID: 490-85449-A-1-B MS
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.014	J	1.00	1.09		mg/L		107	75 - 125
Antimony	0.00050	U	0.100	0.107		mg/L		107	75 - 125
Arsenic	0.0070		0.100	0.105		mg/L		98	75 - 125
Barium	0.044		0.100	0.145		mg/L		100	75 - 125
Beryllium	0.00050	U	0.100	0.0852		mg/L		85	75 - 125
Cadmium	0.00040	U	0.100	0.101		mg/L		101	75 - 125
Calcium	142	E	10.0	153.4	E 4	mg/L		114	75 - 125
Chromium	0.00050	U	0.100	0.100		mg/L		100	75 - 125
Cobalt	0.0026		0.100	0.102		mg/L		99	75 - 125
Lead	0.00020	U	0.100	0.101		mg/L		101	75 - 125
Magnesium	21.7		10.0	31.35		mg/L		97	75 - 125
Manganese	0.94	B	0.100	1.06	4	mg/L		126	75 - 125
Nickel	0.0044		0.100	0.113		mg/L		109	75 - 125
Potassium	10.3		10.0	20.82		mg/L		106	75 - 125
Selenium	0.0017	J	0.100	0.0899		mg/L		88	75 - 125
Sodium	285	E	10.0	296.4	E 4	mg/L		110	75 - 125
Thallium	0.00083	J	0.100	0.0860		mg/L		85	75 - 125
Zinc	0.010	U	0.100	0.0857		mg/L		86	75 - 125

Lab Sample ID: 490-85449-A-1-B MS
Matrix: Water
Analysis Batch: 276337

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.16		1.00	1.18		mg/L		102	75 - 125
Silver	0.00050	U	0.100	0.105		mg/L		105	75 - 125
Vanadium	0.040	B	0.100	0.151		mg/L		111	75 - 125

Lab Sample ID: 490-85449-A-1-B MS
Matrix: Water
Analysis Batch: 277874

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.0011	J	0.100	0.0964		mg/L		95	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85449-A-1-C MSD
Matrix: Water
Analysis Batch: 275699

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.014	J	1.00	1.12		mg/L		111	75 - 125	3	20
Antimony	0.00050	U	0.100	0.109		mg/L		109	75 - 125	2	20
Arsenic	0.0070		0.100	0.105		mg/L		98	75 - 125	0	20
Barium	0.044		0.100	0.146		mg/L		102	75 - 125	1	20
Beryllium	0.00050	U	0.100	0.0870		mg/L		87	75 - 125	2	20
Cadmium	0.00040	U	0.100	0.104		mg/L		104	75 - 125	3	20
Calcium	142	E	10.0	157.1	E 4	mg/L		151	75 - 125	2	20
Chromium	0.00050	U	0.100	0.100		mg/L		100	75 - 125	0	20
Cobalt	0.0026		0.100	0.102		mg/L		99	75 - 125	0	20
Lead	0.00020	U	0.100	0.105		mg/L		105	75 - 125	3	20
Magnesium	21.7		10.0	32.14		mg/L		105	75 - 125	2	20
Manganese	0.94	B	0.100	1.05	4	mg/L		115	75 - 125	1	20
Nickel	0.0044		0.100	0.116		mg/L		112	75 - 125	2	20
Potassium	10.3		10.0	21.31		mg/L		111	75 - 125	2	20
Selenium	0.0017	J	0.100	0.0916		mg/L		90	75 - 125	2	20
Sodium	285	E	10.0	305.3	E 4	mg/L		199	75 - 125	3	20
Thallium	0.00083	J	0.100	0.0882		mg/L		87	75 - 125	3	20
Zinc	0.010	U	0.100	0.0859		mg/L		86	75 - 125	0	20

Lab Sample ID: 490-85449-A-1-C MSD
Matrix: Water
Analysis Batch: 276337

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	0.16		1.00	1.25		mg/L		108	75 - 125	5	20
Silver	0.00050	U	0.100	0.106		mg/L		106	75 - 125	1	20
Vanadium	0.040	B	0.100	0.160		mg/L		120	75 - 125	6	20

Lab Sample ID: 490-85449-A-1-C MSD
Matrix: Water
Analysis Batch: 277874

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 274876

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	0.0011	J	0.100	0.0973		mg/L		96	75 - 125	1	20

Lab Sample ID: MB 490-276235/1-A
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 276235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 17:45	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 17:45	1
Calcium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 17:45	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 490-276235/1-A
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 276235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Iron	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 17:45	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 17:45	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 17:45	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Potassium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 17:45	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 17:45	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Sodium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 17:45	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 17:45	1
Vanadium	0.000855	J	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 17:45	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 17:45	1

Lab Sample ID: LCS 490-276235/2-A
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 276235

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	0.970		mg/L		97	80 - 120
Antimony	0.100	0.106		mg/L		106	80 - 120
Arsenic	0.100	0.102		mg/L		102	80 - 120
Barium	0.100	0.103		mg/L		103	80 - 120
Beryllium	0.100	0.103		mg/L		103	80 - 120
Cadmium	0.100	0.0974		mg/L		97	80 - 120
Calcium	10.0	9.41		mg/L		94	80 - 120
Chromium	0.100	0.0941		mg/L		94	80 - 120
Cobalt	0.100	0.0995		mg/L		100	80 - 120
Copper	0.100	0.0957		mg/L		96	80 - 120
Iron	1.00	1.03		mg/L		103	80 - 120
Lead	0.100	0.101		mg/L		101	80 - 120
Magnesium	10.0	9.38		mg/L		94	80 - 120
Manganese	0.100	0.0997		mg/L		100	80 - 120
Nickel	0.100	0.0955		mg/L		96	80 - 120
Potassium	10.0	9.53		mg/L		95	80 - 120
Selenium	0.100	0.0901		mg/L		90	80 - 120
Silver	0.100	0.0949		mg/L		95	80 - 120
Sodium	10.0	9.40		mg/L		94	80 - 120
Thallium	0.100	0.0978		mg/L		98	80 - 120
Vanadium	0.100	0.0956		mg/L		96	80 - 120
Zinc	0.100	0.0900		mg/L		90	80 - 120

Lab Sample ID: 490-85759-A-1-D MS
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 276235

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0096	U	1.00	1.03		mg/L		103	75 - 125
Antimony	0.00050	U	0.100	0.111		mg/L		111	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85759-A-1-D MS
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 276235

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0032		0.100	0.104		mg/L		101	75 - 125
Barium	2.1	E	0.100	2.24	E 4	mg/L		116	75 - 125
Beryllium	0.00050	U	0.100	0.108		mg/L		108	75 - 125
Cadmium	0.00040	U	0.100	0.102		mg/L		102	75 - 125
Calcium	29.2		10.0	39.31		mg/L		101	75 - 125
Chromium	0.00050	U	0.100	0.0992		mg/L		99	75 - 125
Cobalt	0.0022		0.100	0.109		mg/L		107	75 - 125
Copper	0.00050	U	0.100	0.102		mg/L		102	75 - 125
Iron	26.8		1.00	28.66	4	mg/L		182	75 - 125
Lead	0.00020	U	0.100	0.107		mg/L		107	75 - 125
Magnesium	18.2		10.0	28.31		mg/L		101	75 - 125
Manganese	15.7	E	0.100	16.17	E 4	mg/L		520	75 - 125
Nickel	0.00050	U	0.100	0.101		mg/L		101	75 - 125
Potassium	4.6		10.0	14.72		mg/L		101	75 - 125
Selenium	0.00060	U	0.100	0.0940		mg/L		94	75 - 125
Silver	0.00050	U	0.100	0.0995		mg/L		99	75 - 125
Sodium	7.3		10.0	17.27		mg/L		100	75 - 125
Thallium	0.00054	J	0.100	0.103		mg/L		103	75 - 125
Vanadium	0.00075	J B	0.100	0.101		mg/L		101	75 - 125
Zinc	0.010	U	0.100	0.0973		mg/L		97	75 - 125

Lab Sample ID: 490-85759-A-1-E MSD
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 276235

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0096	U	1.00	1.01		mg/L		101	75 - 125	2	20
Antimony	0.00050	U	0.100	0.109		mg/L		109	75 - 125	3	20
Arsenic	0.0032		0.100	0.101		mg/L		98	75 - 125	3	20
Barium	2.1	E	0.100	2.18	E 4	mg/L		62	75 - 125	2	20
Beryllium	0.00050	U	0.100	0.103		mg/L		103	75 - 125	5	20
Cadmium	0.00040	U	0.100	0.0994		mg/L		99	75 - 125	3	20
Calcium	29.2		10.0	38.60		mg/L		94	75 - 125	2	20
Chromium	0.00050	U	0.100	0.0979		mg/L		98	75 - 125	1	20
Cobalt	0.0022		0.100	0.107		mg/L		105	75 - 125	2	20
Copper	0.00050	U	0.100	0.0992		mg/L		99	75 - 125	2	20
Iron	26.8		1.00	27.43	4	mg/L		59	75 - 125	4	20
Lead	0.00020	U	0.100	0.104		mg/L		104	75 - 125	3	20
Magnesium	18.2		10.0	28.02		mg/L		98	75 - 125	1	20
Manganese	15.7	E	0.100	15.57	E 4	mg/L		-80	75 - 125	4	20
Nickel	0.00050	U	0.100	0.0976		mg/L		98	75 - 125	3	20
Potassium	4.6		10.0	14.50		mg/L		99	75 - 125	2	20
Selenium	0.00060	U	0.100	0.0928		mg/L		93	75 - 125	1	20
Silver	0.00050	U	0.100	0.0967		mg/L		97	75 - 125	3	20
Sodium	7.3		10.0	17.07		mg/L		98	75 - 125	1	20
Thallium	0.00054	J	0.100	0.102		mg/L		101	75 - 125	2	20
Vanadium	0.00075	J B	0.100	0.101		mg/L		100	75 - 125	0	20
Zinc	0.010	U	0.100	0.0956		mg/L		96	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 490-276944/1-A
Matrix: Water
Analysis Batch: 277464

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276944

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 18:15	08/28/15 21:17	1

Lab Sample ID: LCS 490-276944/2-A
Matrix: Water
Analysis Batch: 277464

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276944

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000984		mg/L		98	80 - 120

Lab Sample ID: LCSD 490-276944/3-A
Matrix: Water
Analysis Batch: 277464

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 276944

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00100	0.000982		mg/L		98	80 - 120	0	20

Lab Sample ID: 490-85462-G-17-C MS
Matrix: Water
Analysis Batch: 277464

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 276944

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U F1	0.00100	0.00015	U F1	mg/L		0	75 - 125

Lab Sample ID: 490-85462-G-17-D MSD
Matrix: Water
Analysis Batch: 277464

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 276944

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U F1	0.00100	0.000180	J F1	mg/L		18	75 - 125	NC	20

Lab Sample ID: MB 490-278307/1-A
Matrix: Water
Analysis Batch: 278590

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 278307

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/01/15 18:33	09/02/15 12:45	1

Lab Sample ID: LCS 490-278307/2-A
Matrix: Water
Analysis Batch: 278590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 278307

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000918		mg/L		92	80 - 120

Lab Sample ID: LCSD 490-278307/3-A
Matrix: Water
Analysis Batch: 278590

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 278307

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00100	0.000918		mg/L		92	80 - 120	0	20

Lab Sample ID: 490-85462-G-9-D MS
Matrix: Water
Analysis Batch: 278590

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 278307

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U F1	0.00100	0.000695	F1	mg/L		69	75 - 125

Lab Sample ID: 490-85462-G-9-E MSD
Matrix: Water
Analysis Batch: 278590

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 278307

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U F1	0.00100	0.000682	F1	mg/L		68	75 - 125	2	20

Lab Sample ID: MB 490-278585/1-A
Matrix: Water
Analysis Batch: 278742

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 278585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/02/15 14:52	09/02/15 22:08	1

Lab Sample ID: LCS 490-278585/2-A
Matrix: Water
Analysis Batch: 278742

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 278585

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.00100		mg/L		100	80 - 120

Lab Sample ID: 490-86428-D-1-B MS
Matrix: Water
Analysis Batch: 278742

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 278585

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.00103		mg/L		103	75 - 125

Lab Sample ID: 490-86428-D-1-C MSD
Matrix: Water
Analysis Batch: 278742

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 278585

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.00102		mg/L		102	75 - 125	2	20

Lab Sample ID: MB 490-275791/1-B
Matrix: Water
Analysis Batch: 276250

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 275794

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/24/15 15:07	08/25/15 20:25	1

Lab Sample ID: LCS 490-275791/2-B
Matrix: Water
Analysis Batch: 276250

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 275794

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000803		mg/L		80	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 490-85229-H-12-G MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 276250 — **Prep Batch: 275794**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000880		mg/L		88	75 - 125

Lab Sample ID: 490-85229-H-12-H MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 276250 — **Prep Batch: 275794**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000871		mg/L		87	75 - 125	1	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 490-274647/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275204 — **Prep Batch: 274647**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/19/15 16:13	08/21/15 11:48	1

Lab Sample ID: LCS 490-274647/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275204 — **Prep Batch: 274647**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.102		mg/L		102	90 - 110

Lab Sample ID: 490-85437-1 MS — **Client Sample ID: PM Air Shaft-180-081715**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275204 — **Prep Batch: 274647**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1	0.100	0.0509	F1	mg/L		51	70 - 130

Lab Sample ID: 490-85437-1 MSD — **Client Sample ID: PM Air Shaft-180-081715**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275204 — **Prep Batch: 274647**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1	0.100	0.0536	F1	mg/L		54	70 - 130	5	46

Lab Sample ID: 490-85437-6 DU — **Client Sample ID: FB-03-081815**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275204 — **Prep Batch: 274647**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.0070	U	0.0070	U	mg/L		NC	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 490-274777/5
Matrix: Water
Analysis Batch: 274777

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/19/15 16:42	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/19/15 16:42	1

Lab Sample ID: LCS 490-274777/6
Matrix: Water
Analysis Batch: 274777

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	100	91.99		mg/L		92	90 - 110

Lab Sample ID: 490-85409-D-1 DU
Matrix: Water
Analysis Batch: 274777

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	94.2		95.19		mg/L		1	20
Total Alkalinity as CaCO3	94.2		95.19		mg/L		1	20

Lab Sample ID: 490-85437-6 DU
Matrix: Water
Analysis Batch: 274777

Client Sample ID: FB-03-081815
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	U	mg/L		NC	20
Total Alkalinity as CaCO3	5.0	U	5.0	U	mg/L		NC	20

Lab Sample ID: MB 490-275160/5
Matrix: Water
Analysis Batch: 275160

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/20/15 16:19	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/20/15 16:19	1

Lab Sample ID: LCS 490-275160/6
Matrix: Water
Analysis Batch: 275160

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	100	93.11		mg/L		93	90 - 110

Lab Sample ID: 490-85437-1 DU
Matrix: Water
Analysis Batch: 275160

Client Sample ID: PM Air Shaft-180-081715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	191		190.4		mg/L		0.1	20
Total Alkalinity as CaCO3	191		190.4		mg/L		0.1	20

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 490-85548-E-7 DU
Matrix: Water
Analysis Batch: 275160

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	5.0	U		5.0	U	mg/L				NC	20
Total Alkalinity as CaCO3	5.0	U		5.0	U	mg/L				NC	20

GC/MS VOA

Analysis Batch: 275960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-L-12 MS	Matrix Spike	Total/NA	Water	8260C SIM	
490-85229-L-12 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C SIM	
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	8260C SIM	
490-85437-2	CM-100-081715	Total/NA	Water	8260C SIM	
490-85437-3	CM-160-081715	Total/NA	Water	8260C SIM	
LCS 490-275960/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-275960/11	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-275960/7	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 276290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-2 - RA	CM-100-081715	Total/NA	Water	8260C SIM	
490-85437-3 - RA	CM-160-081715	Total/NA	Water	8260C SIM	
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	8260C SIM	
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	8260C SIM	
490-85437-6	FB-03-081815	Total/NA	Water	8260C SIM	
490-85437-7	TB-08-081815	Total/NA	Water	8260C SIM	
LCS 490-276290/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-276290/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-276290/7	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 277121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	8260C	
490-85437-1 MS	PM Air Shaft-180-081715	Total/NA	Water	8260C	
490-85437-1 MSD	PM Air Shaft-180-081715	Total/NA	Water	8260C	
490-85437-2	CM-100-081715	Total/NA	Water	8260C	
490-85437-3	CM-160-081715	Total/NA	Water	8260C	
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	8260C	
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	8260C	
490-85437-6	FB-03-081815	Total/NA	Water	8260C	
490-85437-7	TB-08-081815	Total/NA	Water	8260C	
LCS 490-277121/4	Lab Control Sample	Total/NA	Water	8260C	
MB 490-277121/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 277393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-4 - RA	RW-12 (55-65)-081715	Total/NA	Water	8260C SIM	
490-85437-5 - RA	RW-11S (236-241)-081715	Total/NA	Water	8260C SIM	
490-85437-6 - RA	FB-03-081815	Total/NA	Water	8260C SIM	
490-85437-7 - RA	TB-08-081815	Total/NA	Water	8260C SIM	
LCS 490-277393/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-277393/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-277393/7	Method Blank	Total/NA	Water	8260C SIM	

GC/MS Semi VOA

Prep Batch: 275595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 275595 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-2	CM-100-081715	Total/NA	Water	3510C	
490-85437-3	CM-160-081715	Total/NA	Water	3510C	
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	3510C	
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	3510C	
490-85437-6	FB-03-081815	Total/NA	Water	3510C	
LCS 490-275595/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-275595/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 275780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	3510C	
490-85437-2	CM-100-081715	Total/NA	Water	3510C	
490-85437-3	CM-160-081715	Total/NA	Water	3510C	
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	3510C	
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	3510C	
490-85437-6	FB-03-081815	Total/NA	Water	3510C	
LCS 490-275780/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-275780/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 276363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	8270D	275780
490-85437-2	CM-100-081715	Total/NA	Water	8270D	275780
490-85437-3	CM-160-081715	Total/NA	Water	8270D	275780
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	8270D	275780
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	8270D	275780
490-85437-6	FB-03-081815	Total/NA	Water	8270D	275780
LCS 490-275780/2-A	Lab Control Sample	Total/NA	Water	8270D	275780
MB 490-275780/1-A	Method Blank	Total/NA	Water	8270D	275780

Analysis Batch: 276817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	8270D SIM	275595
490-85437-2	CM-100-081715	Total/NA	Water	8270D SIM	275595
490-85437-3	CM-160-081715	Total/NA	Water	8270D SIM	275595
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	8270D SIM	275595
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	8270D SIM	275595
490-85437-6	FB-03-081815	Total/NA	Water	8270D SIM	275595
LCS 490-275595/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	275595
MB 490-275595/1-A	Method Blank	Total/NA	Water	8270D SIM	275595

GC Semi VOA

Prep Batch: 277676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	3510C	
490-85437-2	CM-100-081715	Total/NA	Water	3510C	
490-85437-3	CM-160-081715	Total/NA	Water	3510C	
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	3510C	
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Prep Batch: 277676 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-6	FB-03-081815	Total/NA	Water	3510C	
LCS 490-277676/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-277676/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 278119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	8082A	277676
490-85437-2	CM-100-081715	Total/NA	Water	8082A	277676
490-85437-3	CM-160-081715	Total/NA	Water	8082A	277676
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	8082A	277676
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	8082A	277676
490-85437-6	FB-03-081815	Total/NA	Water	8082A	277676
LCS 490-277676/2-A	Lab Control Sample	Total/NA	Water	8082A	277676
MB 490-277676/1-A	Method Blank	Total/NA	Water	8082A	277676

HPLC/IC

Analysis Batch: 277170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	9056A	
490-85437-1 MS	PM Air Shaft-180-081715	Total/NA	Water	9056A	
490-85437-1 MSD	PM Air Shaft-180-081715	Total/NA	Water	9056A	
490-85437-2	CM-100-081715	Total/NA	Water	9056A	
490-85437-3	CM-160-081715	Total/NA	Water	9056A	
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	9056A	
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	9056A	
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	9056A	
490-85437-6	FB-03-081815	Total/NA	Water	9056A	
LCS 490-277170/7	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-277170/8	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-277170/6	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 274876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	3010A	
490-85437-2	CM-100-081715	Total/NA	Water	3010A	
490-85437-3	CM-160-081715	Total/NA	Water	3010A	
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	3010A	
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	3010A	
490-85437-6	FB-03-081815	Total/NA	Water	3010A	
490-85449-A-1-B MS	Matrix Spike	Total/NA	Water	3010A	
490-85449-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
LCS 490-274876/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 490-274876/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 490-274876/1-A	Method Blank	Total/NA	Water	3010A	

Metals (Continued)

Analysis Batch: 275699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	6020A	274876
490-85437-2	CM-100-081715	Total/NA	Water	6020A	274876
490-85437-3	CM-160-081715	Total/NA	Water	6020A	274876
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	6020A	274876
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	6020A	274876
490-85437-6	FB-03-081815	Total/NA	Water	6020A	274876
490-85449-A-1-B MS	Matrix Spike	Total/NA	Water	6020A	274876
490-85449-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	274876
LCS 490-274876/2-A	Lab Control Sample	Total/NA	Water	6020A	274876
LCSD 490-274876/3-A	Lab Control Sample Dup	Total/NA	Water	6020A	274876
MB 490-274876/1-A	Method Blank	Total/NA	Water	6020A	274876

Filtration Batch: 275791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-H-12-G MS	Matrix Spike	Dissolved	Water	Filtration	
490-85229-H-12-H MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	
490-85437-1	PM Air Shaft-180-081715	Dissolved	Water	Filtration	
490-85437-2	CM-100-081715	Dissolved	Water	Filtration	
490-85437-3	CM-160-081715	Dissolved	Water	Filtration	
490-85437-4	RW-12 (55-65)-081715	Dissolved	Water	Filtration	
490-85437-5	RW-11S (236-241)-081715	Dissolved	Water	Filtration	
490-85437-6	FB-03-081815	Dissolved	Water	Filtration	
LCS 490-275791/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-275791/1-B	Method Blank	Dissolved	Water	Filtration	

Prep Batch: 275794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-H-12-G MS	Matrix Spike	Dissolved	Water	7470A	275791
490-85229-H-12-H MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	275791
490-85437-1	PM Air Shaft-180-081715	Dissolved	Water	7470A	275791
490-85437-2	CM-100-081715	Dissolved	Water	7470A	275791
490-85437-3	CM-160-081715	Dissolved	Water	7470A	275791
490-85437-4	RW-12 (55-65)-081715	Dissolved	Water	7470A	275791
490-85437-5	RW-11S (236-241)-081715	Dissolved	Water	7470A	275791
490-85437-6	FB-03-081815	Dissolved	Water	7470A	275791
LCS 490-275791/2-B	Lab Control Sample	Dissolved	Water	7470A	275791
MB 490-275791/1-B	Method Blank	Dissolved	Water	7470A	275791

Filtration Batch: 276153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Dissolved	Water	Filtration	
490-85437-2	CM-100-081715	Dissolved	Water	Filtration	
490-85437-3	CM-160-081715	Dissolved	Water	Filtration	
490-85437-4	RW-12 (55-65)-081715	Dissolved	Water	Filtration	
490-85437-5	RW-11S (236-241)-081715	Dissolved	Water	Filtration	
490-85437-6	FB-03-081815	Dissolved	Water	Filtration	

Prep Batch: 276235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Dissolved	Water	3005A	276153
490-85437-2	CM-100-081715	Dissolved	Water	3005A	276153

Metals (Continued)

Prep Batch: 276235 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-3	CM-160-081715	Dissolved	Water	3005A	276153
490-85437-4	RW-12 (55-65)-081715	Dissolved	Water	3005A	276153
490-85437-5	RW-11S (236-241)-081715	Dissolved	Water	3005A	276153
490-85437-6	FB-03-081815	Dissolved	Water	3005A	276153
490-85759-A-1-D MS	Matrix Spike	Dissolved	Water	3005A	
490-85759-A-1-E MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	
LCS 490-276235/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 490-276235/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 276250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-H-12-G MS	Matrix Spike	Dissolved	Water	7470A	275794
490-85229-H-12-H MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	275794
490-85437-1	PM Air Shaft-180-081715	Dissolved	Water	7470A	275794
490-85437-2	CM-100-081715	Dissolved	Water	7470A	275794
490-85437-3	CM-160-081715	Dissolved	Water	7470A	275794
490-85437-4	RW-12 (55-65)-081715	Dissolved	Water	7470A	275794
490-85437-5	RW-11S (236-241)-081715	Dissolved	Water	7470A	275794
490-85437-6	FB-03-081815	Dissolved	Water	7470A	275794
LCS 490-275791/2-B	Lab Control Sample	Dissolved	Water	7470A	275794
MB 490-275791/1-B	Method Blank	Dissolved	Water	7470A	275794

Analysis Batch: 276337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	6020A	274876
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	6020A	274876
490-85437-2	CM-100-081715	Total/NA	Water	6020A	274876
490-85437-3	CM-160-081715	Total/NA	Water	6020A	274876
490-85437-3	CM-160-081715	Total/NA	Water	6020A	274876
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	6020A	274876
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	6020A	274876
490-85437-6	FB-03-081815	Total/NA	Water	6020A	274876
490-85449-A-1-B MS	Matrix Spike	Total/NA	Water	6020A	274876
490-85449-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	274876
LCS 490-274876/2-A	Lab Control Sample	Total/NA	Water	6020A	274876
LCSD 490-274876/3-A	Lab Control Sample Dup	Total/NA	Water	6020A	274876
MB 490-274876/1-A	Method Blank	Total/NA	Water	6020A	274876

Analysis Batch: 276838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Dissolved	Water	6020A	276235
490-85437-2	CM-100-081715	Dissolved	Water	6020A	276235
490-85437-3	CM-160-081715	Dissolved	Water	6020A	276235
490-85437-4	RW-12 (55-65)-081715	Dissolved	Water	6020A	276235
490-85437-5	RW-11S (236-241)-081715	Dissolved	Water	6020A	276235
490-85437-6	FB-03-081815	Dissolved	Water	6020A	276235
490-85759-A-1-D MS	Matrix Spike	Dissolved	Water	6020A	276235
490-85759-A-1-E MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	276235
LCS 490-276235/2-A	Lab Control Sample	Total Recoverable	Water	6020A	276235
MB 490-276235/1-A	Method Blank	Total Recoverable	Water	6020A	276235

Metals (Continued)

Prep Batch: 276944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	7470A	
490-85437-6	FB-03-081815	Total/NA	Water	7470A	
490-85462-G-17-C MS	Matrix Spike	Total/NA	Water	7470A	
490-85462-G-17-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
LCS 490-276944/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 490-276944/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 490-276944/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 277464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	7470A	276944
490-85437-6	FB-03-081815	Total/NA	Water	7470A	276944
490-85462-G-17-C MS	Matrix Spike	Total/NA	Water	7470A	276944
490-85462-G-17-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	276944
LCS 490-276944/2-A	Lab Control Sample	Total/NA	Water	7470A	276944
LCSD 490-276944/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	276944
MB 490-276944/1-A	Method Blank	Total/NA	Water	7470A	276944

Analysis Batch: 277874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85449-A-1-B MS	Matrix Spike	Total/NA	Water	6020A	274876
490-85449-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	274876
LCS 490-274876/2-A	Lab Control Sample	Total/NA	Water	6020A	274876
LCSD 490-274876/3-A	Lab Control Sample Dup	Total/NA	Water	6020A	274876
MB 490-274876/1-A	Method Blank	Total/NA	Water	6020A	274876

Analysis Batch: 277984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Dissolved	Water	6020A	276235
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	6020A	274876

Prep Batch: 278307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	7470A	
490-85437-2	CM-100-081715	Total/NA	Water	7470A	
490-85462-G-9-D MS	Matrix Spike	Total/NA	Water	7470A	
490-85462-G-9-E MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
LCS 490-278307/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 490-278307/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 490-278307/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 278563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	6020A	274876
490-85437-2	CM-100-081715	Total/NA	Water	6020A	274876
490-85437-3	CM-160-081715	Total/NA	Water	6020A	274876
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	6020A	274876
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	6020A	274876
490-85437-6	FB-03-081815	Total/NA	Water	6020A	274876

Metals (Continued)

Prep Batch: 278585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-3	CM-160-081715	Total/NA	Water	7470A	
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	7470A	
490-86428-D-1-B MS	Matrix Spike	Total/NA	Water	7470A	
490-86428-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
LCS 490-278585/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 490-278585/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 278590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	7470A	278307
490-85437-2	CM-100-081715	Total/NA	Water	7470A	278307
490-85462-G-9-D MS	Matrix Spike	Total/NA	Water	7470A	278307
490-85462-G-9-E MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	278307
LCS 490-278307/2-A	Lab Control Sample	Total/NA	Water	7470A	278307
LCSD 490-278307/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	278307
MB 490-278307/1-A	Method Blank	Total/NA	Water	7470A	278307

Analysis Batch: 278742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-3	CM-160-081715	Total/NA	Water	7470A	278585
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	7470A	278585
490-86428-D-1-B MS	Matrix Spike	Total/NA	Water	7470A	278585
490-86428-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	278585
LCS 490-278585/2-A	Lab Control Sample	Total/NA	Water	7470A	278585
MB 490-278585/1-A	Method Blank	Total/NA	Water	7470A	278585

General Chemistry

Prep Batch: 274647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	9012B	
490-85437-1 MS	PM Air Shaft-180-081715	Total/NA	Water	9012B	
490-85437-1 MSD	PM Air Shaft-180-081715	Total/NA	Water	9012B	
490-85437-2	CM-100-081715	Total/NA	Water	9012B	
490-85437-3	CM-160-081715	Total/NA	Water	9012B	
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	9012B	
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	9012B	
490-85437-6	FB-03-081815	Total/NA	Water	9012B	
490-85437-6 DU	FB-03-081815	Total/NA	Water	9012B	
LCS 490-274647/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 490-274647/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 274777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85409-D-1 DU	Duplicate	Total/NA	Water	SM 2320B	
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	SM 2320B	
490-85437-2	CM-100-081715	Total/NA	Water	SM 2320B	
490-85437-3	CM-160-081715	Total/NA	Water	SM 2320B	
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	SM 2320B	
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 274777 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-6	FB-03-081815	Total/NA	Water	SM 2320B	
490-85437-6 DU	FB-03-081815	Total/NA	Water	SM 2320B	
LCS 490-274777/6	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 490-274777/5	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 275160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1 DU	PM Air Shaft-180-081715	Total/NA	Water	SM 2320B	
490-85548-E-7 DU	Duplicate	Total/NA	Water	SM 2320B	
LCS 490-275160/6	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 490-275160/5	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 275204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-1	PM Air Shaft-180-081715	Total/NA	Water	9012B	274647
490-85437-1 MS	PM Air Shaft-180-081715	Total/NA	Water	9012B	274647
490-85437-1 MSD	PM Air Shaft-180-081715	Total/NA	Water	9012B	274647
490-85437-2	CM-100-081715	Total/NA	Water	9012B	274647
490-85437-3	CM-160-081715	Total/NA	Water	9012B	274647
490-85437-4	RW-12 (55-65)-081715	Total/NA	Water	9012B	274647
490-85437-5	RW-11S (236-241)-081715	Total/NA	Water	9012B	274647
490-85437-6	FB-03-081815	Total/NA	Water	9012B	274647
490-85437-6 DU	FB-03-081815	Total/NA	Water	9012B	274647
LCS 490-274647/2-A	Lab Control Sample	Total/NA	Water	9012B	274647
MB 490-274647/1-A	Method Blank	Total/NA	Water	9012B	274647

Client Sample ID: PM Air Shaft-180-081715

Lab Sample ID: 490-85437-1

Date Collected: 08/17/15 12:05

Matrix: Water

Date Received: 08/19/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277121	08/28/15 18:03	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275960	08/25/15 19:29	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275780	08/24/15 14:24	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	276363	08/26/15 17:04	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275595	08/24/15 06:43	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276817	08/27/15 23:03	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277676	08/31/15 06:31	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278119	09/01/15 21:39	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		277170	08/27/15 21:10	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 18:26	LEG	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		10	50 mL	50 mL	277984	08/31/15 16:48	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276337	08/26/15 00:32	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		5	50 mL	50 mL	276337	08/26/15 00:38	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278563	09/02/15 09:36	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 20:20	CME	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 21:13	BLG	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	278307	09/01/15 18:33	BLG	TAL NSH
Total/NA	Analysis	7470A		1	30.0 mL	30.0 mL	278590	09/02/15 13:21	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274647	08/19/15 16:13	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	275204	08/21/15 11:50	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274777	08/19/15 17:41	SMB	TAL NSH

Client Sample ID: CM-100-081715

Lab Sample ID: 490-85437-2

Date Collected: 08/17/15 15:10

Matrix: Water

Date Received: 08/19/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277121	08/28/15 18:30	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275960	08/25/15 19:58	MJH	TAL NSH
Total/NA	Analysis	8260C SIM	RA	1	10 mL	10 mL	276290	08/26/15 18:59	KS	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275780	08/24/15 14:24	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	276363	08/26/15 17:28	SNR	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	275595	08/24/15 06:43	ET	TAL NSH

Client Sample ID: CM-100-081715

Lab Sample ID: 490-85437-2

Date Collected: 08/17/15 15:10

Matrix: Water

Date Received: 08/19/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D SIM		1	270 mL	1 mL	276817	08/27/15 23:30	BES	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	277676	08/31/15 06:31	ET	TAL NSH
Total/NA	Analysis	8082A		1	270 mL	1 mL	278119	09/01/15 21:55	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		277170	08/27/15 22:22	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 18:31	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276337	08/26/15 00:43	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278563	09/02/15 09:42	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 20:25	CME	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 21:20	BLG	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	278307	09/01/15 18:33	BLG	TAL NSH
Total/NA	Analysis	7470A		1	30.0 mL	30.0 mL	278590	09/02/15 13:23	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274647	08/19/15 16:13	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	275204	08/21/15 11:53	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274777	08/19/15 17:58	SMB	TAL NSH

Client Sample ID: CM-160-081715

Lab Sample ID: 490-85437-3

Date Collected: 08/17/15 16:45

Matrix: Water

Date Received: 08/19/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277121	08/28/15 18:57	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	275960	08/25/15 20:27	MJH	TAL NSH
Total/NA	Analysis	8260C SIM	RA	1	10 mL	10 mL	276290	08/26/15 19:28	KS	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275780	08/24/15 14:24	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	276363	08/26/15 17:52	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275595	08/24/15 06:43	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276817	08/27/15 23:56	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277676	08/31/15 06:31	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278119	09/01/15 22:11	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		277170	08/27/15 22:46	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 18:46	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276337	08/26/15 00:49	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH

Client Sample ID: CM-160-081715

Lab Sample ID: 490-85437-3

Date Collected: 08/17/15 16:45

Matrix: Water

Date Received: 08/19/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020A		5	50 mL	50 mL	276337	08/26/15 01:07	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278563	09/02/15 09:47	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 20:30	CME	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 21:23	BLG	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	278585	09/02/15 18:12	BLG	TAL NSH
Total/NA	Analysis	7470A		1	30.0 mL	30.0 mL	278742	09/02/15 22:47	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274647	08/19/15 16:13	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	275204	08/21/15 11:54	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274777	08/19/15 18:03	SMB	TAL NSH

Client Sample ID: RW-12 (55-65)-081715

Lab Sample ID: 490-85437-4

Date Collected: 08/17/15 11:11

Matrix: Water

Date Received: 08/19/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277121	08/28/15 19:24	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276290	08/26/15 19:57	KS	TAL NSH
Total/NA	Analysis	8260C SIM	RA	1	10 mL	10 mL	277393	08/29/15 17:34	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275780	08/24/15 14:24	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	276363	08/26/15 18:15	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275595	08/24/15 06:43	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276817	08/28/15 00:22	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277676	08/31/15 06:31	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278119	09/01/15 22:26	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		277170	08/27/15 23:10	JHS	TAL NSH
Total/NA	Analysis	9056A		5	10 mL		277170	08/27/15 23:34	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 18:52	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276337	08/26/15 01:12	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278563	09/02/15 09:53	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 20:35	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		10	50 mL	50 mL	277984	08/31/15 17:19	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Client Sample ID: RW-12 (55-65)-081715

Date Collected: 08/17/15 11:11
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 21:25	BLG	TAL NSH
Total/NA	Prep	7470A			30.0 mL	30.0 mL	278585	09/02/15 18:12	BLG	TAL NSH
Total/NA	Analysis	7470A		1	30.0 mL	30.0 mL	278742	09/02/15 22:49	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274647	08/19/15 16:13	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	275204	08/21/15 11:54	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274777	08/19/15 18:12	SMB	TAL NSH

Client Sample ID: RW-11S (236-241)-081715

Date Collected: 08/17/15 15:15
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277121	08/28/15 19:51	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276290	08/26/15 20:25	KS	TAL NSH
Total/NA	Analysis	8260C SIM	RA	1	10 mL	10 mL	277393	08/29/15 18:03	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275780	08/24/15 14:24	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	276363	08/26/15 18:39	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275595	08/24/15 06:43	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276817	08/28/15 00:48	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277676	08/31/15 06:31	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278119	09/01/15 22:42	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		277170	08/27/15 23:58	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 18:57	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276337	08/26/15 01:18	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278563	09/02/15 09:59	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 20:40	CME	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 21:28	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	276944	08/27/15 18:15	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	277464	08/28/15 21:41	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274647	08/19/15 16:13	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	275204	08/21/15 11:55	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274777	08/19/15 18:17	SMB	TAL NSH

Client Sample ID: FB-03-081815

Date Collected: 08/18/15 08:00
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277121	08/28/15 17:36	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276290	08/26/15 20:54	KS	TAL NSH
Total/NA	Analysis	8260C SIM	RA	1	10 mL	10 mL	277393	08/29/15 18:31	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275780	08/24/15 14:24	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	276363	08/26/15 19:03	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275595	08/24/15 06:43	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	276817	08/28/15 01:14	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277676	08/31/15 06:31	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278119	09/01/15 22:58	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		277170	08/28/15 00:22	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 19:02	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276337	08/26/15 01:24	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	278563	09/02/15 10:04	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	274876	08/20/15 11:46	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275699	08/21/15 20:46	CME	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	275794	08/24/15 15:07	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	275791	08/24/15 15:07	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	276250	08/25/15 21:30	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	276944	08/27/15 18:15	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	277464	08/28/15 21:44	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	274647	08/19/15 16:13	SDL	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	275204	08/21/15 11:57	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	274777	08/19/15 18:21	SMB	TAL NSH

Client Sample ID: TB-08-081815

Date Collected: 08/18/15 00:01
Date Received: 08/19/15 09:10

Lab Sample ID: 490-85437-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277121	08/28/15 17:09	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276290	08/26/15 21:23	KS	TAL NSH
Total/NA	Analysis	8260C SIM	RA	1	10 mL	10 mL	277393	08/29/15 16:08	MJH	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
9056A	Anions, Ion Chromatography	SW846	TAL NSH
6020A	Metals (ICP/MS)	SW846	TAL NSH
7470A	Mercury (CVAA)	SW846	TAL NSH
9012B	Cyanide, Total andor Amenable	SW846	TAL NSH
SM 2320B	Alkalinity	SM	TAL NSH

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85437-1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	TN965	09-30-15

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
8270D	3510C	Water	1,4-Dioxane

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total
8260C		Water	Dichlorobromomethane
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	1,4-Dioxane
8260C SIM		Water	Ethylene Dibromide
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-85437 Chain of Custody

Cooler Received/Opened On 8/19/2015 @ 910

1. Tracking # 2703 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960358

2. Temperature of rep. sample or temp blank when opened: 0.5 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO (NA)

4. Were custody seals on outside of cooler? YES (NO) NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? (YES)...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other (None)

9. Cooling process: (Ice) Ice-pack (Ice (direct contact)) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...(NO)...NA

14. Was there a Trip Blank in this cooler? YES...(NO)...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...(NA) DA 8-19-15

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES...NO...(NA) DA 8-19-15

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES...(NO) Was a PIPE generated? YES...(NO)...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 6/24/09

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 490
85437

COOLER RECEIPT FORM

Cooler Received/Opened On 8/19/2015 @ 0910

1. Tracking # 2725 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 2.9 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA

4. Were custody seals on outside of cooler? YES..NO..NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES..NO..NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO...NA

b. Was there any observable headspace present in any VOA vial? YES..NO..NA

14. Was there a Trip Blank in this cooler? YES..NO..NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES..NO..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
85437

Cooler Received/Opened On 8/19/2015 @ 910

1. Tracking # 2714 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960358

2. Temperature of rep. sample or temp blank when opened: 1.0 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) EZA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES NO Was a PIPE generated? YES NO ...# 490-194590

DA 8-19-15

*Sample-D-1 has headspace.

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 6/24/09

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 490
85437

COOLER RECEIPT FORM

Cooler Received/Opened On 8/19/2015 @ 910

1. Tracking # 2736 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960358

2. Temperature of rep. sample or temp blank when opened: 0.6 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES..NO..NA

If yes, how many and where:

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) ECA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES..NO..NA If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES..NO Was a PIPE generated? YES..NO..#

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
85437

TestAmerica

9/21/2015

Client Information	Sampler: Robert Lautenberg	Lab PM: Brown, Shali	Car	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
	Preservation Code:																					
1	PMA-Shaft-180-081715	8/17/15	12:05	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
2	CM-100-081715	8/17/15	15:10	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
3	CM-160-081715	8/17/15	16:45	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
4	RW-12 (55-65)-081715	8/17/15	11:11	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
5	RW-11S (236-244)-081715	8/17/15	15:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
6	FB-03-081815	8/18/15	08:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
7	TB-08-081815	8/18/15	—	—	Water	N	N	✓	✓													
					Water																	
					Water																	
					Water																	
					Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	8/18/15 845	Cornerstone	[signature]	8/18/15 845	TA
2	James Tolson	8/18/15 1235	TA	[signature]	8-19-15 0910	TAN
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.5, 2.9, 1.0, 0.6

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 490-85437-1

Login Number: 85437
List Number: 1
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.5C, 2.9C, 1.0C, 0.6C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	Headspace larger than 1/4" in one or more vials, one vial with accpt. headspace
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-85529-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Tim Roeper

Authorized for release by:
9/21/2015 1:27:25 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-85529-1	PM AirShaft-230-081815	Water	08/18/15 10:50	08/20/15 09:20
490-85529-2	CM-275-081815	Water	08/18/15 13:20	08/20/15 09:20
490-85529-3	RW-10A (75-85) - 081815	Water	08/18/15 10:25	08/20/15 09:20
490-85529-4	RW-10 (185-195) - 081815	Water	08/18/15 11:35	08/20/15 09:20
490-85529-5	RW-8 (163-173) - 081815	Water	08/18/15 14:15	08/20/15 09:20
490-85529-6	Trip Blank - 09-081915	Water	08/18/15 01:00	08/20/15 09:20

Job ID: 490-85529-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 490-85529-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 8/20/2015 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.2º C and 2.5º C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples PM AirShaft-230-081815 (490-85529-1), CM-275-081815 (490-85529-2), RW-10A (75-85) - 081815 (490-85529-3), RW-10 (185-195) - 081815 (490-85529-4), RW-8 (163-173) - 081815 (490-85529-5) and Trip Blank - 09-081915 (490-85529-6) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/29/2015.

1,1-Dichloroethene exceeded the RPD limit for LCSD 490-277302/4. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS SIM)

Samples PM AirShaft-230-081815 (490-85529-1), CM-275-081815 (490-85529-2), RW-10A (75-85) - 081815 (490-85529-3), RW-10 (185-195) - 081815 (490-85529-4), RW-8 (163-173) - 081815 (490-85529-5) and Trip Blank - 09-081915 (490-85529-6) were analyzed for volatile organic compounds (GC-MS SIM) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/26/2015, 08/27/2015 and 08/29/2015.

Job ID: 490-85529-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

1,2-Dichloroethane-d4 (Surr) failed the surrogate recovery criteria high for RW-10 (185-195) - 081815 (490-85529-4). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Ethylene Dibromide failed the recovery criteria low for LCS 490-276673/3. 1,4-Dioxane exceeded the RPD limit for LCSD 490-276290/4. Ethylene Dibromide failed the recovery criteria low for LCSD 490-276673/4.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 490-277393.

Sample PM AirShaft-230-081815 (490-85529-1)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GC MS)

Samples PM AirShaft-230-081815 (490-85529-1), CM-275-081815 (490-85529-2), RW-10A (75-85) - 081815 (490-85529-3), RW-10 (185-195) - 081815 (490-85529-4) and RW-8 (163-173) - 081815 (490-85529-5) were analyzed for semivolatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/25/2015 and analyzed on 08/26/2015.

Benzaldehyde failed the recovery criteria high for LCS 490-275885/2-A. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-275885 and analytical batch 490-276363.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples PM AirShaft-230-081815 (490-85529-1), CM-275-081815 (490-85529-2), RW-10A (75-85) - 081815 (490-85529-3), RW-10 (185-195) - 081815 (490-85529-4) and RW-8 (163-173) - 081815 (490-85529-5) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 08/31/2015 and analyzed on 09/01/2015 and 09/02/2015.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-277676.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

Samples PM AirShaft-230-081815 (490-85529-1), CM-275-081815 (490-85529-2), RW-10A (75-85) - 081815 (490-85529-3), RW-10 (185-195) - 081815 (490-85529-4) and RW-8 (163-173) - 081815 (490-85529-5) were analyzed for polycyclic aromatic hydrocarbons (PAHs) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/25/2015 and analyzed on 08/28/2015.

Hexachlorobenzene was detected in method blank MB 490-275872/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-275872 and analytical batch 490-277077.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED METALS (ICPMS)

Samples PM AirShaft-230-081815 (490-85529-1), CM-275-081815 (490-85529-2), RW-10A (75-85) - 081815 (490-85529-3), RW-10 (185-195) - 081815 (490-85529-4) and RW-8 (163-173) - 081815 (490-85529-5) were analyzed for dissolved metals (ICPMS) in

Job ID: 490-85529-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/26/2015 and analyzed on 08/26/2015, 08/31/2015 and 09/01/2015.

Vanadium was detected in method blank MB 490-276235/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

METALS (ICPMS)

Samples PM AirShaft-230-081815 (490-85529-1), CM-275-081815 (490-85529-2), RW-10A (75-85) - 081815 (490-85529-3), RW-10 (185-195) - 081815 (490-85529-4) and RW-8 (163-173) - 081815 (490-85529-5) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/24/2015 and analyzed on 08/24/2015, 08/25/2015, 08/26/2015 and 09/07/2015.

Vanadium was detected in method blank MB 490-275634/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Arsenic and Vanadium were detected in method blank MB 490-275634/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Iron, Sodium and Zinc failed the recovery criteria high for the MS of sample 490-85229-12 in batch 490-275984.
Iron and Zinc failed the recovery criteria high for the MSD of sample 490-85229-12 in batch 490-275984. Refer to the QC report for details.

Samples PM AirShaft-230-081815 (490-85529-1)[10X] and CM-275-081815 (490-85529-2)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED MERCURY (CVAA)

Samples PM AirShaft-230-081815 (490-85529-1), CM-275-081815 (490-85529-2), RW-10A (75-85) - 081815 (490-85529-3), RW-10 (185-195) - 081815 (490-85529-4) and RW-8 (163-173) - 081815 (490-85529-5) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/27/2015 and analyzed on 08/31/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples PM AirShaft-230-081815 (490-85529-1), CM-275-081815 (490-85529-2), RW-10A (75-85) - 081815 (490-85529-3), RW-10 (185-195) - 081815 (490-85529-4) and RW-8 (163-173) - 081815 (490-85529-5) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/27/2015 and analyzed on 08/29/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ALKALINITY

Samples PM AirShaft-230-081815 (490-85529-1), CM-275-081815 (490-85529-2), RW-10A (75-85) - 081815 (490-85529-3), RW-10 (185-195) - 081815 (490-85529-4) and RW-8 (163-173) - 081815 (490-85529-5) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/20/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL CYANIDE

Samples PM AirShaft-230-081815 (490-85529-1), CM-275-081815 (490-85529-2), RW-10A (75-85) - 081815 (490-85529-3), RW-10 (185-195) - 081815 (490-85529-4) and RW-8 (163-173) - 081815 (490-85529-5) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared on 08/21/2015 and analyzed on 08/26/2015.

Job ID: 490-85529-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

Cyanide, Total failed the recovery criteria low for the MS of sample RW-10A (75-85) - 081815MS (490-85529-3) in batch 490-276908.

Cyanide, Total failed the recovery criteria low for the MSD of sample RW-10A (75-85) - 081815MSD (490-85529-3) in batch 490-276908. Cyanide, Total exceeded the RPD limit. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS

Samples PM AirShaft-230-081815 (490-85529-1), CM-275-081815 (490-85529-2), RW-10A (75-85) - 081815 (490-85529-3), RW-10 (185-195) - 081815 (490-85529-4) and RW-8 (163-173) - 081815 (490-85529-5) were analyzed for anions in accordance with SW-846 Method 9056. The samples were analyzed on 08/27/2015 and 08/28/2015.

Chloride and Chloride failed the recovery criteria low for the MS of sample CM-275-081815MS (490-85529-2) in batch 490-277230. Chloride and Chloride failed the recovery criteria low for the MSD of sample CM-275-081815MSD (490-85529-2) in batch 490-277230. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits
X	Surrogate is outside control limits
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
*	LCS or LCSD is outside acceptance limits.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample ID: PM AirShaft-230-081815

Date Collected: 08/18/15 10:50
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-1

Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/26/15 21:51	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/26/15 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/26/15 21:51*	*1*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*		*08/26/15 21:51*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*08/26/15 21:51*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/26/15 21:51*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**140**	**D**	100	2.7	ug/L			08/27/15 22:02	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*	*D*	*70 - 130*		*08/27/15 22:02*	*10*
4-Bromofluorobenzene (Surr)	*117*	*D*	*70 - 130*		*08/27/15 22:02*	*10*
Dibromofluoromethane (Surr)	*93*	*D*	*70 - 130*		*08/27/15 22:02*	*10*
Toluene-d8 (Surr)	*99*	*D*	*70 - 130*		*08/27/15 22:02*	*10*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.10	U	0.30	0.10	ug/L			08/29/15 19:00	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*	*D*	*70 - 130*		*08/29/15 19:00*	*10*
4-Bromofluorobenzene (Surr)	*106*	*D*	*70 - 130*		*08/29/15 19:00*	*10*
Dibromofluoromethane (Surr)	*102*	*D*	*70 - 130*		*08/29/15 19:00*	*10*
Toluene-d8 (Surr)	*98*	*D*	*70 - 130*		*08/29/15 19:00*	*10*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 10:42	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/29/15 10:42	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 10:42	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 10:42	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/29/15 10:42	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/29/15 10:42	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/29/15 10:42	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/29/15 10:42	1
1,2-Dichlorobenzene	**0.42**	**J**	1.0	0.19	ug/L			08/29/15 10:42	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/29/15 10:42	1
1,3-Dichlorobenzene	**1.4**		1.0	0.18	ug/L			08/29/15 10:42	1
1,4-Dichlorobenzene	**3.6**		1.0	0.17	ug/L			08/29/15 10:42	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/29/15 10:42	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/29/15 10:42	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/29/15 10:42	1
Acetone	2.7	U	25	2.7	ug/L			08/29/15 10:42	1
Benzene	**25**		1.0	0.20	ug/L			08/29/15 10:42	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/29/15 10:42	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/29/15 10:42	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/29/15 10:42	1

Client Sample ID: PM AirShaft-230-081815
Date Collected: 08/18/15 10:50
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/29/15 10:42	1
Chlorobenzene	**15**		1.0	0.18	ug/L			08/29/15 10:42	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/29/15 10:42	1
Chloroethane	**7.7**		1.0	0.36	ug/L			08/29/15 10:42	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/29/15 10:42	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/29/15 10:42	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/29/15 10:42	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/29/15 10:42	1
Cyclohexane	**1.7**	**J**	5.0	0.13	ug/L			08/29/15 10:42	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/29/15 10:42	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/29/15 10:42	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/29/15 10:42	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/29/15 10:42	1
Isopropylbenzene	**7.4**		1.0	0.33	ug/L			08/29/15 10:42	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/29/15 10:42	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/29/15 10:42	1
Methylcyclohexane	**0.27**	**J**	5.0	0.090	ug/L			08/29/15 10:42	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/29/15 10:42	1
Styrene	0.28	U	1.0	0.28	ug/L			08/29/15 10:42	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/29/15 10:42	1
Toluene	**0.24**	**J**	1.0	0.17	ug/L			08/29/15 10:42	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/29/15 10:42	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/29/15 10:42	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/29/15 10:42	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/29/15 10:42	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/29/15 10:42	1
Xylenes, Total	**0.85**	**J**	3.0	0.58	ug/L			08/29/15 10:42	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/29/15 10:42	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethyl ether	*1.0*	*J*	*ug/L*		*2.35*	*60-29-7*		*08/29/15 10:42*	*1*
Hexane	*0.16*	*J*	*ug/L*		*3.12*	*110-54-3*		*08/29/15 10:42*	*1*
Cyclopentane, methyl-	*5.2*	*J N*	*ug/L*		*3.53*	*96-37-7*		*08/29/15 10:42*	*1*
Tetrahydrofuran	*4.3*	*J*	*ug/L*		*3.80*	*109-99-9*		*08/29/15 10:42*	*1*
N-Propylbenzene	*1.0*		*ug/L*		*8.06*	*103-65-1*		*08/29/15 10:42*	*1*
1,2,4-Trimethylbenzene	*0.20*	*J*	*ug/L*		*8.59*	*95-63-6*		*08/29/15 10:42*	*1*
1,2,3-Trimethylbenzene	*0.41*	*J*	*ug/L*		*9.00*	*526-73-8*		*08/29/15 10:42*	*1*
Indane	*7.3*	*J N*	*ug/L*		*9.20*	*496-11-7*		*08/29/15 10:42*	*1*
Benzene, 2-ethenyl-1,4-dimethyl-	*4.6*	*J N*	*ug/L*		*10.69*	*2039-89-6*		*08/29/15 10:42*	*1*
Naphthalene	*4.6*	*J*	*ug/L*		*11.38*	*91-20-3*		*08/29/15 10:42*	*1*
Total Alkanes	*0.16*	*J*	*ug/L*					*08/29/15 10:42*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/29/15 10:42*	*1*
Dibromofluoromethane (Surr)	*85*		*70 - 130*		*08/29/15 10:42*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*08/29/15 10:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*77*		*70 - 130*		*08/29/15 10:42*	*1*

Client Sample ID: PM AirShaft-230-081815
Date Collected: 08/18/15 10:50
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-1
Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.023	U	0.046	0.023	ug/L		08/25/15 06:06	08/28/15 16:25	1
Benzo[a]pyrene	0.023	U	0.046	0.023	ug/L		08/25/15 06:06	08/28/15 16:25	1
Benzo[b]fluoranthene	0.023	U	0.046	0.023	ug/L		08/25/15 06:06	08/28/15 16:25	1
Hexachlorobenzene	0.013	U	0.019	0.013	ug/L		08/25/15 06:06	08/28/15 16:25	1
Hexachlorobutadiene	0.19	U	0.37	0.19	ug/L		08/25/15 06:06	08/28/15 16:25	1
N-Nitrosodimethylamine	0.19	U	0.74	0.19	ug/L		08/25/15 06:06	08/28/15 16:25	1
Pentachlorophenol	0.093	U	0.28	0.093	ug/L		08/25/15 06:06	08/28/15 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*99*		*10 - 120*	*08/25/15 06:06*	*08/28/15 16:25*	*1*
2-Fluorobiphenyl (Surr)	*76*		*29 - 120*	*08/25/15 06:06*	*08/28/15 16:25*	*1*
Nitrobenzene-d5	*78*		*27 - 120*	*08/25/15 06:06*	*08/28/15 16:25*	*1*
Terphenyl-d14	*90*		*13 - 120*	*08/25/15 06:06*	*08/28/15 16:25*	*1*
2-Fluorophenol	*54*		*10 - 120*	*08/25/15 06:06*	*08/28/15 16:25*	*1*
Phenol-d5	*38*		*10 - 120*	*08/25/15 06:06*	*08/28/15 16:25*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.31	U	1.9	0.31	ug/L		08/25/15 08:27	08/26/15 14:18	1
1,2,4,5-Tetrachlorobenzene	2.0	U	9.6	2.0	ug/L		08/25/15 08:27	08/26/15 14:18	1
2,3,4,6-Tetrachlorophenol	6.6	U	9.6	6.6	ug/L		08/25/15 08:27	08/26/15 14:18	1
2,4,5-Trichlorophenol	6.8	U	9.6	6.8	ug/L		08/25/15 08:27	08/26/15 14:18	1
2,4,6-Trichlorophenol	6.5	U	9.6	6.5	ug/L		08/25/15 08:27	08/26/15 14:18	1
2,4-Dichlorophenol	5.4	U	9.6	5.4	ug/L		08/25/15 08:27	08/26/15 14:18	1
2,4-Dimethylphenol	4.0	U	9.6	4.0	ug/L		08/25/15 08:27	08/26/15 14:18	1
2,4-Dinitrophenol	5.7	U	24	5.7	ug/L		08/25/15 08:27	08/26/15 14:18	1
2,4-Dinitrotoluene	3.1	U	9.6	3.1	ug/L		08/25/15 08:27	08/26/15 14:18	1
2,6-Dinitrotoluene	2.2	U	9.6	2.2	ug/L		08/25/15 08:27	08/26/15 14:18	1
2-Chloronaphthalene	2.7	U	9.6	2.7	ug/L		08/25/15 08:27	08/26/15 14:18	1
2-Chlorophenol	4.6	U	9.6	4.6	ug/L		08/25/15 08:27	08/26/15 14:18	1
2-Methylnaphthalene	0.38	U	1.9	0.38	ug/L		08/25/15 08:27	08/26/15 14:18	1
2-Methylphenol	2.2	U	9.6	2.2	ug/L		08/25/15 08:27	08/26/15 14:18	1
2-Nitroaniline	3.6	U	24	3.6	ug/L		08/25/15 08:27	08/26/15 14:18	1
2-Nitrophenol	5.1	U	9.6	5.1	ug/L		08/25/15 08:27	08/26/15 14:18	1
3,3'-Dichlorobenzidine	3.2	U	9.6	3.2	ug/L		08/25/15 08:27	08/26/15 14:18	1
3 & 4 Methylphenol	2.1	U	9.6	2.1	ug/L		08/25/15 08:27	08/26/15 14:18	1
3-Nitroaniline	2.6	U	24	2.6	ug/L		08/25/15 08:27	08/26/15 14:18	1
4,6-Dinitro-2-methylphenol	8.9	U	24	8.9	ug/L		08/25/15 08:27	08/26/15 14:18	1
4-Bromophenyl phenyl ether	2.6	U	9.6	2.6	ug/L		08/25/15 08:27	08/26/15 14:18	1
4-Chloro-3-methylphenol	4.3	U	9.6	4.3	ug/L		08/25/15 08:27	08/26/15 14:18	1
4-Chloroaniline	4.0	U	9.6	4.0	ug/L		08/25/15 08:27	08/26/15 14:18	1
4-Chlorophenyl phenyl ether	2.7	U	9.6	2.7	ug/L		08/25/15 08:27	08/26/15 14:18	1
4-Nitroaniline	3.0	U	24	3.0	ug/L		08/25/15 08:27	08/26/15 14:18	1
4-Nitrophenol	5.2	U	24	5.2	ug/L		08/25/15 08:27	08/26/15 14:18	1
Acenaphthylene	0.34	U	1.9	0.34	ug/L		08/25/15 08:27	08/26/15 14:18	1
Acetophenone	2.2	U	9.6	2.2	ug/L		08/25/15 08:27	08/26/15 14:18	1
Anthracene	0.37	U	1.9	0.37	ug/L		08/25/15 08:27	08/26/15 14:18	1
Benzaldehyde	5.5	U *	9.6	5.5	ug/L		08/25/15 08:27	08/26/15 14:18	1
Benzo[g,h,i]perylene	0.60	U	1.9	0.60	ug/L		08/25/15 08:27	08/26/15 14:18	1
Benzo[k]fluoranthene	0.36	U	1.9	0.36	ug/L		08/25/15 08:27	08/26/15 14:18	1

Client Sample ID: PM AirShaft-230-081815
Date Collected: 08/18/15 10:50
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	3.0	U	9.6	3.0	ug/L		08/25/15 08:27	08/26/15 14:18	1
Bis(2-chloroethyl)ether	2.7	U	9.6	2.7	ug/L		08/25/15 08:27	08/26/15 14:18	1
Butyl benzyl phthalate	2.4	U	9.6	2.4	ug/L		08/25/15 08:27	08/26/15 14:18	1
Bis(2-ethylhexyl) phthalate	5.8	U	9.6	5.8	ug/L		08/25/15 08:27	08/26/15 14:18	1
Carbazole	2.7	U	9.6	2.7	ug/L		08/25/15 08:27	08/26/15 14:18	1
Caprolactam	2.3	U	9.6	2.3	ug/L		08/25/15 08:27	08/26/15 14:18	1
Chrysene	0.32	U	1.9	0.32	ug/L		08/25/15 08:27	08/26/15 14:18	1
Dibenz(a,h)anthracene	0.43	U	1.9	0.43	ug/L		08/25/15 08:27	08/26/15 14:18	1
Dibenzofuran	2.8	U	9.6	2.8	ug/L		08/25/15 08:27	08/26/15 14:18	1
Diethyl phthalate	2.9	U	9.6	2.9	ug/L		08/25/15 08:27	08/26/15 14:18	1
Dimethyl phthalate	3.0	U	9.6	3.0	ug/L		08/25/15 08:27	08/26/15 14:18	1
Di-n-butyl phthalate	2.4	U	9.6	2.4	ug/L		08/25/15 08:27	08/26/15 14:18	1
Fluoranthene	0.31	U	1.9	0.31	ug/L		08/25/15 08:27	08/26/15 14:18	1
Fluorene	0.31	U	1.9	0.31	ug/L		08/25/15 08:27	08/26/15 14:18	1
Hexachlorocyclopentadiene	1.7	U	9.6	1.7	ug/L		08/25/15 08:27	08/26/15 14:18	1
Hexachloroethane	1.8	U	9.6	1.8	ug/L		08/25/15 08:27	08/26/15 14:18	1
Indeno[1,2,3-cd]pyrene	0.39	U	1.9	0.39	ug/L		08/25/15 08:27	08/26/15 14:18	1
Isophorone	3.0	U	9.6	3.0	ug/L		08/25/15 08:27	08/26/15 14:18	1
Naphthalene	0.36	U	1.9	0.36	ug/L		08/25/15 08:27	08/26/15 14:18	1
Nitrobenzene	2.6	U	9.6	2.6	ug/L		08/25/15 08:27	08/26/15 14:18	1
N-Nitrosodi-n-propylamine	3.3	U	9.6	3.3	ug/L		08/25/15 08:27	08/26/15 14:18	1
N-Nitrosodiphenylamine	3.5	U	9.6	3.5	ug/L		08/25/15 08:27	08/26/15 14:18	1
Phenanthrene	0.40	U	1.9	0.40	ug/L		08/25/15 08:27	08/26/15 14:18	1
Phenol	1.4	U	9.6	1.4	ug/L		08/25/15 08:27	08/26/15 14:18	1
Pyrene	0.34	U	1.9	0.34	ug/L		08/25/15 08:27	08/26/15 14:18	1
Diphenyl	2.1	U	9.6	2.1	ug/L		08/25/15 08:27	08/26/15 14:18	1
Di-n-octyl phthalate	2.4	U	9.6	2.4	ug/L		08/25/15 08:27	08/26/15 14:18	1
2,2'-oxybis[1-chloropropane]	2.7	U	9.6	2.7	ug/L		08/25/15 08:27	08/26/15 14:18	1
Atrazine	2.8	U	9.6	2.8	ug/L		08/25/15 08:27	08/26/15 14:18	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/15 08:27*	*08/26/15 14:18*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*97*		*10 - 120*	*08/25/15 08:27*	*08/26/15 14:18*	*1*
2-Fluorobiphenyl (Surr)	*77*		*29 - 120*	*08/25/15 08:27*	*08/26/15 14:18*	*1*
2-Fluorophenol (Surr)	*43*		*10 - 120*	*08/25/15 08:27*	*08/26/15 14:18*	*1*
Nitrobenzene-d5 (Surr)	*72*		*27 - 120*	*08/25/15 08:27*	*08/26/15 14:18*	*1*
Phenol-d5 (Surr)	*28*		*10 - 120*	*08/25/15 08:27*	*08/26/15 14:18*	*1*
Terphenyl-d14 (Surr)	*69*		*13 - 120*	*08/25/15 08:27*	*08/26/15 14:18*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.41	U	0.48	0.41	ug/L		08/31/15 06:31	09/01/15 23:13	1
PCB-1221	0.33	U	0.48	0.33	ug/L		08/31/15 06:31	09/01/15 23:13	1
PCB-1232	0.38	U	0.48	0.38	ug/L		08/31/15 06:31	09/01/15 23:13	1
PCB-1242	0.21	U	0.48	0.21	ug/L		08/31/15 06:31	09/01/15 23:13	1
PCB-1248	0.14	U	0.48	0.14	ug/L		08/31/15 06:31	09/01/15 23:13	1
PCB-1254	0.16	U	0.48	0.16	ug/L		08/31/15 06:31	09/01/15 23:13	1
PCB-1260	0.17	U	0.48	0.17	ug/L		08/31/15 06:31	09/01/15 23:13	1

Client Sample ID: PM AirShaft-230-081815

Date Collected: 08/18/15 10:50
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-1

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.41	U	0.48	0.41	ug/L		08/31/15 06:31	09/01/15 23:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*50*		*10 - 150*	*08/31/15 06:31*	*09/01/15 23:13*	*1*
Tetrachloro-m-xylene	*39*		*10 - 150*	*08/31/15 06:31*	*09/01/15 23:13*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.2**		1.00	0.70	mg/L			08/27/15 23:42	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/27/15 23:42	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.035**		0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 20:24	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:24	1
Arsenic	**0.0030**	**B**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:24	1
Barium	**0.54**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:24	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:24	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 20:24	1
Calcium	**98.9**		10.0	1.3	mg/L		08/24/15 09:53	08/25/15 17:36	10
Chromium	**0.0088**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:24	1
Cobalt	**0.0016**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:24	1
Copper	**0.0061**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:24	1
Iron	**126**		0.25	0.10	mg/L		08/24/15 09:53	08/25/15 17:36	10
Lead	**0.98**		0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:24	1
Magnesium	**11.4**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:24	1
Manganese	**2.1**		0.020	0.0050	mg/L		08/24/15 09:53	08/25/15 17:36	10
Nickel	**0.0029**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:24	1
Potassium	**7.9**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:24	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 20:24	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/26/15 00:02	1
Sodium	**29.6**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:24	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:24	1
Vanadium	**0.0050**	**B**	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 22:11	1
Zinc	**5.7**		0.25	0.10	mg/L		08/24/15 09:53	08/25/15 17:36	10

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 19:07	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:07	1
Arsenic	**0.00058**	**J**	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:07	1
Barium	**0.29**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:07	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:07	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 19:07	1
Calcium	**149**		50.0	6.3	mg/L		08/26/15 09:20	09/01/15 17:01	50
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:07	1
Cobalt	**0.0010**	**J**	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:07	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:07	1
Iron	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:07	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:07	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: PM AirShaft-230-081815
Date Collected: 08/18/15 10:50
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-1
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	**11.9**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:07	1
Manganese	**2.9**		0.10	0.025	mg/L		08/26/15 09:20	09/01/15 17:01	50
Nickel	**0.0014**	**J**	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:07	1
Potassium	**7.9**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:07	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 19:07	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:07	1
Sodium	**30.9**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:07	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:07	1
Vanadium	**0.00089**	**J B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 19:07	1
Zinc	**4.6**		1.3	0.50	mg/L		08/26/15 09:20	09/01/15 17:01	50

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 18:18	08/29/15 19:54	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 17:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/21/15 14:56	08/26/15 21:17	1
Bicarbonate Alkalinity as CaCO3	**506**		10.0	5.0	mg/L			08/20/15 17:07	1
Total Alkalinity as CaCO3	**506**		10.0	5.0	mg/L			08/20/15 17:07	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: CM-275-081815
Date Collected: 08/18/15 13:20
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-2
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/26/15 22:20	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/26/15 22:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/26/15 22:20*	*1*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*		*08/26/15 22:20*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*08/26/15 22:20*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/26/15 22:20*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/27/15 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/27/15 15:49*	*1*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*		*08/27/15 15:49*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*08/27/15 15:49*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/27/15 15:49*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/29/15 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/29/15 19:28*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/29/15 19:28*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/29/15 19:28*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/29/15 19:28*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 05:45	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/29/15 05:45	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 05:45	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 05:45	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/29/15 05:45	1
1,1-Dichloroethene	0.25	U *	1.0	0.25	ug/L			08/29/15 05:45	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/29/15 05:45	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/29/15 05:45	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/29/15 05:45	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/29/15 05:45	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/29/15 05:45	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/29/15 05:45	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/29/15 05:45	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/29/15 05:45	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/29/15 05:45	1
Acetone	2.7	U	25	2.7	ug/L			08/29/15 05:45	1
Benzene	0.20	U	1.0	0.20	ug/L			08/29/15 05:45	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/29/15 05:45	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/29/15 05:45	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/29/15 05:45	1

Client Sample ID: CM-275-081815
Date Collected: 08/18/15 13:20
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/29/15 05:45	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/29/15 05:45	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/29/15 05:45	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/29/15 05:45	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/29/15 05:45	1
Chloromethane	**0.40**	**J**	1.0	0.36	ug/L			08/29/15 05:45	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/29/15 05:45	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/29/15 05:45	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/29/15 05:45	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/29/15 05:45	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/29/15 05:45	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/29/15 05:45	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/29/15 05:45	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/29/15 05:45	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/29/15 05:45	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/29/15 05:45	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/29/15 05:45	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/29/15 05:45	1
Styrene	0.28	U	1.0	0.28	ug/L			08/29/15 05:45	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/29/15 05:45	1
Toluene	0.17	U	1.0	0.17	ug/L			08/29/15 05:45	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/29/15 05:45	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/29/15 05:45	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/29/15 05:45	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/29/15 05:45	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/29/15 05:45	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/29/15 05:45	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/29/15 05:45	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/15 05:45*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/29/15 05:45*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/29/15 05:45*	*1*
Dibromofluoromethane (Surr)	*81*		*70 - 130*		*08/29/15 05:45*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/29/15 05:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*08/29/15 05:45*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.023	U	0.046	0.023	ug/L		08/25/15 06:06	08/28/15 18:14	1
Benzo[a]pyrene	0.023	U	0.046	0.023	ug/L		08/25/15 06:06	08/28/15 18:14	1
Benzo[b]fluoranthene	0.023	U	0.046	0.023	ug/L		08/25/15 06:06	08/28/15 18:14	1
Hexachlorobenzene	0.013	U	0.019	0.013	ug/L		08/25/15 06:06	08/28/15 18:14	1
Hexachlorobutadiene	0.19	U	0.37	0.19	ug/L		08/25/15 06:06	08/28/15 18:14	1
N-Nitrosodimethylamine	0.19	U	0.74	0.19	ug/L		08/25/15 06:06	08/28/15 18:14	1
Pentachlorophenol	0.093	U	0.28	0.093	ug/L		08/25/15 06:06	08/28/15 18:14	1

Client Sample ID: CM-275-081815
Date Collected: 08/18/15 13:20
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*101*		*10 - 120*	*08/25/15 06:06*	*08/28/15 18:14*	*1*
2-Fluorobiphenyl (Surr)	*84*		*29 - 120*	*08/25/15 06:06*	*08/28/15 18:14*	*1*
Nitrobenzene-d5	*79*		*27 - 120*	*08/25/15 06:06*	*08/28/15 18:14*	*1*
Terphenyl-d14	*95*		*13 - 120*	*08/25/15 06:06*	*08/28/15 18:14*	*1*
2-Fluorophenol	*63*		*10 - 120*	*08/25/15 06:06*	*08/28/15 18:14*	*1*
Phenol-d5	*42*		*10 - 120*	*08/25/15 06:06*	*08/28/15 18:14*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.31	U	1.9	0.31	ug/L		08/25/15 08:27	08/26/15 14:42	1
1,2,4,5-Tetrachlorobenzene	2.0	U	9.6	2.0	ug/L		08/25/15 08:27	08/26/15 14:42	1
2,3,4,6-Tetrachlorophenol	6.6	U	9.6	6.6	ug/L		08/25/15 08:27	08/26/15 14:42	1
2,4,5-Trichlorophenol	6.8	U	9.6	6.8	ug/L		08/25/15 08:27	08/26/15 14:42	1
2,4,6-Trichlorophenol	6.5	U	9.6	6.5	ug/L		08/25/15 08:27	08/26/15 14:42	1
2,4-Dichlorophenol	5.4	U	9.6	5.4	ug/L		08/25/15 08:27	08/26/15 14:42	1
2,4-Dimethylphenol	4.0	U	9.6	4.0	ug/L		08/25/15 08:27	08/26/15 14:42	1
2,4-Dinitrophenol	5.7	U	24	5.7	ug/L		08/25/15 08:27	08/26/15 14:42	1
2,4-Dinitrotoluene	3.1	U	9.6	3.1	ug/L		08/25/15 08:27	08/26/15 14:42	1
2,6-Dinitrotoluene	2.2	U	9.6	2.2	ug/L		08/25/15 08:27	08/26/15 14:42	1
2-Chloronaphthalene	2.7	U	9.6	2.7	ug/L		08/25/15 08:27	08/26/15 14:42	1
2-Chlorophenol	4.6	U	9.6	4.6	ug/L		08/25/15 08:27	08/26/15 14:42	1
2-Methylnaphthalene	0.38	U	1.9	0.38	ug/L		08/25/15 08:27	08/26/15 14:42	1
2-Methylphenol	2.2	U	9.6	2.2	ug/L		08/25/15 08:27	08/26/15 14:42	1
2-Nitroaniline	3.6	U	24	3.6	ug/L		08/25/15 08:27	08/26/15 14:42	1
2-Nitrophenol	5.1	U	9.6	5.1	ug/L		08/25/15 08:27	08/26/15 14:42	1
3,3'-Dichlorobenzidine	3.2	U	9.6	3.2	ug/L		08/25/15 08:27	08/26/15 14:42	1
3 & 4 Methylphenol	2.1	U	9.6	2.1	ug/L		08/25/15 08:27	08/26/15 14:42	1
3-Nitroaniline	2.6	U	24	2.6	ug/L		08/25/15 08:27	08/26/15 14:42	1
4,6-Dinitro-2-methylphenol	8.9	U	24	8.9	ug/L		08/25/15 08:27	08/26/15 14:42	1
4-Bromophenyl phenyl ether	2.6	U	9.6	2.6	ug/L		08/25/15 08:27	08/26/15 14:42	1
4-Chloro-3-methylphenol	4.3	U	9.6	4.3	ug/L		08/25/15 08:27	08/26/15 14:42	1
4-Chloroaniline	4.0	U	9.6	4.0	ug/L		08/25/15 08:27	08/26/15 14:42	1
4-Chlorophenyl phenyl ether	2.7	U	9.6	2.7	ug/L		08/25/15 08:27	08/26/15 14:42	1
4-Nitroaniline	3.0	U	24	3.0	ug/L		08/25/15 08:27	08/26/15 14:42	1
4-Nitrophenol	5.2	U	24	5.2	ug/L		08/25/15 08:27	08/26/15 14:42	1
Acenaphthylene	0.34	U	1.9	0.34	ug/L		08/25/15 08:27	08/26/15 14:42	1
Acetophenone	2.2	U	9.6	2.2	ug/L		08/25/15 08:27	08/26/15 14:42	1
Anthracene	0.37	U	1.9	0.37	ug/L		08/25/15 08:27	08/26/15 14:42	1
Benzaldehyde	5.5	U *	9.6	5.5	ug/L		08/25/15 08:27	08/26/15 14:42	1
Benzo[g,h,i]perylene	0.60	U	1.9	0.60	ug/L		08/25/15 08:27	08/26/15 14:42	1
Benzo[k]fluoranthene	0.36	U	1.9	0.36	ug/L		08/25/15 08:27	08/26/15 14:42	1
Bis(2-chloroethoxy)methane	3.0	U	9.6	3.0	ug/L		08/25/15 08:27	08/26/15 14:42	1
Bis(2-chloroethyl)ether	2.7	U	9.6	2.7	ug/L		08/25/15 08:27	08/26/15 14:42	1
Butyl benzyl phthalate	2.4	U	9.6	2.4	ug/L		08/25/15 08:27	08/26/15 14:42	1
Bis(2-ethylhexyl) phthalate	5.8	U	9.6	5.8	ug/L		08/25/15 08:27	08/26/15 14:42	1
Carbazole	2.7	U	9.6	2.7	ug/L		08/25/15 08:27	08/26/15 14:42	1
Caprolactam	2.3	U	9.6	2.3	ug/L		08/25/15 08:27	08/26/15 14:42	1
Chrysene	0.32	U	1.9	0.32	ug/L		08/25/15 08:27	08/26/15 14:42	1
Dibenz(a,h)anthracene	0.43	U	1.9	0.43	ug/L		08/25/15 08:27	08/26/15 14:42	1
Dibenzofuran	2.8	U	9.6	2.8	ug/L		08/25/15 08:27	08/26/15 14:42	1

Client Sample ID: CM-275-081815
Date Collected: 08/18/15 13:20
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	2.9	U	9.6	2.9	ug/L		08/25/15 08:27	08/26/15 14:42	1
Dimethyl phthalate	3.0	U	9.6	3.0	ug/L		08/25/15 08:27	08/26/15 14:42	1
Di-n-butyl phthalate	2.4	U	9.6	2.4	ug/L		08/25/15 08:27	08/26/15 14:42	1
Fluoranthene	0.31	U	1.9	0.31	ug/L		08/25/15 08:27	08/26/15 14:42	1
Fluorene	0.31	U	1.9	0.31	ug/L		08/25/15 08:27	08/26/15 14:42	1
Hexachlorocyclopentadiene	1.7	U	9.6	1.7	ug/L		08/25/15 08:27	08/26/15 14:42	1
Hexachloroethane	1.8	U	9.6	1.8	ug/L		08/25/15 08:27	08/26/15 14:42	1
Indeno[1,2,3-cd]pyrene	0.39	U	1.9	0.39	ug/L		08/25/15 08:27	08/26/15 14:42	1
Isophorone	3.0	U	9.6	3.0	ug/L		08/25/15 08:27	08/26/15 14:42	1
Naphthalene	0.36	U	1.9	0.36	ug/L		08/25/15 08:27	08/26/15 14:42	1
Nitrobenzene	2.6	U	9.6	2.6	ug/L		08/25/15 08:27	08/26/15 14:42	1
N-Nitrosodi-n-propylamine	3.3	U	9.6	3.3	ug/L		08/25/15 08:27	08/26/15 14:42	1
N-Nitrosodiphenylamine	3.5	U	9.6	3.5	ug/L		08/25/15 08:27	08/26/15 14:42	1
Phenanthrene	0.40	U	1.9	0.40	ug/L		08/25/15 08:27	08/26/15 14:42	1
Phenol	1.4	U	9.6	1.4	ug/L		08/25/15 08:27	08/26/15 14:42	1
Pyrene	0.34	U	1.9	0.34	ug/L		08/25/15 08:27	08/26/15 14:42	1
Diphenyl	2.1	U	9.6	2.1	ug/L		08/25/15 08:27	08/26/15 14:42	1
Di-n-octyl phthalate	2.4	U	9.6	2.4	ug/L		08/25/15 08:27	08/26/15 14:42	1
2,2'-oxybis[1-chloropropane]	2.7	U	9.6	2.7	ug/L		08/25/15 08:27	08/26/15 14:42	1
Atrazine	2.8	U	9.6	2.8	ug/L		08/25/15 08:27	08/26/15 14:42	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/15 08:27*	*08/26/15 14:42*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*108*		*10 - 120*	*08/25/15 08:27*	*08/26/15 14:42*	*1*
2-Fluorobiphenyl (Surr)	*86*		*29 - 120*	*08/25/15 08:27*	*08/26/15 14:42*	*1*
2-Fluorophenol (Surr)	*46*		*10 - 120*	*08/25/15 08:27*	*08/26/15 14:42*	*1*
Nitrobenzene-d5 (Surr)	*79*		*27 - 120*	*08/25/15 08:27*	*08/26/15 14:42*	*1*
Phenol-d5 (Surr)	*28*		*10 - 120*	*08/25/15 08:27*	*08/26/15 14:42*	*1*
Terphenyl-d14 (Surr)	*84*		*13 - 120*	*08/25/15 08:27*	*08/26/15 14:42*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.38	U	0.45	0.38	ug/L		08/31/15 06:31	09/01/15 23:29	1
PCB-1221	0.30	U	0.45	0.30	ug/L		08/31/15 06:31	09/01/15 23:29	1
PCB-1232	0.36	U	0.45	0.36	ug/L		08/31/15 06:31	09/01/15 23:29	1
PCB-1242	0.20	U	0.45	0.20	ug/L		08/31/15 06:31	09/01/15 23:29	1
PCB-1248	0.13	U	0.45	0.13	ug/L		08/31/15 06:31	09/01/15 23:29	1
PCB-1254	0.15	U	0.45	0.15	ug/L		08/31/15 06:31	09/01/15 23:29	1
PCB-1260	0.16	U	0.45	0.16	ug/L		08/31/15 06:31	09/01/15 23:29	1
Polychlorinated biphenyls, Total	0.38	U	0.45	0.38	ug/L		08/31/15 06:31	09/01/15 23:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*66*		*10 - 150*	*08/31/15 06:31*	*09/01/15 23:29*	*1*
Tetrachloro-m-xylene	*42*		*10 - 150*	*08/31/15 06:31*	*09/01/15 23:29*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**183**	**F1**	1.00	0.70	mg/L			08/28/15 16:17	1
Sulfate	**3.46**		1.00	0.60	mg/L			08/28/15 16:17	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.086**		0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 20:30	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:30	1
Arsenic	**0.0032**	**B**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:30	1
Barium	**0.12**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:30	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:30	1
Cadmium	**0.0064**		0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 20:30	1
Calcium	**83.2**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:30	1
Chromium	**0.016**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:30	1
Cobalt	**0.00094**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:30	1
Copper	**0.018**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:30	1
Iron	**25.5**		0.025	0.010	mg/L		08/24/15 09:53	08/24/15 20:30	1
Lead	**0.091**		0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:30	1
Magnesium	**22.8**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:30	1
Manganese	**1.3**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:30	1
Nickel	**0.0060**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:30	1
Potassium	**4.7**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:30	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 20:30	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/26/15 00:07	1
Sodium	**82.7**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:30	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:30	1
Vanadium	**0.0022**	**B**	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 22:27	1
Zinc	**8.2**		0.25	0.10	mg/L		08/24/15 09:53	08/25/15 17:42	10

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 19:13	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:13	1
Arsenic	**0.00054**	**J**	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:13	1
Barium	**0.088**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:13	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:13	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 19:13	1
Calcium	**82.9**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:13	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:13	1
Cobalt	**0.00055**	**J**	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:13	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:13	1
Iron	**0.014**	**J**	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:13	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:13	1
Magnesium	**24.0**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:13	1
Manganese	**1.4**	**B**	0.020	0.0050	mg/L		08/26/15 09:20	08/31/15 17:45	10
Nickel	**0.0034**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:13	1
Potassium	**4.7**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:13	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 19:13	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:13	1
Sodium	**87.2**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:13	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:13	1
Vanadium	**0.0010**	**J B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 19:13	1
Zinc	**2.8**		0.25	0.10	mg/L		08/26/15 09:20	08/31/15 17:45	10

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 18:18	08/29/15 20:01	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: CM-275-081815
Date Collected: 08/18/15 13:20
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-2
Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 17:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/21/15 14:56	08/26/15 21:18	1
Bicarbonate Alkalinity as CaCO3	**249**		10.0	5.0	mg/L			08/20/15 17:12	1
Total Alkalinity as CaCO3	**249**		10.0	5.0	mg/L			08/20/15 17:12	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: RW-10A (75-85) - 081815

Date Collected: 08/18/15 10:25
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-3

Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/26/15 22:48	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/26/15 22:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*08/26/15 22:48*	*1*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*		*08/26/15 22:48*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*08/26/15 22:48*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*08/26/15 22:48*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/27/15 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/27/15 16:17*	*1*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*		*08/27/15 16:17*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/27/15 16:17*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/27/15 16:17*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/29/15 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/29/15 19:57*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*08/29/15 19:57*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/29/15 19:57*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/29/15 19:57*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 06:12	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/29/15 06:12	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 06:12	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 06:12	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/29/15 06:12	1
1,1-Dichloroethene	0.25	U *	1.0	0.25	ug/L			08/29/15 06:12	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/29/15 06:12	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/29/15 06:12	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/29/15 06:12	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/29/15 06:12	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/29/15 06:12	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/29/15 06:12	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/29/15 06:12	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/29/15 06:12	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/29/15 06:12	1
Acetone	2.7	U	25	2.7	ug/L			08/29/15 06:12	1
Benzene	0.20	U	1.0	0.20	ug/L			08/29/15 06:12	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/29/15 06:12	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/29/15 06:12	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/29/15 06:12	1

Client Sample ID: RW-10A (75-85) - 081815
Date Collected: 08/18/15 10:25
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/29/15 06:12	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/29/15 06:12	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/29/15 06:12	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/29/15 06:12	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/29/15 06:12	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/29/15 06:12	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/29/15 06:12	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/29/15 06:12	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/29/15 06:12	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/29/15 06:12	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/29/15 06:12	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/29/15 06:12	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/29/15 06:12	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/29/15 06:12	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/29/15 06:12	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/29/15 06:12	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/29/15 06:12	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/29/15 06:12	1
Styrene	0.28	U	1.0	0.28	ug/L			08/29/15 06:12	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/29/15 06:12	1
Toluene	0.17	U	1.0	0.17	ug/L			08/29/15 06:12	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/29/15 06:12	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/29/15 06:12	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/29/15 06:12	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/29/15 06:12	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/29/15 06:12	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/29/15 06:12	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/29/15 06:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/15 06:12*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/29/15 06:12*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/29/15 06:12*	*1*
Dibromofluoromethane (Surr)	*91*		*70 - 130*		*08/29/15 06:12*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/29/15 06:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*08/29/15 06:12*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/25/15 06:06	08/28/15 18:42	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/25/15 06:06	08/28/15 18:42	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/25/15 06:06	08/28/15 18:42	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/25/15 06:06	08/28/15 18:42	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/25/15 06:06	08/28/15 18:42	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/25/15 06:06	08/28/15 18:42	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/25/15 06:06	08/28/15 18:42	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: RW-10A (75-85) - 081815
Date Collected: 08/18/15 10:25
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-3
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*79*		*10 - 120*	*08/25/15 06:06*	*08/28/15 18:42*	*1*
2-Fluorobiphenyl (Surr)	*73*		*29 - 120*	*08/25/15 06:06*	*08/28/15 18:42*	*1*
Nitrobenzene-d5	*68*		*27 - 120*	*08/25/15 06:06*	*08/28/15 18:42*	*1*
Terphenyl-d14	*80*		*13 - 120*	*08/25/15 06:06*	*08/28/15 18:42*	*1*
2-Fluorophenol	*58*		*10 - 120*	*08/25/15 06:06*	*08/28/15 18:42*	*1*
Phenol-d5	*39*		*10 - 120*	*08/25/15 06:06*	*08/28/15 18:42*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/25/15 08:27	08/26/15 15:06	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/25/15 08:27	08/26/15 15:06	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/25/15 08:27	08/26/15 15:06	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/25/15 08:27	08/26/15 15:06	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/25/15 08:27	08/26/15 15:06	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/25/15 08:27	08/26/15 15:06	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/25/15 08:27	08/26/15 15:06	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/25/15 08:27	08/26/15 15:06	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/25/15 08:27	08/26/15 15:06	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/25/15 08:27	08/26/15 15:06	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 15:06	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/25/15 08:27	08/26/15 15:06	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/25/15 08:27	08/26/15 15:06	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/25/15 08:27	08/26/15 15:06	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/25/15 08:27	08/26/15 15:06	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/25/15 08:27	08/26/15 15:06	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/25/15 08:27	08/26/15 15:06	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/25/15 08:27	08/26/15 15:06	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/25/15 08:27	08/26/15 15:06	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/25/15 08:27	08/26/15 15:06	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/25/15 08:27	08/26/15 15:06	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/25/15 08:27	08/26/15 15:06	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/25/15 08:27	08/26/15 15:06	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 15:06	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/25/15 08:27	08/26/15 15:06	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/25/15 08:27	08/26/15 15:06	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/25/15 08:27	08/26/15 15:06	1
Acetophenone	2.3	U	10	2.3	ug/L		08/25/15 08:27	08/26/15 15:06	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/25/15 08:27	08/26/15 15:06	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/25/15 08:27	08/26/15 15:06	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/25/15 08:27	08/26/15 15:06	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/25/15 08:27	08/26/15 15:06	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/25/15 08:27	08/26/15 15:06	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 15:06	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/25/15 08:27	08/26/15 15:06	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/25/15 08:27	08/26/15 15:06	1
Carbazole	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 15:06	1
Caprolactam	2.4	U	10	2.4	ug/L		08/25/15 08:27	08/26/15 15:06	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/25/15 08:27	08/26/15 15:06	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/25/15 08:27	08/26/15 15:06	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/25/15 08:27	08/26/15 15:06	1

Client Sample ID: RW-10A (75-85) - 081815

Date Collected: 08/18/15 10:25
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-3

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/25/15 08:27	08/26/15 15:06	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/25/15 08:27	08/26/15 15:06	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/25/15 08:27	08/26/15 15:06	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/25/15 08:27	08/26/15 15:06	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/25/15 08:27	08/26/15 15:06	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/25/15 08:27	08/26/15 15:06	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/25/15 08:27	08/26/15 15:06	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/25/15 08:27	08/26/15 15:06	1
Isophorone	3.1	U	10	3.1	ug/L		08/25/15 08:27	08/26/15 15:06	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/25/15 08:27	08/26/15 15:06	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/25/15 08:27	08/26/15 15:06	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/25/15 08:27	08/26/15 15:06	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/25/15 08:27	08/26/15 15:06	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/25/15 08:27	08/26/15 15:06	1
Phenol	1.5	U	10	1.5	ug/L		08/25/15 08:27	08/26/15 15:06	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/25/15 08:27	08/26/15 15:06	1
Diphenyl	2.2	U	10	2.2	ug/L		08/25/15 08:27	08/26/15 15:06	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/25/15 08:27	08/26/15 15:06	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 15:06	1
Atrazine	2.9	U	10	2.9	ug/L		08/25/15 08:27	08/26/15 15:06	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/15 08:27*	*08/26/15 15:06*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*105*		*10 - 120*	*08/25/15 08:27*	*08/26/15 15:06*	*1*
2-Fluorobiphenyl (Surr)	*87*		*29 - 120*	*08/25/15 08:27*	*08/26/15 15:06*	*1*
2-Fluorophenol (Surr)	*44*		*10 - 120*	*08/25/15 08:27*	*08/26/15 15:06*	*1*
Nitrobenzene-d5 (Surr)	*78*		*27 - 120*	*08/25/15 08:27*	*08/26/15 15:06*	*1*
Phenol-d5 (Surr)	*28*		*10 - 120*	*08/25/15 08:27*	*08/26/15 15:06*	*1*
Terphenyl-d14 (Surr)	*81*		*13 - 120*	*08/25/15 08:27*	*08/26/15 15:06*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 06:31	09/01/15 23:45	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 06:31	09/01/15 23:45	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 06:31	09/01/15 23:45	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 06:31	09/01/15 23:45	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 06:31	09/01/15 23:45	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 06:31	09/01/15 23:45	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 06:31	09/01/15 23:45	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 06:31	09/01/15 23:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*80*		*10 - 150*	*08/31/15 06:31*	*09/01/15 23:45*	*1*
Tetrachloro-m-xylene	*51*		*10 - 150*	*08/31/15 06:31*	*09/01/15 23:45*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.02**		1.00	0.70	mg/L			08/28/15 17:17	1
Sulfate	**34.1**		1.00	0.60	mg/L			08/28/15 17:17	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 20:35	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:35	1
Arsenic	**0.0020**	**B**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:35	1
Barium	**0.0071**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:35	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:35	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 20:35	1
Calcium	**51.4**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:35	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:35	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:35	1
Copper	**0.0040**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:35	1
Iron	**0.029**		0.025	0.010	mg/L		08/24/15 09:53	08/24/15 20:35	1
Lead	**0.00082**	**J**	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:35	1
Magnesium	**14.0**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:35	1
Manganese	**0.0019**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:35	1
Nickel	**0.0059**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:35	1
Potassium	**2.2**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:35	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 20:35	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/26/15 00:12	1
Sodium	**5.0**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:35	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:35	1
Vanadium	**0.0014**	**J B**	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 22:32	1
Zinc	**0.013**	**J**	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 20:35	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 19:18	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:18	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:18	1
Barium	**0.0069**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:18	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:18	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 19:18	1
Calcium	**50.2**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:18	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:18	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:18	1
Copper	**0.0019**	**J**	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:18	1
Iron	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:18	1
Lead	**0.00026**	**J**	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:18	1
Magnesium	**14.4**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:18	1
Manganese	**0.00082**	**J**	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:18	1
Nickel	**0.0058**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:18	1
Potassium	**2.1**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:18	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 19:18	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:18	1
Sodium	**5.1**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:18	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:18	1
Vanadium	**0.0015**	**J B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 19:18	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:18	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 18:18	08/29/15 20:03	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: RW-10A (75-85) - 081815
Date Collected: 08/18/15 10:25
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-3
Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 17:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U F1 F2	0.010	0.0070	mg/L		08/21/15 14:56	08/26/15 21:19	1
Bicarbonate Alkalinity as CaCO3	**147**		10.0	5.0	mg/L			08/20/15 17:17	1
Total Alkalinity as CaCO3	**147**		10.0	5.0	mg/L			08/20/15 17:17	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: RW-10 (185-195) - 081815
Date Collected: 08/18/15 11:35
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-4
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	**0.016**	**J**	0.030	0.010	ug/L			08/26/15 23:17	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/26/15 23:17	1
1,4-Dioxane	0.27	U *	10	0.27	ug/L			08/26/15 23:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/15 23:17*	*1*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*		*08/26/15 23:17*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*08/26/15 23:17*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/26/15 23:17*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/29/15 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*141*	*X*	*70 - 130*		*08/29/15 20:25*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*08/29/15 20:25*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/29/15 20:25*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/29/15 20:25*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 06:39	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/29/15 06:39	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 06:39	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 06:39	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/29/15 06:39	1
1,1-Dichloroethene	0.25	U *	1.0	0.25	ug/L			08/29/15 06:39	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/29/15 06:39	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/29/15 06:39	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/29/15 06:39	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/29/15 06:39	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/29/15 06:39	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/29/15 06:39	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/29/15 06:39	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/29/15 06:39	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/29/15 06:39	1
Acetone	**24**	**J**	25	2.7	ug/L			08/29/15 06:39	1
Benzene	0.20	U	1.0	0.20	ug/L			08/29/15 06:39	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/29/15 06:39	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/29/15 06:39	1
Carbon disulfide	**1.6**		1.0	0.22	ug/L			08/29/15 06:39	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/29/15 06:39	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/29/15 06:39	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/29/15 06:39	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/29/15 06:39	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/29/15 06:39	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/29/15 06:39	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/29/15 06:39	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/29/15 06:39	1

Client Sample ID: RW-10 (185-195) - 081815
Date Collected: 08/18/15 11:35
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/29/15 06:39	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/29/15 06:39	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/29/15 06:39	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/29/15 06:39	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/29/15 06:39	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/29/15 06:39	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/29/15 06:39	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/29/15 06:39	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/29/15 06:39	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/29/15 06:39	1
Styrene	0.28	U	1.0	0.28	ug/L			08/29/15 06:39	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/29/15 06:39	1
Toluene	0.17	U	1.0	0.17	ug/L			08/29/15 06:39	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/29/15 06:39	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/29/15 06:39	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/29/15 06:39	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/29/15 06:39	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/29/15 06:39	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/29/15 06:39	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/29/15 06:39	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/15 06:39*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/29/15 06:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/29/15 06:39*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/29/15 06:39*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/29/15 06:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*08/29/15 06:39*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.022	U	0.043	0.022	ug/L		08/25/15 06:06	08/28/15 19:09	1
Benzo[a]pyrene	0.022	U	0.043	0.022	ug/L		08/25/15 06:06	08/28/15 19:09	1
Benzo[b]fluoranthene	0.022	U	0.043	0.022	ug/L		08/25/15 06:06	08/28/15 19:09	1
Hexachlorobenzene	0.012	U	0.017	0.012	ug/L		08/25/15 06:06	08/28/15 19:09	1
Hexachlorobutadiene	0.17	U	0.34	0.17	ug/L		08/25/15 06:06	08/28/15 19:09	1
N-Nitrosodimethylamine	0.17	U	0.69	0.17	ug/L		08/25/15 06:06	08/28/15 19:09	1
Pentachlorophenol	0.086	U	0.26	0.086	ug/L		08/25/15 06:06	08/28/15 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*102*		*10 - 120*	*08/25/15 06:06*	*08/28/15 19:09*	*1*
2-Fluorobiphenyl (Surr)	*86*		*29 - 120*	*08/25/15 06:06*	*08/28/15 19:09*	*1*
Nitrobenzene-d5	*81*		*27 - 120*	*08/25/15 06:06*	*08/28/15 19:09*	*1*
Terphenyl-d14	*95*		*13 - 120*	*08/25/15 06:06*	*08/28/15 19:09*	*1*
2-Fluorophenol	*64*		*10 - 120*	*08/25/15 06:06*	*08/28/15 19:09*	*1*
Phenol-d5	*43*		*10 - 120*	*08/25/15 06:06*	*08/28/15 19:09*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: RW-10 (185-195) - 081815
Date Collected: 08/18/15 11:35
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/25/15 08:27	08/26/15 15:29	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/25/15 08:27	08/26/15 15:29	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/25/15 08:27	08/26/15 15:29	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/25/15 08:27	08/26/15 15:29	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/25/15 08:27	08/26/15 15:29	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/25/15 08:27	08/26/15 15:29	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/25/15 08:27	08/26/15 15:29	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/25/15 08:27	08/26/15 15:29	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/25/15 08:27	08/26/15 15:29	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/25/15 08:27	08/26/15 15:29	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 15:29	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/25/15 08:27	08/26/15 15:29	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/25/15 08:27	08/26/15 15:29	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/25/15 08:27	08/26/15 15:29	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/25/15 08:27	08/26/15 15:29	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/25/15 08:27	08/26/15 15:29	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/25/15 08:27	08/26/15 15:29	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/25/15 08:27	08/26/15 15:29	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/25/15 08:27	08/26/15 15:29	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/25/15 08:27	08/26/15 15:29	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/25/15 08:27	08/26/15 15:29	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/25/15 08:27	08/26/15 15:29	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/25/15 08:27	08/26/15 15:29	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 15:29	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/25/15 08:27	08/26/15 15:29	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/25/15 08:27	08/26/15 15:29	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/25/15 08:27	08/26/15 15:29	1
Acetophenone	2.3	U	10	2.3	ug/L		08/25/15 08:27	08/26/15 15:29	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/25/15 08:27	08/26/15 15:29	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/25/15 08:27	08/26/15 15:29	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/25/15 08:27	08/26/15 15:29	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/25/15 08:27	08/26/15 15:29	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/25/15 08:27	08/26/15 15:29	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 15:29	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/25/15 08:27	08/26/15 15:29	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/25/15 08:27	08/26/15 15:29	1
Carbazole	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 15:29	1
Caprolactam	2.4	U	10	2.4	ug/L		08/25/15 08:27	08/26/15 15:29	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/25/15 08:27	08/26/15 15:29	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/25/15 08:27	08/26/15 15:29	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/25/15 08:27	08/26/15 15:29	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/25/15 08:27	08/26/15 15:29	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/25/15 08:27	08/26/15 15:29	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/25/15 08:27	08/26/15 15:29	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/25/15 08:27	08/26/15 15:29	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/25/15 08:27	08/26/15 15:29	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/25/15 08:27	08/26/15 15:29	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/25/15 08:27	08/26/15 15:29	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/25/15 08:27	08/26/15 15:29	1

Client Sample ID: RW-10 (185-195) - 081815
Date Collected: 08/18/15 11:35
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	3.1	U	10	3.1	ug/L		08/25/15 08:27	08/26/15 15:29	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/25/15 08:27	08/26/15 15:29	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/25/15 08:27	08/26/15 15:29	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/25/15 08:27	08/26/15 15:29	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/25/15 08:27	08/26/15 15:29	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/25/15 08:27	08/26/15 15:29	1
Phenol	**3.3**	**J**	10	1.5	ug/L		08/25/15 08:27	08/26/15 15:29	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/25/15 08:27	08/26/15 15:29	1
Diphenyl	2.2	U	10	2.2	ug/L		08/25/15 08:27	08/26/15 15:29	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/25/15 08:27	08/26/15 15:29	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 15:29	1
Atrazine	2.9	U	10	2.9	ug/L		08/25/15 08:27	08/26/15 15:29	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca -6,	*3.8*	*J N*	*ug/L*		*7.73*	*82304-66-3*	*08/25/15 08:27*	*08/26/15 15:29*	*1*
n-Hexadecanoic acid	*5.8*	*J N*	*ug/L*		*7.85*	*57-10-3*	*08/25/15 08:27*	*08/26/15 15:29*	*1*
3,5-di-tert-Butyl-4-hydroxyphenylprop ion	*12*	*J N*	*ug/L*		*7.95*	*20170-32-5*	*08/25/15 08:27*	*08/26/15 15:29*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*108*		*10 - 120*	*08/25/15 08:27*	*08/26/15 15:29*	*1*
2-Fluorobiphenyl (Surr)	*84*		*29 - 120*	*08/25/15 08:27*	*08/26/15 15:29*	*1*
2-Fluorophenol (Surr)	*47*		*10 - 120*	*08/25/15 08:27*	*08/26/15 15:29*	*1*
Nitrobenzene-d5 (Surr)	*79*		*27 - 120*	*08/25/15 08:27*	*08/26/15 15:29*	*1*
Phenol-d5 (Surr)	*30*		*10 - 120*	*08/25/15 08:27*	*08/26/15 15:29*	*1*
Terphenyl-d14 (Surr)	*95*		*13 - 120*	*08/25/15 08:27*	*08/26/15 15:29*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.40	U	0.46	0.40	ug/L		08/31/15 06:31	09/02/15 00:00	1
PCB-1221	0.31	U	0.46	0.31	ug/L		08/31/15 06:31	09/02/15 00:00	1
PCB-1232	0.37	U	0.46	0.37	ug/L		08/31/15 06:31	09/02/15 00:00	1
PCB-1242	0.20	U	0.46	0.20	ug/L		08/31/15 06:31	09/02/15 00:00	1
PCB-1248	0.14	U	0.46	0.14	ug/L		08/31/15 06:31	09/02/15 00:00	1
PCB-1254	0.16	U	0.46	0.16	ug/L		08/31/15 06:31	09/02/15 00:00	1
PCB-1260	0.17	U	0.46	0.17	ug/L		08/31/15 06:31	09/02/15 00:00	1
Polychlorinated biphenyls, Total	0.40	U	0.46	0.40	ug/L		08/31/15 06:31	09/02/15 00:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*43*		*10 - 150*	*08/31/15 06:31*	*09/02/15 00:00*	*1*
Tetrachloro-m-xylene	*23*		*10 - 150*	*08/31/15 06:31*	*09/02/15 00:00*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.61**		1.00	0.70	mg/L			08/28/15 17:37	1
Sulfate	**123**		1.00	0.60	mg/L			08/28/15 17:37	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.17**		0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 20:40	1

Client Sample ID: RW-10 (185-195) - 081815

Date Collected: 08/18/15 11:35
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-4

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:40	1
Arsenic	**0.0067**	**B**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:40	1
Barium	**0.011**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:40	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:40	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 20:40	1
Calcium	**47.7**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:40	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:40	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:40	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:40	1
Iron	**0.014**	**J**	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 20:40	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:40	1
Magnesium	**0.44**	**J**	1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:40	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:40	1
Nickel	**0.0037**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:40	1
Potassium	**11.7**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:40	1
Selenium	**0.0011**	**J**	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 20:40	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/26/15 00:17	1
Sodium	**39.0**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:40	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:40	1
Vanadium	**0.0024**	**B**	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 22:37	1
Zinc	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 20:40	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.18**		0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 19:23	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:23	1
Arsenic	**0.0052**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:23	1
Barium	**0.011**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:23	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:23	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 19:23	1
Calcium	**47.2**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:23	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:23	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:23	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:23	1
Iron	**0.030**		0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:23	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:23	1
Magnesium	**0.43**	**J**	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:23	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:23	1
Nickel	**0.0031**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:23	1
Potassium	**11.9**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:23	1
Selenium	**0.00081**	**J**	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 19:23	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:23	1
Sodium	**41.5**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:23	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:23	1
Vanadium	**0.0028**	**B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 19:23	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:23	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 18:18	08/29/15 20:06	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 17:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/21/15 15:14	08/26/15 21:22	1
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/20/15 17:25	1
Total Alkalinity as CaCO3	**69.5**		10.0	5.0	mg/L			08/20/15 17:25	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: RW-8 (163-173) - 081815
Date Collected: 08/18/15 14:15
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-5
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/26/15 23:46	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/26/15 23:46	1
1,4-Dioxane	0.27	U *	10	0.27	ug/L			08/26/15 23:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/26/15 23:46*	*1*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*		*08/26/15 23:46*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/26/15 23:46*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/26/15 23:46*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/29/15 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/29/15 20:54*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*08/29/15 20:54*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/29/15 20:54*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/29/15 20:54*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 07:06	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/29/15 07:06	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 07:06	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 07:06	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/29/15 07:06	1
1,1-Dichloroethene	0.25	U *	1.0	0.25	ug/L			08/29/15 07:06	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/29/15 07:06	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/29/15 07:06	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/29/15 07:06	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/29/15 07:06	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/29/15 07:06	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/29/15 07:06	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/29/15 07:06	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/29/15 07:06	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/29/15 07:06	1
Acetone	2.7	U	25	2.7	ug/L			08/29/15 07:06	1
Benzene	**0.27**	**J**	1.0	0.20	ug/L			08/29/15 07:06	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/29/15 07:06	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/29/15 07:06	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/29/15 07:06	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/29/15 07:06	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/29/15 07:06	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/29/15 07:06	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/29/15 07:06	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/29/15 07:06	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/29/15 07:06	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/29/15 07:06	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/29/15 07:06	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: RW-8 (163-173) - 081815
Date Collected: 08/18/15 14:15
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/29/15 07:06	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/29/15 07:06	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/29/15 07:06	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/29/15 07:06	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/29/15 07:06	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/29/15 07:06	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/29/15 07:06	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/29/15 07:06	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/29/15 07:06	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/29/15 07:06	1
Styrene	0.28	U	1.0	0.28	ug/L			08/29/15 07:06	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/29/15 07:06	1
Toluene	0.17	U	1.0	0.17	ug/L			08/29/15 07:06	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/29/15 07:06	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/29/15 07:06	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/29/15 07:06	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/29/15 07:06	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/29/15 07:06	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/29/15 07:06	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/29/15 07:06	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/15 07:06*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/29/15 07:06*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*08/29/15 07:06*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/29/15 07:06*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/29/15 07:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*08/29/15 07:06*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/25/15 06:06	08/28/15 19:36	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/25/15 06:06	08/28/15 19:36	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/25/15 06:06	08/28/15 19:36	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/25/15 06:06	08/28/15 19:36	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/25/15 06:06	08/28/15 19:36	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/25/15 06:06	08/28/15 19:36	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/25/15 06:06	08/28/15 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*110*		*10 - 120*	*08/25/15 06:06*	*08/28/15 19:36*	*1*
2-Fluorobiphenyl (Surr)	*92*		*29 - 120*	*08/25/15 06:06*	*08/28/15 19:36*	*1*
Nitrobenzene-d5	*84*		*27 - 120*	*08/25/15 06:06*	*08/28/15 19:36*	*1*
Terphenyl-d14	*101*		*13 - 120*	*08/25/15 06:06*	*08/28/15 19:36*	*1*
2-Fluorophenol	*76*		*10 - 120*	*08/25/15 06:06*	*08/28/15 19:36*	*1*
Phenol-d5	*53*		*10 - 120*	*08/25/15 06:06*	*08/28/15 19:36*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: RW-8 (163-173) - 081815
Date Collected: 08/18/15 14:15
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/25/15 08:27	08/26/15 15:53	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/25/15 08:27	08/26/15 15:53	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/25/15 08:27	08/26/15 15:53	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/25/15 08:27	08/26/15 15:53	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/25/15 08:27	08/26/15 15:53	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/25/15 08:27	08/26/15 15:53	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/25/15 08:27	08/26/15 15:53	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/25/15 08:27	08/26/15 15:53	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/25/15 08:27	08/26/15 15:53	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/25/15 08:27	08/26/15 15:53	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 15:53	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/25/15 08:27	08/26/15 15:53	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/25/15 08:27	08/26/15 15:53	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/25/15 08:27	08/26/15 15:53	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/25/15 08:27	08/26/15 15:53	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/25/15 08:27	08/26/15 15:53	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/25/15 08:27	08/26/15 15:53	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/25/15 08:27	08/26/15 15:53	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/25/15 08:27	08/26/15 15:53	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/25/15 08:27	08/26/15 15:53	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/25/15 08:27	08/26/15 15:53	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/25/15 08:27	08/26/15 15:53	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/25/15 08:27	08/26/15 15:53	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 15:53	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/25/15 08:27	08/26/15 15:53	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/25/15 08:27	08/26/15 15:53	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/25/15 08:27	08/26/15 15:53	1
Acetophenone	2.3	U	10	2.3	ug/L		08/25/15 08:27	08/26/15 15:53	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/25/15 08:27	08/26/15 15:53	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/25/15 08:27	08/26/15 15:53	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/25/15 08:27	08/26/15 15:53	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/25/15 08:27	08/26/15 15:53	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/25/15 08:27	08/26/15 15:53	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 15:53	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/25/15 08:27	08/26/15 15:53	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/25/15 08:27	08/26/15 15:53	1
Carbazole	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 15:53	1
Caprolactam	2.4	U	10	2.4	ug/L		08/25/15 08:27	08/26/15 15:53	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/25/15 08:27	08/26/15 15:53	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/25/15 08:27	08/26/15 15:53	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/25/15 08:27	08/26/15 15:53	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/25/15 08:27	08/26/15 15:53	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/25/15 08:27	08/26/15 15:53	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/25/15 08:27	08/26/15 15:53	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/25/15 08:27	08/26/15 15:53	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/25/15 08:27	08/26/15 15:53	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/25/15 08:27	08/26/15 15:53	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/25/15 08:27	08/26/15 15:53	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/25/15 08:27	08/26/15 15:53	1

Client Sample ID: RW-8 (163-173) - 081815
Date Collected: 08/18/15 14:15
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	3.1	U	10	3.1	ug/L		08/25/15 08:27	08/26/15 15:53	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/25/15 08:27	08/26/15 15:53	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/25/15 08:27	08/26/15 15:53	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/25/15 08:27	08/26/15 15:53	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/25/15 08:27	08/26/15 15:53	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/25/15 08:27	08/26/15 15:53	1
Phenol	1.5	U	10	1.5	ug/L		08/25/15 08:27	08/26/15 15:53	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/25/15 08:27	08/26/15 15:53	1
Diphenyl	2.2	U	10	2.2	ug/L		08/25/15 08:27	08/26/15 15:53	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/25/15 08:27	08/26/15 15:53	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 15:53	1
Atrazine	2.9	U	10	2.9	ug/L		08/25/15 08:27	08/26/15 15:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzenesulfonamide, N-butyl-	*8.4*	*J N*	*ug/L*		*7.32*	*3622-84-2*	*08/25/15 08:27*	*08/26/15 15:53*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*105*		*10 - 120*	*08/25/15 08:27*	*08/26/15 15:53*	*1*
2-Fluorobiphenyl (Surr)	*84*		*29 - 120*	*08/25/15 08:27*	*08/26/15 15:53*	*1*
2-Fluorophenol (Surr)	*45*		*10 - 120*	*08/25/15 08:27*	*08/26/15 15:53*	*1*
Nitrobenzene-d5 (Surr)	*78*		*27 - 120*	*08/25/15 08:27*	*08/26/15 15:53*	*1*
Phenol-d5 (Surr)	*28*		*10 - 120*	*08/25/15 08:27*	*08/26/15 15:53*	*1*
Terphenyl-d14 (Surr)	*81*		*13 - 120*	*08/25/15 08:27*	*08/26/15 15:53*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.40	U	0.46	0.40	ug/L		08/31/15 06:31	09/02/15 00:16	1
PCB-1221	0.31	U	0.46	0.31	ug/L		08/31/15 06:31	09/02/15 00:16	1
PCB-1232	0.37	U	0.46	0.37	ug/L		08/31/15 06:31	09/02/15 00:16	1
PCB-1242	0.20	U	0.46	0.20	ug/L		08/31/15 06:31	09/02/15 00:16	1
PCB-1248	0.14	U	0.46	0.14	ug/L		08/31/15 06:31	09/02/15 00:16	1
PCB-1254	0.16	U	0.46	0.16	ug/L		08/31/15 06:31	09/02/15 00:16	1
PCB-1260	0.17	U	0.46	0.17	ug/L		08/31/15 06:31	09/02/15 00:16	1
Polychlorinated biphenyls, Total	0.40	U	0.46	0.40	ug/L		08/31/15 06:31	09/02/15 00:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*93*		*10 - 150*	*08/31/15 06:31*	*09/02/15 00:16*	*1*
Tetrachloro-m-xylene	*65*		*10 - 150*	*08/31/15 06:31*	*09/02/15 00:16*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.1**		1.00	0.70	mg/L			08/28/15 17:57	1
Sulfate	**162**		1.00	0.60	mg/L			08/28/15 17:57	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 20:45	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:45	1
Arsenic	**0.0036**	**B**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:45	1
Barium	**0.012**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:45	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:45	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: RW-8 (163-173) - 081815
Date Collected: 08/18/15 14:15
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-5
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 20:45	1
Calcium	**37.5**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:45	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:45	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:45	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:45	1
Iron	**0.029**		0.025	0.010	mg/L		08/24/15 09:53	08/24/15 20:45	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:45	1
Magnesium	**6.2**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:45	1
Manganese	**0.015**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:45	1
Nickel	**0.019**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:45	1
Potassium	**2.5**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:45	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 20:45	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/26/15 00:23	1
Sodium	**52.4**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:45	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:45	1
Vanadium	**0.0012**	**J B**	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 22:43	1
Zinc	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 20:45	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 19:28	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:28	1
Arsenic	**0.0021**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:28	1
Barium	**0.012**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:28	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:28	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 19:28	1
Calcium	**35.0**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:28	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:28	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:28	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:28	1
Iron	**0.017**	**J**	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:28	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:28	1
Magnesium	**6.3**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:28	1
Manganese	**0.016**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:28	1
Nickel	**0.014**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:28	1
Potassium	**2.2**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:28	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 19:28	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:28	1
Sodium	**48.9**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:28	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:28	1
Vanadium	**0.0013**	**J B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 19:28	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:28	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 18:18	08/29/15 20:08	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 17:34	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: RW-8 (163-173) - 081815
Date Collected: 08/18/15 14:15
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-5
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/21/15 15:14	08/26/15 21:23	1
Bicarbonate Alkalinity as CaCO3	**72.8**		10.0	5.0	mg/L			08/20/15 17:43	1
Total Alkalinity as CaCO3	**72.8**		10.0	5.0	mg/L			08/20/15 17:43	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: Trip Blank - 09-081915

Date Collected: 08/18/15 01:00
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-6

Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/26/15 18:30	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/26/15 18:30	1
1,4-Dioxane	0.27	U *	10	0.27	ug/L			08/26/15 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/26/15 18:30*	*1*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*		*08/26/15 18:30*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*08/26/15 18:30*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/26/15 18:30*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/29/15 15:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/29/15 15:40*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/29/15 15:40*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/29/15 15:40*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/29/15 15:40*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 04:51	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/29/15 04:51	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 04:51	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 04:51	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/29/15 04:51	1
1,1-Dichloroethene	0.25	U *	1.0	0.25	ug/L			08/29/15 04:51	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/29/15 04:51	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/29/15 04:51	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/29/15 04:51	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/29/15 04:51	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/29/15 04:51	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/29/15 04:51	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/29/15 04:51	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/29/15 04:51	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/29/15 04:51	1
Acetone	2.7	U	25	2.7	ug/L			08/29/15 04:51	1
Benzene	0.20	U	1.0	0.20	ug/L			08/29/15 04:51	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/29/15 04:51	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/29/15 04:51	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/29/15 04:51	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/29/15 04:51	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/29/15 04:51	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/29/15 04:51	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/29/15 04:51	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/29/15 04:51	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/29/15 04:51	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/29/15 04:51	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/29/15 04:51	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: Trip Blank - 09-081915
Date Collected: 08/18/15 01:00
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/29/15 04:51	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/29/15 04:51	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/29/15 04:51	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/29/15 04:51	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/29/15 04:51	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/29/15 04:51	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/29/15 04:51	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/29/15 04:51	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/29/15 04:51	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/29/15 04:51	1
Styrene	0.28	U	1.0	0.28	ug/L			08/29/15 04:51	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/29/15 04:51	1
Toluene	0.17	U	1.0	0.17	ug/L			08/29/15 04:51	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/29/15 04:51	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/29/15 04:51	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/29/15 04:51	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/29/15 04:51	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/29/15 04:51	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/29/15 04:51	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/29/15 04:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/15 04:51*	*1*
Total Alkanes TIC	*None*		*ug/L*					*08/29/15 04:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/29/15 04:51*	*1*
Dibromofluoromethane (Surr)	*88*		*70 - 130*		*08/29/15 04:51*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/29/15 04:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*08/29/15 04:51*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-277302/6
Matrix: Water
Analysis Batch: 277302

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 03:30	1
Freon-113	0.15	U	1.0	0.15	ug/L			08/29/15 03:30	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 03:30	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			08/29/15 03:30	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			08/29/15 03:30	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			08/29/15 03:30	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			08/29/15 03:30	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			08/29/15 03:30	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			08/29/15 03:30	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			08/29/15 03:30	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			08/29/15 03:30	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			08/29/15 03:30	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			08/29/15 03:30	1
2-Hexanone	1.3	U	10	1.3	ug/L			08/29/15 03:30	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			08/29/15 03:30	1
Acetone	2.7	U	25	2.7	ug/L			08/29/15 03:30	1
Benzene	0.20	U	1.0	0.20	ug/L			08/29/15 03:30	1
Bromoform	0.29	U	1.0	0.29	ug/L			08/29/15 03:30	1
Bromomethane	0.35	U	1.0	0.35	ug/L			08/29/15 03:30	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			08/29/15 03:30	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			08/29/15 03:30	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			08/29/15 03:30	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			08/29/15 03:30	1
Chloroethane	0.36	U	1.0	0.36	ug/L			08/29/15 03:30	1
Chloroform	0.23	U	1.0	0.23	ug/L			08/29/15 03:30	1
Chloromethane	0.36	U	1.0	0.36	ug/L			08/29/15 03:30	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			08/29/15 03:30	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/29/15 03:30	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			08/29/15 03:30	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			08/29/15 03:30	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			08/29/15 03:30	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			08/29/15 03:30	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			08/29/15 03:30	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			08/29/15 03:30	1
Methyl acetate	0.58	U	10	0.58	ug/L			08/29/15 03:30	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			08/29/15 03:30	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			08/29/15 03:30	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			08/29/15 03:30	1
Styrene	0.28	U	1.0	0.28	ug/L			08/29/15 03:30	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			08/29/15 03:30	1
Toluene	0.17	U	1.0	0.17	ug/L			08/29/15 03:30	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			08/29/15 03:30	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			08/29/15 03:30	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			08/29/15 03:30	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			08/29/15 03:30	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			08/29/15 03:30	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			08/29/15 03:30	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			08/29/15 03:30	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/29/15 03:30	1
Total Alkanes TIC	None		ug/L					08/29/15 03:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130		08/29/15 03:30	1
Dibromofluoromethane (Surr)	95		70 - 130		08/29/15 03:30	1
Toluene-d8 (Surr)	101		70 - 130		08/29/15 03:30	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 130		08/29/15 03:30	1

Lab Sample ID: LCS 490-277302/3
Matrix: Water
Analysis Batch: 277302

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	17.6		ug/L		88	78 - 135
Freon-113	20.0	20.1		ug/L		101	77 - 129
1,1,2,2-Tetrachloroethane	20.0	22.6		ug/L		113	69 - 131
1,1,2-Trichloroethane	20.0	21.9		ug/L		109	80 - 124
1,1-Dichloroethane	20.0	21.0		ug/L		105	78 - 125
1,1-Dichloroethene	20.0	21.1		ug/L		106	79 - 124
1,2,4-Trichlorobenzene	20.0	21.9		ug/L		110	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	19.6		ug/L		98	54 - 125
1,2-Dichlorobenzene	20.0	21.8		ug/L		109	80 - 121
1,2-Dichloropropane	20.0	19.3		ug/L		97	75 - 120
1,3-Dichlorobenzene	20.0	20.9		ug/L		104	80 - 122
1,4-Dichlorobenzene	20.0	21.5		ug/L		107	80 - 120
2-Butanone (MEK)	100	95.9		ug/L		96	62 - 133
2-Hexanone	100	105		ug/L		105	60 - 142
4-Methyl-2-pentanone (MIBK)	100	105		ug/L		105	60 - 137
Acetone	100	88.0		ug/L		88	54 - 145
Benzene	20.0	19.7		ug/L		99	80 - 121
Bromoform	20.0	21.4		ug/L		107	46 - 145
Bromomethane	20.0	17.5		ug/L		88	41 - 150
Carbon disulfide	20.0	20.6		ug/L		103	77 - 126
Carbon tetrachloride	20.0	17.6		ug/L		88	64 - 147
Chlorobenzene	20.0	21.4		ug/L		107	80 - 120
Chlorodibromomethane	20.0	20.1		ug/L		100	69 - 133
Chloroethane	20.0	19.9		ug/L		99	72 - 120
Chloroform	20.0	18.2		ug/L		91	73 - 129
Chloromethane	20.0	15.0		ug/L		75	12 - 150
cis-1,2-Dichloroethene	20.0	19.5		ug/L		97	76 - 125
cis-1,3-Dichloropropene	20.0	20.5		ug/L		102	74 - 140
Cyclohexane	20.0	21.7		ug/L		109	73 - 122
Dichlorobromomethane	20.0	17.5		ug/L		88	75 - 129
Dichlorodifluoromethane	20.0	18.6		ug/L		93	37 - 127
Ethylbenzene	20.0	20.6		ug/L		103	80 - 130
1,2-Dibromoethane	20.0	20.7		ug/L		103	80 - 129
Isopropylbenzene	20.0	21.2		ug/L		106	80 - 141
Methyl acetate	100	104		ug/L		104	64 - 150
Methyl tert-butyl ether	20.0	16.7		ug/L		83	72 - 133
Methylcyclohexane	20.0	20.6		ug/L		103	71 - 129
Methylene Chloride	20.0	17.5		ug/L		88	79 - 123
Styrene	20.0	21.5		ug/L		108	80 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 490-277302/3
Matrix: Water
Analysis Batch: 277302

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	20.0	20.2		ug/L		101	80 - 126
Toluene	20.0	21.0		ug/L		105	80 - 126
trans-1,2-Dichloroethene	20.0	18.9		ug/L		94	79 - 126
trans-1,3-Dichloropropene	20.0	21.4	E	ug/L		107	63 - 134
Trichloroethene	20.0	19.1		ug/L		96	80 - 123
Trichlorofluoromethane	20.0	17.4		ug/L		87	65 - 124
Vinyl chloride	20.0	20.2		ug/L		101	68 - 120
1,2-Dichloroethane	20.0	16.8		ug/L		84	77 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*

Lab Sample ID: LCSD 490-277302/4
Matrix: Water
Analysis Batch: 277302

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	16.3		ug/L		82	78 - 135	8	17
Freon-113	20.0	18.5		ug/L		93	77 - 129	8	18
1,1,2,2-Tetrachloroethane	20.0	21.2		ug/L		106	69 - 131	6	20
1,1,2-Trichloroethane	20.0	20.5		ug/L		102	80 - 124	7	15
1,1-Dichloroethane	20.0	19.1		ug/L		95	78 - 125	10	17
1,1-Dichloroethene	20.0	17.1	*	ug/L		86	79 - 124	21	17
1,2,4-Trichlorobenzene	20.0	20.3		ug/L		101	63 - 133	8	19
1,2-Dibromo-3-Chloropropane	20.0	17.7		ug/L		88	54 - 125	11	24
1,2-Dichlorobenzene	20.0	20.6		ug/L		103	80 - 121	6	15
1,2-Dichloropropane	20.0	17.6		ug/L		88	75 - 120	9	17
1,3-Dichlorobenzene	20.0	20.1		ug/L		100	80 - 122	4	15
1,4-Dichlorobenzene	20.0	19.7		ug/L		99	80 - 120	8	15
2-Butanone (MEK)	100	92.9		ug/L		93	62 - 133	3	19
2-Hexanone	100	97.3		ug/L		97	60 - 142	8	15
4-Methyl-2-pentanone (MIBK)	100	96.1		ug/L		96	60 - 137	9	17
Acetone	100	90.2		ug/L		90	54 - 145	2	21
Benzene	20.0	18.7		ug/L		93	80 - 121	5	17
Bromoform	20.0	19.3		ug/L		97	46 - 145	10	16
Bromomethane	20.0	19.7		ug/L		98	41 - 150	12	50
Carbon disulfide	20.0	18.7		ug/L		94	77 - 126	10	21
Carbon tetrachloride	20.0	16.4		ug/L		82	64 - 147	7	19
Chlorobenzene	20.0	19.9		ug/L		99	80 - 120	7	14
Chlorodibromomethane	20.0	19.2		ug/L		96	69 - 133	4	15
Chloroethane	20.0	19.8		ug/L		99	72 - 120	0	20
Chloroform	20.0	16.8		ug/L		84	73 - 129	8	18
Chloromethane	20.0	17.6		ug/L		88	12 - 150	16	31
cis-1,2-Dichloroethene	20.0	18.6		ug/L		93	76 - 125	4	17
cis-1,3-Dichloropropene	20.0	18.7		ug/L		93	74 - 140	9	15

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 490-277302/4
Matrix: Water
Analysis Batch: 277302

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyclohexane			20.0	19.9		ug/L		99	73 - 122	9	16
Dichlorobromomethane			20.0	16.8		ug/L		84	75 - 129	5	18
Dichlorodifluoromethane			20.0	18.3		ug/L		92	37 - 127	1	18
Ethylbenzene			20.0	19.0		ug/L		95	80 - 130	8	15
1,2-Dibromoethane			20.0	20.1		ug/L		100	80 - 129	3	15
Isopropylbenzene			20.0	19.6		ug/L		98	80 - 141	7	16
Methyl acetate			100	97.3		ug/L		97	64 - 150	6	31
Methyl tert-butyl ether			20.0	15.6		ug/L		78	72 - 133	6	16
Methylcyclohexane			20.0	19.7		ug/L		99	71 - 129	4	19
Methylene Chloride			20.0	16.7		ug/L		84	79 - 123	5	17
Styrene			20.0	19.9		ug/L		99	80 - 127	8	24
Tetrachloroethene			20.0	18.8		ug/L		94	80 - 126	7	16
Toluene			20.0	19.5		ug/L		98	80 - 126	7	15
trans-1,2-Dichloroethene			20.0	17.9		ug/L		90	79 - 126	5	16
trans-1,3-Dichloropropene			20.0	19.4		ug/L		97	63 - 134	10	14
Trichloroethene			20.0	18.0		ug/L		90	80 - 123	6	17
Trichlorofluoromethane			20.0	19.1		ug/L		95	65 - 124	9	18
Vinyl chloride			20.0	20.5		ug/L		102	68 - 120	2	17
1,2-Dichloroethane			20.0	15.8		ug/L		79	77 - 121	6	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*

Lab Sample ID: 490-85604-F-6 MS
Matrix: Water
Analysis Batch: 277302

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.19	U	50.0	42.3		ug/L		85	76 - 149
Freon-113	0.15	U	50.0	48.9		ug/L		98	72 - 148
1,1,2,2-Tetrachloroethane	0.19	U	50.0	64.0		ug/L		128	56 - 143
1,1,2-Trichloroethane	0.19	U	50.0	50.4		ug/L		101	74 - 134
1,1-Dichloroethane	0.24	U	50.0	47.2		ug/L		94	71 - 139
1,1-Dichloroethene	0.25	U	50.0	50.0		ug/L		100	70 - 142
1,2,4-Trichlorobenzene	0.20	U	50.0	39.5		ug/L		79	60 - 136
1,2-Dibromo-3-Chloropropane	0.94	U F1	50.0	72.7	E F1	ug/L		145	52 - 126
1,2-Dichlorobenzene	0.19	U F1	50.0	38.5	F1	ug/L		77	79 - 128
1,2-Dichloropropane	0.25	U	50.0	43.7		ug/L		87	67 - 131
1,3-Dichlorobenzene	0.18	U F1	50.0	36.4	F1	ug/L		73	77 - 131
1,4-Dichlorobenzene	0.17	U F1	50.0	37.6	F1	ug/L		75	78 - 126
2-Butanone (MEK)	2.6	U	250	229		ug/L		91	50 - 138
2-Hexanone	1.3	U	250	267		ug/L		107	50 - 150
4-Methyl-2-pentanone (MIBK)	0.81	U	250	259		ug/L		104	50 - 147
Acetone	2.7	U	250	213		ug/L		85	45 - 141
Benzene	0.20	J	50.0	41.8		ug/L		83	75 - 133

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-85604-F-6 MS
Matrix: Water
Analysis Batch: 277302

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromoform	0.29	U	50.0	64.1	E	ug/L		128	42 - 147
Bromomethane	0.35	U	50.0	26.7		ug/L		53	16 - 163
Carbon disulfide	0.22	U	50.0	41.3		ug/L		83	48 - 152
Carbon tetrachloride	0.18	U	50.0	47.2		ug/L		94	62 - 164
Chlorobenzene	0.18	U	50.0	48.4		ug/L		97	80 - 129
Chlorodibromomethane	0.25	U	50.0	61.7	E	ug/L		123	66 - 140
Chloroethane	0.36	U	50.0	45.5		ug/L		91	58 - 137
Chloroform	0.23	U	50.0	39.9		ug/L		80	66 - 138
Chloromethane	0.36	U	50.0	30.2		ug/L		60	10 - 169
cis-1,2-Dichloroethene	0.21	U	50.0	44.2		ug/L		88	68 - 138
cis-1,3-Dichloropropene	0.17	U	50.0	59.6		ug/L		119	71 - 141
Cyclohexane	0.13	U	50.0	47.8		ug/L		96	58 - 144
Dichlorobromomethane	0.17	U	50.0	45.8		ug/L		92	70 - 140
Dichlorodifluoromethane	0.17	U	50.0	30.8		ug/L		62	40 - 127
Ethylbenzene	0.49	J	50.0	43.8		ug/L		87	79 - 139
1,2-Dibromoethane	0.21	U	50.0	50.9		ug/L		102	75 - 137
Isopropylbenzene	0.33	U F1	50.0	37.6	F1	ug/L		75	80 - 153
Methyl acetate	0.58	U	250	201		ug/L		80	30 - 165
Methyl tert-butyl ether	0.17	U	50.0	36.0		ug/L		72	66 - 141
Methylcyclohexane	0.090	U	50.0	39.3		ug/L		79	59 - 151
Methylene Chloride	0.22	U	50.0	36.4		ug/L		73	64 - 139
Styrene	0.28	U	50.0	43.1		ug/L		86	61 - 148
Tetrachloroethene	0.14	U	50.0	49.8		ug/L		100	72 - 145
Toluene	0.20	J	50.0	49.4		ug/L		98	75 - 136
trans-1,2-Dichloroethene	0.23	U	50.0	40.1		ug/L		80	66 - 143
trans-1,3-Dichloropropene	0.17	U	50.0	64.3	E	ug/L		129	59 - 135
Trichloroethene	0.20	U	50.0	47.6		ug/L		95	73 - 144
Trichlorofluoromethane	0.21	U	50.0	40.7		ug/L		81	58 - 139
Vinyl chloride	0.18	U	50.0	41.1		ug/L		82	56 - 129
1,2-Dichloroethane	0.20	U F1	50.0	31.2	F1	ug/L		62	64 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*111*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*69*	*X*	*70 - 130*

Lab Sample ID: 490-85604-G-6 MSD
Matrix: Water
Analysis Batch: 277302

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.19	U	50.0	39.8		ug/L		80	76 - 149	6	17
Freon-113	0.15	U	50.0	46.9		ug/L		94	72 - 148	4	18
1,1,2,2-Tetrachloroethane	0.19	U	50.0	61.7		ug/L		123	56 - 143	4	20
1,1,2-Trichloroethane	0.19	U	50.0	49.9		ug/L		100	74 - 134	1	15
1,1-Dichloroethane	0.24	U	50.0	45.6		ug/L		91	71 - 139	3	17
1,1-Dichloroethene	0.25	U	50.0	47.0		ug/L		94	70 - 142	6	17

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-85604-G-6 MSD
Matrix: Water
Analysis Batch: 277302

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	0.20	U	50.0	40.3		ug/L		81	60 - 136	2	19
1,2-Dibromo-3-Chloropropane	0.94	U F1	50.0	69.4	E F1	ug/L		139	52 - 126	5	24
1,2-Dichlorobenzene	0.19	U F1	50.0	39.4		ug/L		79	79 - 128	2	15
1,2-Dichloropropane	0.25	U	50.0	42.3		ug/L		85	67 - 131	3	17
1,3-Dichlorobenzene	0.18	U F1	50.0	38.4		ug/L		77	77 - 131	5	15
1,4-Dichlorobenzene	0.17	U F1	50.0	39.2		ug/L		78	78 - 126	4	15
2-Butanone (MEK)	2.6	U	250	220		ug/L		88	50 - 138	4	19
2-Hexanone	1.3	U	250	262		ug/L		105	50 - 150	2	15
4-Methyl-2-pentanone (MIBK)	0.81	U	250	252		ug/L		101	50 - 147	3	17
Acetone	2.7	U	250	209		ug/L		84	45 - 141	2	21
Benzene	0.20	J	50.0	40.2		ug/L		80	75 - 133	4	17
Bromoform	0.29	U	50.0	64.3	E	ug/L		129	42 - 147	0	16
Bromomethane	0.35	U	50.0	36.2		ug/L		72	16 - 163	30	50
Carbon disulfide	0.22	U	50.0	40.4		ug/L		81	48 - 152	2	21
Carbon tetrachloride	0.18	U	50.0	44.6		ug/L		89	62 - 164	6	19
Chlorobenzene	0.18	U	50.0	47.7		ug/L		95	80 - 129	2	14
Chlorodibromomethane	0.25	U	50.0	61.8	E	ug/L		124	66 - 140	0	15
Chloroethane	0.36	U	50.0	44.5		ug/L		89	58 - 137	2	20
Chloroform	0.23	U	50.0	38.5		ug/L		77	66 - 138	4	18
Chloromethane	0.36	U	50.0	29.2		ug/L		58	10 - 169	3	31
cis-1,2-Dichloroethene	0.21	U	50.0	42.3		ug/L		85	68 - 138	4	17
cis-1,3-Dichloropropene	0.17	U	50.0	57.2		ug/L		114	71 - 141	4	15
Cyclohexane	0.13	U	50.0	45.4		ug/L		91	58 - 144	5	16
Dichlorobromomethane	0.17	U	50.0	44.4		ug/L		89	70 - 140	3	18
Dichlorodifluoromethane	0.17	U	50.0	29.7		ug/L		59	40 - 127	4	18
Ethylbenzene	0.49	J	50.0	42.7		ug/L		84	79 - 139	3	15
1,2-Dibromoethane	0.21	U	50.0	50.1		ug/L		100	75 - 137	2	15
Isopropylbenzene	0.33	U F1	50.0	39.0	F1	ug/L		78	80 - 153	4	16
Methyl acetate	0.58	U	250	189		ug/L		76	30 - 165	6	31
Methyl tert-butyl ether	0.17	U	50.0	35.7		ug/L		71	66 - 141	1	16
Methylcyclohexane	0.090	U	50.0	36.0		ug/L		72	59 - 151	9	19
Methylene Chloride	0.22	U	50.0	35.7		ug/L		71	64 - 139	2	17
Styrene	0.28	U	50.0	44.6		ug/L		89	61 - 148	3	24
Tetrachloroethene	0.14	U	50.0	48.6		ug/L		97	72 - 145	3	16
Toluene	0.20	J	50.0	46.7		ug/L		93	75 - 136	6	15
trans-1,2-Dichloroethene	0.23	U	50.0	39.3		ug/L		79	66 - 143	2	16
trans-1,3-Dichloropropene	0.17	U	50.0	63.1	E	ug/L		126	59 - 135	2	14
Trichloroethene	0.20	U	50.0	46.5		ug/L		93	73 - 144	2	17
Trichlorofluoromethane	0.21	U	50.0	37.9		ug/L		76	58 - 139	7	18
Vinyl chloride	0.18	U	50.0	40.5		ug/L		81	56 - 129	2	17
1,2-Dichloroethane	0.20	U F1	50.0	29.8	F1	ug/L		60	64 - 136	5	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*111*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*69*	*X*	*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-276290/7
Matrix: Water
Analysis Batch: 276290

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/26/15 18:02	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/26/15 18:02	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/26/15 18:02	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/26/15 18:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/15 18:02*	*1*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*		*08/26/15 18:02*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*08/26/15 18:02*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/26/15 18:02*	*1*

Lab Sample ID: LCS 490-276290/3
Matrix: Water
Analysis Batch: 276290

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.500	0.380		ug/L		76	70 - 131		
1,2-Dibromo-3-Chloropropane			0.500	0.366		ug/L		73	40 - 160		
1,4-Dioxane			10.0	7.63	J	ug/L		76	40 - 160		
Ethylene Dibromide			0.500	0.348		ug/L		70	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
Dibromofluoromethane (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 490-276290/4
Matrix: Water
Analysis Batch: 276290

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.500	0.408		ug/L		82	70 - 131	7	19
1,2-Dibromo-3-Chloropropane			0.500	0.400		ug/L		80	40 - 160	9	20
1,4-Dioxane			10.0	10.3	*	ug/L		103	40 - 160	30	20
Ethylene Dibromide			0.500	0.354		ug/L		71	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-276673/7
Matrix: Water
Analysis Batch: 276673

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/27/15 14:42	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/27/15 14:42	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/27/15 14:42	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/27/15 14:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/27/15 14:42*	*1*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*		*08/27/15 14:42*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/27/15 14:42*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/27/15 14:42*	*1*

Lab Sample ID: LCS 490-276673/3
Matrix: Water
Analysis Batch: 276673

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.500	0.377		ug/L		75	70 - 131		
1,2-Dibromo-3-Chloropropane			0.500	0.380		ug/L		76	40 - 160		
1,4-Dioxane			10.0	9.19	J	ug/L		92	40 - 160		
Ethylene Dibromide			0.500	0.337	*	ug/L		67	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 490-276673/4
Matrix: Water
Analysis Batch: 276673

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.500	0.387		ug/L		77	70 - 131	3	19
1,2-Dibromo-3-Chloropropane			0.500	0.366		ug/L		73	40 - 160	4	20
1,4-Dioxane			10.0	9.22	J	ug/L		92	40 - 160	0	20
Ethylene Dibromide			0.500	0.328	*	ug/L		66	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-277393/7
Matrix: Water
Analysis Batch: 277393

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/29/15 15:11	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/29/15 15:11	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/29/15 15:11	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/29/15 15:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/29/15 15:11*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/29/15 15:11*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/29/15 15:11*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/29/15 15:11*	*1*

Lab Sample ID: LCS 490-277393/3
Matrix: Water
Analysis Batch: 277393

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.500	0.501		ug/L		100	70 - 131		
1,2-Dibromo-3-Chloropropane			0.500	0.499		ug/L		100	40 - 160		
1,4-Dioxane			10.0	10.9		ug/L		109	40 - 160		
Ethylene Dibromide			0.500	0.489		ug/L		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 490-277393/4
Matrix: Water
Analysis Batch: 277393

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.500	0.517		ug/L		103	70 - 131	3	19
1,2-Dibromo-3-Chloropropane			0.500	0.496		ug/L		99	40 - 160	0	20
1,4-Dioxane			10.0	12.2		ug/L		122	40 - 160	12	20
Ethylene Dibromide			0.500	0.489		ug/L		98	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-275885/1-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275885

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/25/15 08:27	08/26/15 13:31	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/25/15 08:27	08/26/15 13:31	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/25/15 08:27	08/26/15 13:31	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/25/15 08:27	08/26/15 13:31	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/25/15 08:27	08/26/15 13:31	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/25/15 08:27	08/26/15 13:31	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/25/15 08:27	08/26/15 13:31	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/25/15 08:27	08/26/15 13:31	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/25/15 08:27	08/26/15 13:31	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/25/15 08:27	08/26/15 13:31	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 13:31	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/25/15 08:27	08/26/15 13:31	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/25/15 08:27	08/26/15 13:31	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/25/15 08:27	08/26/15 13:31	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/25/15 08:27	08/26/15 13:31	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/25/15 08:27	08/26/15 13:31	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/25/15 08:27	08/26/15 13:31	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/25/15 08:27	08/26/15 13:31	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/25/15 08:27	08/26/15 13:31	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/25/15 08:27	08/26/15 13:31	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/25/15 08:27	08/26/15 13:31	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/25/15 08:27	08/26/15 13:31	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/25/15 08:27	08/26/15 13:31	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 13:31	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/25/15 08:27	08/26/15 13:31	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/25/15 08:27	08/26/15 13:31	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/25/15 08:27	08/26/15 13:31	1
Acetophenone	2.3	U	10	2.3	ug/L		08/25/15 08:27	08/26/15 13:31	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/25/15 08:27	08/26/15 13:31	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/25/15 08:27	08/26/15 13:31	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/25/15 08:27	08/26/15 13:31	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/25/15 08:27	08/26/15 13:31	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/25/15 08:27	08/26/15 13:31	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 13:31	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/25/15 08:27	08/26/15 13:31	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/25/15 08:27	08/26/15 13:31	1
Carbazole	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 13:31	1
Caprolactam	2.4	U	10	2.4	ug/L		08/25/15 08:27	08/26/15 13:31	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/25/15 08:27	08/26/15 13:31	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/25/15 08:27	08/26/15 13:31	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/25/15 08:27	08/26/15 13:31	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/25/15 08:27	08/26/15 13:31	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/25/15 08:27	08/26/15 13:31	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/25/15 08:27	08/26/15 13:31	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/25/15 08:27	08/26/15 13:31	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/25/15 08:27	08/26/15 13:31	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/25/15 08:27	08/26/15 13:31	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/25/15 08:27	08/26/15 13:31	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-275885/1-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275885

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/25/15 08:27	08/26/15 13:31	1
Isophorone	3.1	U	10	3.1	ug/L		08/25/15 08:27	08/26/15 13:31	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/25/15 08:27	08/26/15 13:31	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/25/15 08:27	08/26/15 13:31	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/25/15 08:27	08/26/15 13:31	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/25/15 08:27	08/26/15 13:31	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/25/15 08:27	08/26/15 13:31	1
Phenol	1.5	U	10	1.5	ug/L		08/25/15 08:27	08/26/15 13:31	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/25/15 08:27	08/26/15 13:31	1
Diphenyl	2.2	U	10	2.2	ug/L		08/25/15 08:27	08/26/15 13:31	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/25/15 08:27	08/26/15 13:31	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/25/15 08:27	08/26/15 13:31	1
Atrazine	2.9	U	10	2.9	ug/L		08/25/15 08:27	08/26/15 13:31	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/15 08:27*	*08/26/15 13:31*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*104*		*10 - 120*	*08/25/15 08:27*	*08/26/15 13:31*	*1*
2-Fluorobiphenyl (Surr)	*80*		*29 - 120*	*08/25/15 08:27*	*08/26/15 13:31*	*1*
2-Fluorophenol (Surr)	*44*		*10 - 120*	*08/25/15 08:27*	*08/26/15 13:31*	*1*
Nitrobenzene-d5 (Surr)	*74*		*27 - 120*	*08/25/15 08:27*	*08/26/15 13:31*	*1*
Phenol-d5 (Surr)	*29*		*10 - 120*	*08/25/15 08:27*	*08/26/15 13:31*	*1*
Terphenyl-d14 (Surr)	*95*		*13 - 120*	*08/25/15 08:27*	*08/26/15 13:31*	*1*

Lab Sample ID: LCS 490-275885/2-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275885

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	40.0	34.8		ug/L		87	46 - 120
1,2,4,5-Tetrachlorobenzene	40.0	37.0		ug/L		92	25 - 120
2,3,4,6-Tetrachlorophenol	40.0	40.2		ug/L		101	31 - 148
2,4,5-Trichlorophenol	40.0	36.7		ug/L		92	40 - 129
2,4,6-Trichlorophenol	40.0	36.5		ug/L		91	39 - 135
2,4-Dichlorophenol	40.0	33.7		ug/L		84	38 - 120
2,4-Dimethylphenol	40.0	31.6		ug/L		79	21 - 126
2,4-Dinitrophenol	80.0	50.5		ug/L		63	20 - 150
2,4-Dinitrotoluene	40.0	38.2		ug/L		95	46 - 132
2,6-Dinitrotoluene	40.0	37.1		ug/L		93	54 - 128
2-Chloronaphthalene	40.0	34.2		ug/L		85	39 - 120
2-Chlorophenol	40.0	30.4		ug/L		76	40 - 120
2-Methylnaphthalene	40.0	32.8		ug/L		82	31 - 120
2-Methylphenol	40.0	29.6		ug/L		74	38 - 120
2-Nitroaniline	40.0	36.1		ug/L		90	46 - 131
2-Nitrophenol	40.0	34.0		ug/L		85	32 - 120
3,3'-Dichlorobenzidine	40.0	35.8		ug/L		89	46 - 129

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-275885/2-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275885

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3 & 4 Methylphenol	40.0	24.6		ug/L		61	33 - 120
3-Nitroaniline	40.0	32.8		ug/L		82	54 - 121
4,6-Dinitro-2-methylphenol	80.0	69.5		ug/L		87	19 - 150
4-Bromophenyl phenyl ether	40.0	36.8		ug/L		92	47 - 127
4-Chloro-3-methylphenol	40.0	34.1		ug/L		85	44 - 120
4-Chloroaniline	40.0	29.0		ug/L		72	44 - 120
4-Chlorophenyl phenyl ether	40.0	37.3		ug/L		93	50 - 120
4-Nitroaniline	40.0	34.9		ug/L		87	55 - 123
4-Nitrophenol	80.0	28.3		ug/L		35	10 - 120
Acenaphthylene	40.0	34.7		ug/L		87	48 - 120
Acetophenone	40.0	33.5		ug/L		84	52 - 133
Anthracene	40.0	36.0		ug/L		90	58 - 130
Benzaldehyde	40.0	53.4	*	ug/L		133	34 - 120
Benzo[g,h,i]perylene	40.0	37.7		ug/L		94	51 - 123
Benzo[k]fluoranthene	40.0	32.6		ug/L		81	51 - 120
Bis(2-chloroethoxy)methane	40.0	30.4		ug/L		76	44 - 120
Bis(2-chloroethyl)ether	40.0	29.3		ug/L		73	47 - 120
Butyl benzyl phthalate	40.0	32.9		ug/L		82	51 - 146
Bis(2-ethylhexyl) phthalate	40.0	37.1		ug/L		93	47 - 138
Carbazole	40.0	35.3		ug/L		88	54 - 123
Caprolactam	40.0	8.54	J	ug/L		21	10 - 120
Chrysene	40.0	31.3		ug/L		78	55 - 120
Dibenz(a,h)anthracene	40.0	40.7		ug/L		102	50 - 125
Dibenzofuran	40.0	34.8		ug/L		87	50 - 120
Diethyl phthalate	40.0	38.3		ug/L		96	54 - 128
Dimethyl phthalate	40.0	37.3		ug/L		93	53 - 127
Di-n-butyl phthalate	40.0	39.0		ug/L		97	54 - 140
Fluoranthene	40.0	38.1		ug/L		95	56 - 120
Fluorene	40.0	36.3		ug/L		91	52 - 120
Hexachlorocyclopentadiene	40.0	36.2		ug/L		91	17 - 120
Hexachloroethane	40.0	33.1		ug/L		83	30 - 120
Indeno[1,2,3-cd]pyrene	40.0	39.6		ug/L		99	54 - 125
Isophorone	40.0	33.3		ug/L		83	47 - 120
Naphthalene	40.0	32.4		ug/L		81	37 - 120
Nitrobenzene	40.0	32.4		ug/L		81	36 - 120
N-Nitrosodi-n-propylamine	40.0	32.8		ug/L		82	51 - 120
N-Nitrosodiphenylamine	80.0	71.6		ug/L		89	58 - 149
Phenanthrene	40.0	34.6		ug/L		86	56 - 120
Phenol	40.0	14.1		ug/L		35	14 - 120
Pyrene	40.0	30.6		ug/L		76	53 - 129
Diphenyl	40.0	34.2		ug/L		85	10 - 146
Di-n-octyl phthalate	40.0	36.0		ug/L		90	50 - 142
2,2'-oxybis[1-chloropropane]	40.0	28.8		ug/L		72	44 - 120
Atrazine	40.0	37.8		ug/L		94	24 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*105*		*10 - 120*
2-Fluorobiphenyl (Surr)	*86*		*29 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-275885/2-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275885

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol (Surr)	*47*		*10 - 120*
Nitrobenzene-d5 (Surr)	*80*		*27 - 120*
Phenol-d5 (Surr)	*33*		*10 - 120*
Terphenyl-d14 (Surr)	*83*		*13 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 490-275872/1-A
Matrix: Water
Analysis Batch: 277077

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275872

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/25/15 06:06	08/28/15 11:54	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/25/15 06:06	08/28/15 11:54	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/25/15 06:06	08/28/15 11:54	1
Hexachlorobenzene	0.0411		0.020	0.014	ug/L		08/25/15 06:06	08/28/15 11:54	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/25/15 06:06	08/28/15 11:54	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/25/15 06:06	08/28/15 11:54	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/25/15 06:06	08/28/15 11:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*71*		*10 - 120*	*08/25/15 06:06*	*08/28/15 11:54*	*1*
2-Fluorobiphenyl (Surr)	*75*		*29 - 120*	*08/25/15 06:06*	*08/28/15 11:54*	*1*
Nitrobenzene-d5	*74*		*27 - 120*	*08/25/15 06:06*	*08/28/15 11:54*	*1*
Terphenyl-d14	*91*		*13 - 120*	*08/25/15 06:06*	*08/28/15 11:54*	*1*
2-Fluorophenol	*61*		*10 - 120*	*08/25/15 06:06*	*08/28/15 11:54*	*1*
Phenol-d5	*40*		*10 - 120*	*08/25/15 06:06*	*08/28/15 11:54*	*1*

Lab Sample ID: LCS 490-275872/2-A
Matrix: Water
Analysis Batch: 277077

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275872

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.823		ug/L		103	57 - 120
Benzo[a]pyrene	0.800	0.726		ug/L		91	57 - 124
Benzo[b]fluoranthene	0.800	0.742		ug/L		93	51 - 125
Hexachlorobenzene	0.800	0.675		ug/L		84	48 - 131
Hexachlorobutadiene	0.800	0.631		ug/L		79	28 - 120
N-Nitrosodimethylamine	0.800	0.481	J	ug/L		60	20 - 120
Pentachlorophenol	1.60	1.32		ug/L		82	21 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*103*		*10 - 120*
2-Fluorobiphenyl (Surr)	*90*		*29 - 120*
Nitrobenzene-d5	*91*		*27 - 120*
Terphenyl-d14	*100*		*13 - 120*
2-Fluorophenol	*67*		*10 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 490-275872/2-A
Matrix: Water
Analysis Batch: 277077

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275872

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Phenol-d5	*47*		*10 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-277676/1-A
Matrix: Water
Analysis Batch: 278119

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277676

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		08/31/15 06:31	09/01/15 20:06	1
PCB-1221	0.34	U	0.50	0.34	ug/L		08/31/15 06:31	09/01/15 20:06	1
PCB-1232	0.40	U	0.50	0.40	ug/L		08/31/15 06:31	09/01/15 20:06	1
PCB-1242	0.22	U	0.50	0.22	ug/L		08/31/15 06:31	09/01/15 20:06	1
PCB-1248	0.15	U	0.50	0.15	ug/L		08/31/15 06:31	09/01/15 20:06	1
PCB-1254	0.17	U	0.50	0.17	ug/L		08/31/15 06:31	09/01/15 20:06	1
PCB-1260	0.18	U	0.50	0.18	ug/L		08/31/15 06:31	09/01/15 20:06	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		08/31/15 06:31	09/01/15 20:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*59*		*10 - 150*	*08/31/15 06:31*	*09/01/15 20:06*	*1*
Tetrachloro-m-xylene	*58*		*10 - 150*	*08/31/15 06:31*	*09/01/15 20:06*	*1*

Lab Sample ID: LCS 490-277676/2-A
Matrix: Water
Analysis Batch: 278119

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277676

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	2.66		ug/L		66	23 - 139		
PCB-1260			4.00	2.84		ug/L		71	36 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*90*		*10 - 150*
Tetrachloro-m-xylene	*72*		*10 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 490-276991/3
Matrix: Water
Analysis Batch: 276991

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			08/27/15 19:01	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/27/15 19:01	1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 490-276991/4
Matrix: Water
Analysis Batch: 276991

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	99.55		mg/L		100	80 - 120
Sulfate	100	98.96		mg/L		99	80 - 120

Lab Sample ID: LCSD 490-276991/5
Matrix: Water
Analysis Batch: 276991

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	99.61		mg/L		100	80 - 120	0	20
Sulfate	100	99.17		mg/L		99	80 - 120	0	20

Lab Sample ID: 490-86043-F-1 MS
Matrix: Water
Analysis Batch: 276991

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.68		100	101.5		mg/L		98	80 - 120
Sulfate	9.66		100	104.3		mg/L		95	80 - 120

Lab Sample ID: 490-86043-F-1 MSD
Matrix: Water
Analysis Batch: 276991

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	3.68		100	102.0		mg/L		98	80 - 120	0	20
Sulfate	9.66		100	104.9		mg/L		95	80 - 120	1	20

Lab Sample ID: MB 490-277229/6
Matrix: Water
Analysis Batch: 277229

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			08/28/15 14:17	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/28/15 14:17	1

Lab Sample ID: LCS 490-277229/7
Matrix: Water
Analysis Batch: 277229

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	101.7		mg/L		102	80 - 120
Sulfate	100	100.8		mg/L		101	80 - 120

Lab Sample ID: LCSD 490-277229/8
Matrix: Water
Analysis Batch: 277229

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	100.8		mg/L		101	80 - 120	1	20

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 490-277229/8
Matrix: Water
Analysis Batch: 277229

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate			100	101.0		mg/L		101	80 - 120	0	20

Lab Sample ID: 490-85529-2 MS
Matrix: Water
Analysis Batch: 277229

Client Sample ID: CM-275-081815
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	183	F1	100	245.2	F1	mg/L		62	80 - 120		
Sulfate	3.46		100	106.7		mg/L		103	80 - 120		

Lab Sample ID: 490-85529-2 MSD
Matrix: Water
Analysis Batch: 277229

Client Sample ID: CM-275-081815
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	183	F1	100	244.1	F1	mg/L		61	80 - 120	0	20
Sulfate	3.46		100	104.7		mg/L		101	80 - 120	2	20

Lab Sample ID: MB 490-277230/6
Matrix: Water
Analysis Batch: 277230

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			08/28/15 14:17	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/28/15 14:17	1

Lab Sample ID: LCS 490-277230/7
Matrix: Water
Analysis Batch: 277230

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			100	101.8		mg/L		102	80 - 120		
Sulfate			100	100.7		mg/L		101	80 - 120		

Lab Sample ID: LCSD 490-277230/8
Matrix: Water
Analysis Batch: 277230

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	100.8		mg/L		101	80 - 120	1	20
Sulfate			100	101.0		mg/L		101	80 - 120	0	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 490-275634/1-A
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 19:22	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Arsenic	0.00111	J	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 19:22	1
Calcium	0.13	U	1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:22	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Iron	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 19:22	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 19:22	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:22	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Potassium	0.13	U	1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:22	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 19:22	1
Sodium	0.13	U	1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:22	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 19:22	1
Zinc	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 19:22	1

Lab Sample ID: MB 490-275634/1-A
Matrix: Water
Analysis Batch: 276307

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/25/15 22:59	1

Lab Sample ID: MB 490-275634/1-A
Matrix: Water
Analysis Batch: 279689

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	0.000997	J	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 14:38	1

Lab Sample ID: LCS 490-275634/2-A
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.03		mg/L		103	80 - 120
Antimony	0.100	0.106		mg/L		106	80 - 120
Arsenic	0.100	0.105		mg/L		105	80 - 120
Barium	0.100	0.107		mg/L		107	80 - 120
Beryllium	0.100	0.111		mg/L		111	80 - 120
Cadmium	0.100	0.0980		mg/L		98	80 - 120
Calcium	10.0	10.08		mg/L		101	80 - 120
Chromium	0.100	0.0996		mg/L		100	80 - 120
Cobalt	0.100	0.104		mg/L		104	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-275634/2-A
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.100	0.0986		mg/L		99	80 - 120
Iron	1.00	1.13		mg/L		113	80 - 120
Lead	0.100	0.107		mg/L		107	80 - 120
Magnesium	10.0	9.98		mg/L		100	80 - 120
Manganese	0.100	0.108		mg/L		108	80 - 120
Nickel	0.100	0.102		mg/L		102	80 - 120
Potassium	10.0	10.38		mg/L		104	80 - 120
Selenium	0.100	0.0929		mg/L		93	80 - 120
Sodium	10.0	10.04		mg/L		100	80 - 120
Thallium	0.100	0.106		mg/L		106	80 - 120
Zinc	0.100	0.0915		mg/L		91	80 - 120

Lab Sample ID: LCS 490-275634/2-A
Matrix: Water
Analysis Batch: 276307

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.100	0.106		mg/L		106	80 - 120

Lab Sample ID: LCS 490-275634/2-A
Matrix: Water
Analysis Batch: 279689

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	0.100	0.104		mg/L		104	80 - 120

Lab Sample ID: 490-85229-J-12-B MS
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0096	U	1.00	0.998		mg/L		100	75 - 125
Antimony	0.00050	U	0.100	0.106		mg/L		106	75 - 125
Arsenic	0.0023	B	0.100	0.0967		mg/L		94	75 - 125
Barium	0.12		0.100	0.223		mg/L		105	75 - 125
Beryllium	0.00050	U	0.100	0.112		mg/L		112	75 - 125
Cadmium	0.00040	U	0.100	0.0976		mg/L		98	75 - 125
Calcium	81.3		10.0	91.47	4	mg/L		102	75 - 125
Chromium	0.0021		0.100	0.0994		mg/L		97	75 - 125
Cobalt	0.00050	U	0.100	0.0992		mg/L		99	75 - 125
Copper	0.0015	J	0.100	0.0992		mg/L		98	75 - 125
Iron	20.0		1.00	22.04	4	mg/L		200	75 - 125
Lead	0.00039	J	0.100	0.106		mg/L		106	75 - 125
Magnesium	22.7		10.0	32.63		mg/L		100	75 - 125
Manganese	1.2		0.100	1.33	4	mg/L		93	75 - 125
Nickel	0.0052		0.100	0.103		mg/L		98	75 - 125
Potassium	4.5		10.0	14.52		mg/L		100	75 - 125
Selenium	0.00060	U	0.100	0.0900		mg/L		90	75 - 125
Sodium	85.7		10.0	98.57	4	mg/L		129	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85229-J-12-B MS
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	0.00051	J	0.100	0.105		mg/L		104	75 - 125
Zinc	0.96		0.100	1.44	4	mg/L		474	75 - 125

Lab Sample ID: 490-85229-J-12-B MS
Matrix: Water
Analysis Batch: 276307

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.00050	U	0.100	0.101		mg/L		101	75 - 125

Lab Sample ID: 490-85229-J-12-B MS
Matrix: Water
Analysis Batch: 279689

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	0.0010	J B	0.100	0.101		mg/L		100	75 - 125

Lab Sample ID: 490-85229-J-12-C MSD
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0096	U	1.00	1.00		mg/L		100	75 - 125	0	20
Antimony	0.00050	U	0.100	0.106		mg/L		106	75 - 125	0	20
Arsenic	0.0023	B	0.100	0.0989		mg/L		97	75 - 125	2	20
Barium	0.12		0.100	0.225		mg/L		107	75 - 125	1	20
Beryllium	0.00050	U	0.100	0.112		mg/L		112	75 - 125	0	20
Cadmium	0.00040	U	0.100	0.0982		mg/L		98	75 - 125	1	20
Calcium	81.3		10.0	92.06	4	mg/L		108	75 - 125	1	20
Chromium	0.0021		0.100	0.101		mg/L		99	75 - 125	1	20
Cobalt	0.00050	U	0.100	0.100		mg/L		100	75 - 125	1	20
Copper	0.0015	J	0.100	0.0997		mg/L		98	75 - 125	0	20
Iron	20.0		1.00	22.16	4	mg/L		212	75 - 125	1	20
Lead	0.00039	J	0.100	0.107		mg/L		107	75 - 125	1	20
Magnesium	22.7		10.0	32.49		mg/L		98	75 - 125	0	20
Manganese	1.2		0.100	1.36	4	mg/L		116	75 - 125	2	20
Nickel	0.0052		0.100	0.104		mg/L		99	75 - 125	1	20
Potassium	4.5		10.0	14.71		mg/L		102	75 - 125	1	20
Selenium	0.00060	U	0.100	0.0915		mg/L		91	75 - 125	2	20
Sodium	85.7		10.0	97.13	4	mg/L		114	75 - 125	1	20
Thallium	0.00051	J	0.100	0.106		mg/L		106	75 - 125	1	20
Zinc	0.96		0.100	1.32	4	mg/L		361	75 - 125	8	20

Lab Sample ID: 490-85229-J-12-C MSD
Matrix: Water
Analysis Batch: 276307

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.00050	U	0.100	0.103		mg/L		103	75 - 125	2	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85229-J-12-C MSD
Matrix: Water
Analysis Batch: 279689

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	0.0010	J B	0.100	0.102		mg/L		101	75 - 125	1	20

Lab Sample ID: MB 490-276235/1-A
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 276235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 17:45	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 17:45	1
Calcium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 17:45	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Iron	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 17:45	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 17:45	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 17:45	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Potassium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 17:45	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 17:45	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Sodium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 17:45	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 17:45	1
Vanadium	0.000855	J	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 17:45	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 17:45	1

Lab Sample ID: LCS 490-276235/2-A
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 276235

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	0.970		mg/L		97	80 - 120
Antimony	0.100	0.106		mg/L		106	80 - 120
Arsenic	0.100	0.102		mg/L		102	80 - 120
Barium	0.100	0.103		mg/L		103	80 - 120
Beryllium	0.100	0.103		mg/L		103	80 - 120
Cadmium	0.100	0.0974		mg/L		97	80 - 120
Calcium	10.0	9.41		mg/L		94	80 - 120
Chromium	0.100	0.0941		mg/L		94	80 - 120
Cobalt	0.100	0.0995		mg/L		100	80 - 120
Copper	0.100	0.0957		mg/L		96	80 - 120
Iron	1.00	1.03		mg/L		103	80 - 120
Lead	0.100	0.101		mg/L		101	80 - 120
Magnesium	10.0	9.38		mg/L		94	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-276235/2-A
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 276235

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.100	0.0997		mg/L		100	80 - 120
Nickel	0.100	0.0955		mg/L		96	80 - 120
Potassium	10.0	9.53		mg/L		95	80 - 120
Selenium	0.100	0.0901		mg/L		90	80 - 120
Silver	0.100	0.0949		mg/L		95	80 - 120
Sodium	10.0	9.40		mg/L		94	80 - 120
Thallium	0.100	0.0978		mg/L		98	80 - 120
Vanadium	0.100	0.0956		mg/L		96	80 - 120
Zinc	0.100	0.0900		mg/L		90	80 - 120

Lab Sample ID: 490-85759-A-1-D MS
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 276235

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0096	U	1.00	1.03		mg/L		103	75 - 125
Antimony	0.00050	U	0.100	0.111		mg/L		111	75 - 125
Arsenic	0.0032		0.100	0.104		mg/L		101	75 - 125
Barium	2.1	E	0.100	2.24	E 4	mg/L		116	75 - 125
Beryllium	0.00050	U	0.100	0.108		mg/L		108	75 - 125
Cadmium	0.00040	U	0.100	0.102		mg/L		102	75 - 125
Calcium	29.2		10.0	39.31		mg/L		101	75 - 125
Chromium	0.00050	U	0.100	0.0992		mg/L		99	75 - 125
Cobalt	0.0022		0.100	0.109		mg/L		107	75 - 125
Copper	0.00050	U	0.100	0.102		mg/L		102	75 - 125
Iron	26.8		1.00	28.66	4	mg/L		182	75 - 125
Lead	0.00020	U	0.100	0.107		mg/L		107	75 - 125
Magnesium	18.2		10.0	28.31		mg/L		101	75 - 125
Manganese	15.7	E	0.100	16.17	E 4	mg/L		520	75 - 125
Nickel	0.00050	U	0.100	0.101		mg/L		101	75 - 125
Potassium	4.6		10.0	14.72		mg/L		101	75 - 125
Selenium	0.00060	U	0.100	0.0940		mg/L		94	75 - 125
Silver	0.00050	U	0.100	0.0995		mg/L		99	75 - 125
Sodium	7.3		10.0	17.27		mg/L		100	75 - 125
Thallium	0.00054	J	0.100	0.103		mg/L		103	75 - 125
Vanadium	0.00075	J B	0.100	0.101		mg/L		101	75 - 125
Zinc	0.010	U	0.100	0.0973		mg/L		97	75 - 125

Lab Sample ID: 490-85759-A-1-E MSD
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 276235

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0096	U	1.00	1.01		mg/L		101	75 - 125	2	20
Antimony	0.00050	U	0.100	0.109		mg/L		109	75 - 125	3	20
Arsenic	0.0032		0.100	0.101		mg/L		98	75 - 125	3	20
Barium	2.1	E	0.100	2.18	E 4	mg/L		62	75 - 125	2	20
Beryllium	0.00050	U	0.100	0.103		mg/L		103	75 - 125	5	20
Cadmium	0.00040	U	0.100	0.0994		mg/L		99	75 - 125	3	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85759-A-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 276838 — **Prep Batch: 276235**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	29.2		10.0	38.60		mg/L		94	75 - 125	2	20
Chromium	0.00050	U	0.100	0.0979		mg/L		98	75 - 125	1	20
Cobalt	0.0022		0.100	0.107		mg/L		105	75 - 125	2	20
Copper	0.00050	U	0.100	0.0992		mg/L		99	75 - 125	2	20
Iron	26.8		1.00	27.43	4	mg/L		59	75 - 125	4	20
Lead	0.00020	U	0.100	0.104		mg/L		104	75 - 125	3	20
Magnesium	18.2		10.0	28.02		mg/L		98	75 - 125	1	20
Manganese	15.7	E	0.100	15.57	E 4	mg/L		-80	75 - 125	4	20
Nickel	0.00050	U	0.100	0.0976		mg/L		98	75 - 125	3	20
Potassium	4.6		10.0	14.50		mg/L		99	75 - 125	2	20
Selenium	0.00060	U	0.100	0.0928		mg/L		93	75 - 125	1	20
Silver	0.00050	U	0.100	0.0967		mg/L		97	75 - 125	3	20
Sodium	7.3		10.0	17.07		mg/L		98	75 - 125	1	20
Thallium	0.00054	J	0.100	0.102		mg/L		101	75 - 125	2	20
Vanadium	0.00075	J B	0.100	0.101		mg/L		100	75 - 125	0	20
Zinc	0.010	U	0.100	0.0956		mg/L		96	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 490-276945/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 277632 — **Prep Batch: 276945**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 18:18	08/29/15 19:49	1

Lab Sample ID: LCS 490-276945/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 277632 — **Prep Batch: 276945**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.00102		mg/L		102	80 - 120

Lab Sample ID: LCSD 490-276945/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 277632 — **Prep Batch: 276945**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00100	0.000983		mg/L		98	80 - 120	4	20

Lab Sample ID: 490-85529-1 MS — **Client Sample ID: PM AirShaft-230-081815**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 277632 — **Prep Batch: 276945**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000922		mg/L			

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 490-85529-1 MSD — **Client Sample ID: PM AirShaft-230-081815**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 277632 — **Prep Batch: 276945**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000902		mg/L					

Lab Sample ID: MB 490-276970/1-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 277919 — **Prep Batch: 277396**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 16:29	1

Lab Sample ID: LCS 490-276970/2-B — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 277919 — **Prep Batch: 277396**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000952		mg/L		95	80 - 120

Lab Sample ID: 490-85780-G-5-K MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 277919 — **Prep Batch: 277396**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000923		mg/L		92	75 - 125

Lab Sample ID: 490-85780-G-5-L MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 277919 — **Prep Batch: 277396**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000913		mg/L		91	75 - 125	1	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 490-275318/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 276908 — **Prep Batch: 275318**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/21/15 14:56	08/26/15 21:14	1

Lab Sample ID: LCS 490-275318/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 276908 — **Prep Batch: 275318**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0985		mg/L		99	90 - 110

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: 490-85529-3 MS
Matrix: Water
Analysis Batch: 276908

Client Sample ID: RW-10A (75-85) - 081815
Prep Type: Total/NA
Prep Batch: 275318

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1 F2	0.100	0.0500	F1	mg/L		50	70 - 130

Lab Sample ID: 490-85529-3 MSD
Matrix: Water
Analysis Batch: 276908

Client Sample ID: RW-10A (75-85) - 081815
Prep Type: Total/NA
Prep Batch: 275318

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1 F2	0.100	0.0278	F1 F2	mg/L		28	70 - 130	57	46

Lab Sample ID: 490-85529-5 DU
Matrix: Water
Analysis Batch: 276908

Client Sample ID: RW-8 (163-173) - 081815
Prep Type: Total/NA
Prep Batch: 275318

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.0070	U	0.0070	U	mg/L		NC	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 490-275160/5
Matrix: Water
Analysis Batch: 275160

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/20/15 16:19	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/20/15 16:19	1

Lab Sample ID: LCS 490-275160/6
Matrix: Water
Analysis Batch: 275160

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	100	93.11		mg/L		93	90 - 110

Lab Sample ID: 490-85437-H-1 DU
Matrix: Water
Analysis Batch: 275160

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	191		190.4		mg/L		0.1	20
Total Alkalinity as CaCO3	191		190.4		mg/L		0.1	20

Lab Sample ID: 490-85548-E-7 DU
Matrix: Water
Analysis Batch: 275160

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	U	mg/L		NC	20
Total Alkalinity as CaCO3	5.0	U	5.0	U	mg/L		NC	20

GC/MS VOA

Analysis Batch: 276290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	8260C SIM	
490-85529-2	CM-275-081815	Total/NA	Water	8260C SIM	
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	8260C SIM	
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	8260C SIM	
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	8260C SIM	
490-85529-6	Trip Blank - 09-081915	Total/NA	Water	8260C SIM	
LCS 490-276290/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-276290/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-276290/7	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 276673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1 - DL	PM AirShaft-230-081815	Total/NA	Water	8260C SIM	
490-85529-2 - RA	CM-275-081815	Total/NA	Water	8260C SIM	
490-85529-3 - RA	RW-10A (75-85) - 081815	Total/NA	Water	8260C SIM	
LCS 490-276673/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-276673/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-276673/7	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 277302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	8260C	
490-85529-2	CM-275-081815	Total/NA	Water	8260C	
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	8260C	
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	8260C	
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	8260C	
490-85529-6	Trip Blank - 09-081915	Total/NA	Water	8260C	
490-85604-F-6 MS	Matrix Spike	Total/NA	Water	8260C	
490-85604-G-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	
LCS 490-277302/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-277302/4	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 490-277302/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 277393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1 - DL2	PM AirShaft-230-081815	Total/NA	Water	8260C SIM	
490-85529-2 - RA2	CM-275-081815	Total/NA	Water	8260C SIM	
490-85529-3 - RA2	RW-10A (75-85) - 081815	Total/NA	Water	8260C SIM	
490-85529-4 - RA	RW-10 (185-195) - 081815	Total/NA	Water	8260C SIM	
490-85529-5 - RA	RW-8 (163-173) - 081815	Total/NA	Water	8260C SIM	
490-85529-6 - RA	Trip Blank - 09-081915	Total/NA	Water	8260C SIM	
LCS 490-277393/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-277393/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-277393/7	Method Blank	Total/NA	Water	8260C SIM	

GC/MS Semi VOA

Prep Batch: 275872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 275872 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-2	CM-275-081815	Total/NA	Water	3510C	
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	3510C	
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	3510C	
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	3510C	
LCS 490-275872/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-275872/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 275885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	3510C	
490-85529-2	CM-275-081815	Total/NA	Water	3510C	
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	3510C	
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	3510C	
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	3510C	
LCS 490-275885/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-275885/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 276363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	8270D	275885
490-85529-2	CM-275-081815	Total/NA	Water	8270D	275885
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	8270D	275885
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	8270D	275885
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	8270D	275885
LCS 490-275885/2-A	Lab Control Sample	Total/NA	Water	8270D	275885
MB 490-275885/1-A	Method Blank	Total/NA	Water	8270D	275885

Analysis Batch: 277077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	8270D SIM	275872
490-85529-2	CM-275-081815	Total/NA	Water	8270D SIM	275872
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	8270D SIM	275872
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	8270D SIM	275872
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	8270D SIM	275872
LCS 490-275872/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	275872
MB 490-275872/1-A	Method Blank	Total/NA	Water	8270D SIM	275872

GC Semi VOA

Prep Batch: 277676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	3510C	
490-85529-2	CM-275-081815	Total/NA	Water	3510C	
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	3510C	
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	3510C	
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	3510C	
LCS 490-277676/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-277676/1-A	Method Blank	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Analysis Batch: 278119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	8082A	277676
490-85529-2	CM-275-081815	Total/NA	Water	8082A	277676
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	8082A	277676
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	8082A	277676
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	8082A	277676
LCS 490-277676/2-A	Lab Control Sample	Total/NA	Water	8082A	277676
MB 490-277676/1-A	Method Blank	Total/NA	Water	8082A	277676

HPLC/IC

Analysis Batch: 276991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	9056A	
490-86043-F-1 MS	Matrix Spike	Total/NA	Water	9056A	
490-86043-F-1 MSD	Matrix Spike Duplicate	Total/NA	Water	9056A	
LCS 490-276991/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-276991/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-276991/3	Method Blank	Total/NA	Water	9056A	

Analysis Batch: 277229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-2	CM-275-081815	Total/NA	Water	9056A	
490-85529-2 MS	CM-275-081815	Total/NA	Water	9056A	
490-85529-2 MSD	CM-275-081815	Total/NA	Water	9056A	
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	9056A	
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	9056A	
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	9056A	
LCS 490-277229/7	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-277229/8	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-277229/6	Method Blank	Total/NA	Water	9056A	

Analysis Batch: 277230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-277230/7	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-277230/8	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-277230/6	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 275634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-J-12-B MS	Matrix Spike	Total/NA	Water	3010A	
490-85229-J-12-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	3010A	
490-85529-2	CM-275-081815	Total/NA	Water	3010A	
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	3010A	
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	3010A	
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	3010A	
LCS 490-275634/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-275634/1-A	Method Blank	Total/NA	Water	3010A	

Metals (Continued)

Analysis Batch: 275984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-J-12-B MS	Matrix Spike	Total/NA	Water	6020A	275634
490-85229-J-12-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	275634
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	6020A	275634
490-85529-2	CM-275-081815	Total/NA	Water	6020A	275634
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	6020A	275634
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	6020A	275634
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	6020A	275634
LCS 490-275634/2-A	Lab Control Sample	Total/NA	Water	6020A	275634
MB 490-275634/1-A	Method Blank	Total/NA	Water	6020A	275634

Filtration Batch: 276153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Dissolved	Water	Filtration	
490-85529-2	CM-275-081815	Dissolved	Water	Filtration	
490-85529-3	RW-10A (75-85) - 081815	Dissolved	Water	Filtration	
490-85529-4	RW-10 (185-195) - 081815	Dissolved	Water	Filtration	
490-85529-5	RW-8 (163-173) - 081815	Dissolved	Water	Filtration	

Prep Batch: 276235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Dissolved	Water	3005A	276153
490-85529-2	CM-275-081815	Dissolved	Water	3005A	276153
490-85529-3	RW-10A (75-85) - 081815	Dissolved	Water	3005A	276153
490-85529-4	RW-10 (185-195) - 081815	Dissolved	Water	3005A	276153
490-85529-5	RW-8 (163-173) - 081815	Dissolved	Water	3005A	276153
490-85759-A-1-D MS	Matrix Spike	Dissolved	Water	3005A	
490-85759-A-1-E MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	
LCS 490-276235/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 490-276235/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 276307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-J-12-B MS	Matrix Spike	Total/NA	Water	6020A	275634
490-85229-J-12-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	275634
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	6020A	275634
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	6020A	275634
490-85529-2	CM-275-081815	Total/NA	Water	6020A	275634
490-85529-2	CM-275-081815	Total/NA	Water	6020A	275634
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	6020A	275634
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	6020A	275634
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	6020A	275634
LCS 490-275634/2-A	Lab Control Sample	Total/NA	Water	6020A	275634
MB 490-275634/1-A	Method Blank	Total/NA	Water	6020A	275634

Analysis Batch: 276838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Dissolved	Water	6020A	276235
490-85529-2	CM-275-081815	Dissolved	Water	6020A	276235
490-85529-3	RW-10A (75-85) - 081815	Dissolved	Water	6020A	276235
490-85529-4	RW-10 (185-195) - 081815	Dissolved	Water	6020A	276235
490-85529-5	RW-8 (163-173) - 081815	Dissolved	Water	6020A	276235

Metals (Continued)

Analysis Batch: 276838 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85759-A-1-D MS	Matrix Spike	Dissolved	Water	6020A	276235
490-85759-A-1-E MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	276235
LCS 490-276235/2-A	Lab Control Sample	Total Recoverable	Water	6020A	276235
MB 490-276235/1-A	Method Blank	Total Recoverable	Water	6020A	276235

Prep Batch: 276945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	7470A	
490-85529-1 MS	PM AirShaft-230-081815	Total/NA	Water	7470A	
490-85529-1 MSD	PM AirShaft-230-081815	Total/NA	Water	7470A	
490-85529-2	CM-275-081815	Total/NA	Water	7470A	
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	7470A	
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	7470A	
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	7470A	
LCS 490-276945/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 490-276945/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 490-276945/1-A	Method Blank	Total/NA	Water	7470A	

Filtration Batch: 276970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Dissolved	Water	Filtration	
490-85529-2	CM-275-081815	Dissolved	Water	Filtration	
490-85529-3	RW-10A (75-85) - 081815	Dissolved	Water	Filtration	
490-85529-4	RW-10 (185-195) - 081815	Dissolved	Water	Filtration	
490-85529-5	RW-8 (163-173) - 081815	Dissolved	Water	Filtration	
490-85780-G-5-K MS	Matrix Spike	Dissolved	Water	Filtration	
490-85780-G-5-L MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	
LCS 490-276970/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-276970/1-B	Method Blank	Dissolved	Water	Filtration	

Prep Batch: 277396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Dissolved	Water	7470A	276970
490-85529-2	CM-275-081815	Dissolved	Water	7470A	276970
490-85529-3	RW-10A (75-85) - 081815	Dissolved	Water	7470A	276970
490-85529-4	RW-10 (185-195) - 081815	Dissolved	Water	7470A	276970
490-85529-5	RW-8 (163-173) - 081815	Dissolved	Water	7470A	276970
490-85780-G-5-K MS	Matrix Spike	Dissolved	Water	7470A	276970
490-85780-G-5-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	276970
LCS 490-276970/2-B	Lab Control Sample	Dissolved	Water	7470A	276970
MB 490-276970/1-B	Method Blank	Dissolved	Water	7470A	276970

Analysis Batch: 277632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	7470A	276945
490-85529-1 MS	PM AirShaft-230-081815	Total/NA	Water	7470A	276945
490-85529-1 MSD	PM AirShaft-230-081815	Total/NA	Water	7470A	276945
490-85529-2	CM-275-081815	Total/NA	Water	7470A	276945
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	7470A	276945
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	7470A	276945
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	7470A	276945

Metals (Continued)

Analysis Batch: 277632 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-276945/2-A	Lab Control Sample	Total/NA	Water	7470A	276945
LCSD 490-276945/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	276945
MB 490-276945/1-A	Method Blank	Total/NA	Water	7470A	276945

Analysis Batch: 277919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Dissolved	Water	7470A	277396
490-85529-2	CM-275-081815	Dissolved	Water	7470A	277396
490-85529-3	RW-10A (75-85) - 081815	Dissolved	Water	7470A	277396
490-85529-4	RW-10 (185-195) - 081815	Dissolved	Water	7470A	277396
490-85529-5	RW-8 (163-173) - 081815	Dissolved	Water	7470A	277396
490-85780-G-5-K MS	Matrix Spike	Dissolved	Water	7470A	277396
490-85780-G-5-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	277396
LCS 490-276970/2-B	Lab Control Sample	Dissolved	Water	7470A	277396
MB 490-276970/1-B	Method Blank	Dissolved	Water	7470A	277396

Analysis Batch: 277984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-2	CM-275-081815	Dissolved	Water	6020A	276235

Analysis Batch: 278353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Dissolved	Water	6020A	276235

Analysis Batch: 279689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-J-12-B MS	Matrix Spike	Total/NA	Water	6020A	275634
490-85229-J-12-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	275634
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	6020A	275634
490-85529-2	CM-275-081815	Total/NA	Water	6020A	275634
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	6020A	275634
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	6020A	275634
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	6020A	275634
LCS 490-275634/2-A	Lab Control Sample	Total/NA	Water	6020A	275634
MB 490-275634/1-A	Method Blank	Total/NA	Water	6020A	275634

General Chemistry

Analysis Batch: 275160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85437-H-1 DU	Duplicate	Total/NA	Water	SM 2320B	
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	SM 2320B	
490-85529-2	CM-275-081815	Total/NA	Water	SM 2320B	
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	SM 2320B	
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	SM 2320B	
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	SM 2320B	
490-85548-E-7 DU	Duplicate	Total/NA	Water	SM 2320B	
LCS 490-275160/6	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 490-275160/5	Method Blank	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Prep Batch: 275318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	9012B	
490-85529-2	CM-275-081815	Total/NA	Water	9012B	
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	9012B	
490-85529-3 MS	RW-10A (75-85) - 081815	Total/NA	Water	9012B	
490-85529-3 MSD	RW-10A (75-85) - 081815	Total/NA	Water	9012B	
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	9012B	
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	9012B	
490-85529-5 DU	RW-8 (163-173) - 081815	Total/NA	Water	9012B	
LCS 490-275318/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 490-275318/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 276908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-1	PM AirShaft-230-081815	Total/NA	Water	9012B	275318
490-85529-2	CM-275-081815	Total/NA	Water	9012B	275318
490-85529-3	RW-10A (75-85) - 081815	Total/NA	Water	9012B	275318
490-85529-3 MS	RW-10A (75-85) - 081815	Total/NA	Water	9012B	275318
490-85529-3 MSD	RW-10A (75-85) - 081815	Total/NA	Water	9012B	275318
490-85529-4	RW-10 (185-195) - 081815	Total/NA	Water	9012B	275318
490-85529-5	RW-8 (163-173) - 081815	Total/NA	Water	9012B	275318
490-85529-5 DU	RW-8 (163-173) - 081815	Total/NA	Water	9012B	275318
LCS 490-275318/2-A	Lab Control Sample	Total/NA	Water	9012B	275318
MB 490-275318/1-A	Method Blank	Total/NA	Water	9012B	275318

Client Sample ID: PM AirShaft-230-081815

Lab Sample ID: 490-85529-1

Date Collected: 08/18/15 10:50

Matrix: Water

Date Received: 08/20/15 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277302	08/29/15 10:42	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276290	08/26/15 21:51	KS	TAL NSH
Total/NA	Analysis	8260C SIM	DL	10	10 mL	10 mL	276673	08/27/15 22:02	RP	TAL NSH
Total/NA	Analysis	8260C SIM	DL2	10	10 mL	10 mL	277393	08/29/15 19:00	MJH	TAL NSH
Total/NA	Prep	3510C			260 mL	1 mL	275885	08/25/15 08:27	MRM	TAL NSH
Total/NA	Analysis	8270D		1	260 mL	1 mL	276363	08/26/15 14:18	SNR	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	275872	08/25/15 06:06	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	270 mL	1 mL	277077	08/28/15 16:25	BES	TAL NSH
Total/NA	Prep	3510C			260 mL	1 mL	277676	08/31/15 06:31	ET	TAL NSH
Total/NA	Analysis	8082A		1	260 mL	1 mL	278119	09/01/15 23:13	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		276991	08/27/15 23:42	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 19:07	LEG	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		50	50 mL	50 mL	278353	09/01/15 17:01	CME	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 20:24	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		10	50 mL	50 mL	276307	08/25/15 17:36	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276307	08/26/15 00:02	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 22:11	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 17:25	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	276945	08/27/15 18:18	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	277632	08/29/15 19:54	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	275318	08/21/15 14:56	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276908	08/26/15 21:17	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	275160	08/20/15 17:07	SMB	TAL NSH

Client Sample ID: CM-275-081815

Lab Sample ID: 490-85529-2

Date Collected: 08/18/15 13:20

Matrix: Water

Date Received: 08/20/15 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277302	08/29/15 05:45	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276290	08/26/15 22:20	KS	TAL NSH
Total/NA	Analysis	8260C SIM	RA	1	10 mL	10 mL	276673	08/27/15 15:49	RP	TAL NSH
Total/NA	Analysis	8260C SIM	RA2	1	10 mL	10 mL	277393	08/29/15 19:28	MJH	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			260 mL	1 mL	275885	08/25/15 08:27	MRM	TAL NSH
Total/NA	Analysis	8270D		1	260 mL	1 mL	276363	08/26/15 14:42	SNR	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	275872	08/25/15 06:06	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	270 mL	1 mL	277077	08/28/15 18:14	BES	TAL NSH
Total/NA	Prep	3510C			280 mL	1 mL	277676	08/31/15 06:31	ET	TAL NSH
Total/NA	Analysis	8082A		1	280 mL	1 mL	278119	09/01/15 23:29	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL	1.0 mL	277229	08/28/15 16:17	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 19:13	LEG	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		10	50 mL	50 mL	277984	08/31/15 17:45	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 20:30	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		10	50 mL	50 mL	276307	08/25/15 17:42	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276307	08/26/15 00:07	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 22:27	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 17:27	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	276945	08/27/15 18:18	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	277632	08/29/15 20:01	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	275318	08/21/15 14:56	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276908	08/26/15 21:18	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	275160	08/20/15 17:12	SMB	TAL NSH

Client Sample ID: RW-10A (75-85) - 081815

Date Collected: 08/18/15 10:25
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277302	08/29/15 06:12	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276290	08/26/15 22:48	KS	TAL NSH
Total/NA	Analysis	8260C SIM	RA	1	10 mL	10 mL	276673	08/27/15 16:17	RP	TAL NSH
Total/NA	Analysis	8260C SIM	RA2	1	10 mL	10 mL	277393	08/29/15 19:57	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275885	08/25/15 08:27	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	276363	08/26/15 15:06	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275872	08/25/15 06:06	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277077	08/28/15 18:42	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277676	08/31/15 06:31	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278119	09/01/15 23:45	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		277229	08/28/15 17:17	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH

Client Sample ID: RW-10A (75-85) - 081815

Date Collected: 08/18/15 10:25
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 19:18	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 20:35	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276307	08/26/15 00:12	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 22:32	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 17:30	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	276945	08/27/15 18:18	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	277632	08/29/15 20:03	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	275318	08/21/15 14:56	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276908	08/26/15 21:19	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	275160	08/20/15 17:17	SMB	TAL NSH

Client Sample ID: RW-10 (185-195) - 081815

Date Collected: 08/18/15 11:35
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277302	08/29/15 06:39	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276290	08/26/15 23:17	KS	TAL NSH
Total/NA	Analysis	8260C SIM	RA	1	10 mL	10 mL	277393	08/29/15 20:25	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275885	08/25/15 08:27	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	276363	08/26/15 15:29	SNR	TAL NSH
Total/NA	Prep	3510C			290 mL	1 mL	275872	08/25/15 06:06	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	290 mL	1 mL	277077	08/28/15 19:09	BES	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	277676	08/31/15 06:31	ET	TAL NSH
Total/NA	Analysis	8082A		1	270 mL	1 mL	278119	09/02/15 00:00	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		277229	08/28/15 17:37	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 19:23	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 20:40	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276307	08/26/15 00:17	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 22:37	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: RW-10 (185-195) - 081815

Date Collected: 08/18/15 11:35
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 17:32	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	276945	08/27/15 18:18	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	277632	08/29/15 20:06	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	275318	08/21/15 15:14	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276908	08/26/15 21:22	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	275160	08/20/15 17:25	SMB	TAL NSH

Client Sample ID: RW-8 (163-173) - 081815

Date Collected: 08/18/15 14:15
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277302	08/29/15 07:06	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276290	08/26/15 23:46	KS	TAL NSH
Total/NA	Analysis	8260C SIM	RA	1	10 mL	10 mL	277393	08/29/15 20:54	MJH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275885	08/25/15 08:27	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	276363	08/26/15 15:53	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	275872	08/25/15 06:06	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277077	08/28/15 19:36	BES	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	277676	08/31/15 06:31	ET	TAL NSH
Total/NA	Analysis	8082A		1	270 mL	1 mL	278119	09/02/15 00:16	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		277229	08/28/15 17:57	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 19:28	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 20:45	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276307	08/26/15 00:23	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 22:43	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 17:34	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	276945	08/27/15 18:18	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	277632	08/29/15 20:08	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	275318	08/21/15 15:14	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276908	08/26/15 21:23	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	275160	08/20/15 17:43	SMB	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Client Sample ID: Trip Blank - 09-081915

Date Collected: 08/18/15 01:00
Date Received: 08/20/15 09:20

Lab Sample ID: 490-85529-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	277302	08/29/15 04:51	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276290	08/26/15 18:30	KS	TAL NSH
Total/NA	Analysis	8260C SIM	RA	1	10 mL	10 mL	277393	08/29/15 15:40	MJH	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
9056A	Anions, Ion Chromatography	SW846	TAL NSH
6020A	Metals (ICP/MS)	SW846	TAL NSH
7470A	Mercury (CVAA)	SW846	TAL NSH
9012B	Cyanide, Total andor Amenable	SW846	TAL NSH
SM 2320B	Alkalinity	SM	TAL NSH

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85529-1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	TN965	09-30-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total
8260C		Water	Dichlorobromomethane
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	1,4-Dioxane
8260C SIM		Water	Ethylene Dibromide
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-85529 Chain of Custody

Cooler Received/Opened On 8/20/2015 @ 920

1. Tracking # 2817 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960358

2. Temperature of rep. sample or temp blank when opened: 0.2 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? YES..(NO)..NA

I certify that I opened the cooler and answered questions 1-6 (intial) ECH

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES..(NO)..NA

14. Was there a Trip Blank in this cooler? YES..(NO)..NA If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? (YES)..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES..(NO)..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..(NO) Was a PIPE generated? YES...(NO)..#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
85529

Cooler Received/Opened On 8/20/2015 @ 0920

1. Tracking # 2806 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 2.5 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where: 2

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? (YES)..NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)..NO...NA

b. Was there any observable headspace present in any VOA vial? YES..(NO)..NA

14. Was there a Trip Blank in this cooler? (YES)..NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? (YES)..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES..(NO)..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES...(NO)..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
85529

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Client Information	Sampler: Robert Lautenberg	Lab PM: Brown, Shali	Carri
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com	
Company: Cornerstone Environmental Group, LLC/ FORD			
Address: 100 Crystal Run Road Suite 101	Due Date Requested:		
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package		
State, Zip: NY, 10941			
Phone: 845-695-0252(Tel)	PO #:		
Email: tim.roeper@cornerstoneeg.com	WO #:		
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864		
Site:	SSOW#:		

COC No: 490-41539-14078.2
Page:
Job #:

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter!)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:															
PMAirShaft-230-081815	8/18/15	10:50	G	Water	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
CM-275-081815	8/18/15	13:20	G	Water	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
RW-10A (75-85)-081815	8/18/15	10:25	G	Water	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
RW-10 (185-195)-081815	8/18/15	11:35	G	Water	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
RW-8 (163-173)-081815	8/18/15	14:15	G	Water	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
TB-09-081915	8/19/15	—	—	Water	✓	✓	✓	✓										
				Water														
				Water														
				Water														
				Water														
				Water														

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	8/19/15 900	Cornerstone	James Theem	8/19/15 900	TA
James Theem	8/19/15 1145	TA	[signature] 0.2/2.5	8/20/15 0920	TAN

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks.

F1

9/21/2015

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 490-85529-1

Login Number: 85529
List Number: 1
Creator: Gundi, Hozar K

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-85658-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Tim Roeper

Authorized for release by:
9/21/2015 1:08:35 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-85658-1	SR-3 Seep 2-081915	Water	08/19/15 11:15	08/21/15 09:20
490-85658-2	SR-3 Pond-081915	Water	08/19/15 11:45	08/21/15 09:20
490-85658-3	SR-3 Seep 1-081915	Water	08/19/15 12:10	08/21/15 09:20
490-85658-4	Dup-04-081915	Water	08/19/15 12:00	08/21/15 09:20
490-85658-5	SW-NOB-02-081915	Water	08/19/15 14:30	08/21/15 09:20
490-85658-6	SW-PAB-04-081915	Water	08/19/15 15:00	08/21/15 09:20
490-85658-7	RW-10 (120-130)-081915	Water	08/19/15 09:25	08/21/15 09:20
490-85658-8	TB-10-082015	Water	08/20/15 00:01	08/21/15 09:20

Job ID: 490-85658-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 490-85658-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 8/21/2015 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.0º C, 0.7º C and 1.0º C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples SR-3 Seep 2-081915 (490-85658-1), SR-3 Pond-081915 (490-85658-2), SR-3 Seep 1-081915 (490-85658-3), Dup-04-081915 (490-85658-4), SW-NOB-02-081915 (490-85658-5), SW-PAB-04-081915 (490-85658-6), RW-10 (120-130)-081915 (490-85658-7) and TB-10-082015 (490-85658-8) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 09/01/2015.

Cyclohexane failed the recovery criteria high for LCS 490-278001/4. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS SIM)

Samples SR-3 Seep 2-081915 (490-85658-1), SR-3 Pond-081915 (490-85658-2), SR-3 Seep 1-081915 (490-85658-3), Dup-04-081915 (490-85658-4), SW-NOB-02-081915 (490-85658-5), SW-PAB-04-081915 (490-85658-6), RW-10 (120-130)-081915 (490-85658-7) and

Job ID: 490-85658-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

TB-10-082015 (490-85658-8) were analyzed for volatile organic compounds (GC-MS SIM) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/27/2015, 08/29/2015 and 08/31/2015.

1,2-Dichloroethane-d4 (Surr) failed the surrogate recovery criteria high for SR-3 Pond-081915 (490-85658-2). 1,2-Dichloroethane-d4 (Surr) failed the surrogate recovery criteria high for RW-10 (120-130)-081915 (490-85658-7). Refer to the QC report for details.

Ethylene Dibromide failed the recovery criteria low for LCS 490-276673/3. Ethylene Dibromide failed the recovery criteria low for LCSD 490-276673/4. Refer to the QC report for details.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 490-277393 and 490-277754.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GC MS)

Samples SR-3 Seep 2-081915 (490-85658-1), SR-3 Pond-081915 (490-85658-2), SR-3 Seep 1-081915 (490-85658-3), Dup-04-081915 (490-85658-4), SW-NOB-02-081915 (490-85658-5), SW-PAB-04-081915 (490-85658-6) and RW-10 (120-130)-081915 (490-85658-7) were analyzed for semivolatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared and analyzed on 08/26/2015.

Benzaldehyde failed the recovery criteria high for LCSD 490-276223/3-A. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-276223 and analytical batch 490-276363.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples SR-3 Seep 2-081915 (490-85658-1), SR-3 Pond-081915 (490-85658-2), SR-3 Seep 1-081915 (490-85658-3), Dup-04-081915 (490-85658-4), SW-NOB-02-081915 (490-85658-5), SW-PAB-04-081915 (490-85658-6) and RW-10 (120-130)-081915 (490-85658-7) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 09/02/2015 and analyzed on 09/03/2015.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 490-278338.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

Samples SR-3 Seep 2-081915 (490-85658-1), SR-3 Pond-081915 (490-85658-2), SR-3 Seep 1-081915 (490-85658-3), Dup-04-081915 (490-85658-4), SW-NOB-02-081915 (490-85658-5), SW-PAB-04-081915 (490-85658-6) and RW-10 (120-130)-081915 (490-85658-7) were analyzed for polycyclic aromatic hydrocarbons (PAHs) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/25/2015 and analyzed on 08/27/2015.

Pentachlorophenol exceeded the RPD limit for LCSD 490-276166/3-A. Refer to the QC report for details.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-276166 and analytical batch 490-276355.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED METALS (ICPMS)

Samples SR-3 Seep 2-081915 (490-85658-1), SR-3 Pond-081915 (490-85658-2), SR-3 Seep 1-081915 (490-85658-3), Dup-04-081915 (490-85658-4), SW-NOB-02-081915 (490-85658-5), SW-PAB-04-081915 (490-85658-6) and RW-10 (120-130)-081915 (490-85658-7) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared and analyzed

Job ID: 490-85658-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

on 08/26/2015.

Vanadium was detected in method blank MB 490-276235/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

METALS (ICPMS)

Samples SR-3 Seep 2-081915 (490-85658-1), SR-3 Pond-081915 (490-85658-2), SR-3 Seep 1-081915 (490-85658-3), Dup-04-081915 (490-85658-4), SW-NOB-02-081915 (490-85658-5), SW-PAB-04-081915 (490-85658-6) and RW-10 (120-130)-081915 (490-85658-7) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/24/2015 and analyzed on 08/24/2015, 08/26/2015 and 09/07/2015.

Arsenic and Vanadium were detected in method blank MB 490-275634/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED MERCURY (CVAA)

Samples SR-3 Seep 2-081915 (490-85658-1), SR-3 Pond-081915 (490-85658-2), SR-3 Seep 1-081915 (490-85658-3), Dup-04-081915 (490-85658-4), SW-NOB-02-081915 (490-85658-5), SW-PAB-04-081915 (490-85658-6) and RW-10 (120-130)-081915 (490-85658-7) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/27/2015 and analyzed on 08/30/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples SR-3 Seep 2-081915 (490-85658-1), SR-3 Pond-081915 (490-85658-2), SR-3 Seep 1-081915 (490-85658-3), Dup-04-081915 (490-85658-4), SW-NOB-02-081915 (490-85658-5), SW-PAB-04-081915 (490-85658-6) and RW-10 (120-130)-081915 (490-85658-7) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/27/2015 and analyzed on 08/29/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ALKALINITY

Samples SR-3 Seep 2-081915 (490-85658-1), SR-3 Pond-081915 (490-85658-2), SR-3 Seep 1-081915 (490-85658-3), Dup-04-081915 (490-85658-4), SW-NOB-02-081915 (490-85658-5), SW-PAB-04-081915 (490-85658-6) and RW-10 (120-130)-081915 (490-85658-7) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/22/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL CYANIDE

Samples SR-3 Seep 2-081915 (490-85658-1), SR-3 Pond-081915 (490-85658-2), SR-3 Seep 1-081915 (490-85658-3), Dup-04-081915 (490-85658-4), SW-NOB-02-081915 (490-85658-5), SW-PAB-04-081915 (490-85658-6) and RW-10 (120-130)-081915 (490-85658-7) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared on 08/22/2015 and 08/26/2015 and analyzed on 08/25/2015 and 08/28/2015.

Cyanide, Total failed the recovery criteria low for the MS of sample 490-85658-6 in batch 490-276105.
Cyanide, Total failed the recovery criteria low for the MSD of sample 490-85658-6 in batch 490-276105. Cyanide, Total exceeded the RPD limit. Refer to the QC report for details.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Job ID: 490-85658-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

Insufficient sample volume was available to perform a matrix spike duplicate/sample duplicate (MSD/DUP) associated with preparation batch 490-276486 and analytical batch 490-277615.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS

Samples SR-3 Seep 2-081915 (490-85658-1), SR-3 Pond-081915 (490-85658-2), SR-3 Seep 1-081915 (490-85658-3), Dup-04-081915 (490-85658-4), SW-NOB-02-081915 (490-85658-5), SW-PAB-04-081915 (490-85658-6) and RW-10 (120-130)-081915 (490-85658-7) were analyzed for anions in accordance with SW-846 Method 9056. The samples were analyzed on 08/28/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
J	Indicates an Estimated Value for TICs

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample ID: SR-3 Seep 2-081915

Date Collected: 08/19/15 11:15
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-1

Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	10	0.27	ug/L			08/27/15 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/27/15 16:46*	*1*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*		*08/27/15 16:46*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/27/15 16:46*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/27/15 16:46*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/29/15 21:23	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/29/15 21:23	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/29/15 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*08/29/15 21:23*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/29/15 21:23*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*08/29/15 21:23*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/29/15 21:23*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 16:43	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/01/15 16:43	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 16:43	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 16:43	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/01/15 16:43	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/01/15 16:43	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/01/15 16:43	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/01/15 16:43	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/01/15 16:43	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/01/15 16:43	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 16:43	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/01/15 16:43	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/01/15 16:43	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/01/15 16:43	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/01/15 16:43	1
Acetone	2.7	U	25	2.7	ug/L			09/01/15 16:43	1
Benzene	**0.67**	**J**	1.0	0.20	ug/L			09/01/15 16:43	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/01/15 16:43	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/01/15 16:43	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/01/15 16:43	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/01/15 16:43	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 16:43	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/01/15 16:43	1
Chloroethane	**1.8**		1.0	0.36	ug/L			09/01/15 16:43	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/01/15 16:43	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/01/15 16:43	1
cis-1,2-Dichloroethene	**0.26**	**J**	1.0	0.21	ug/L			09/01/15 16:43	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 16:43	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: SR-3 Seep 2-081915
Date Collected: 08/19/15 11:15
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/01/15 16:43	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/01/15 16:43	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/01/15 16:43	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/01/15 16:43	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/01/15 16:43	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/01/15 16:43	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/01/15 16:43	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/01/15 16:43	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/01/15 16:43	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/01/15 16:43	1
Styrene	0.28	U	1.0	0.28	ug/L			09/01/15 16:43	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/01/15 16:43	1
Toluene	0.17	U	1.0	0.17	ug/L			09/01/15 16:43	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/01/15 16:43	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 16:43	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/01/15 16:43	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/01/15 16:43	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/01/15 16:43	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/01/15 16:43	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/01/15 16:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/15 16:43*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/01/15 16:43*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*09/01/15 16:43*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*09/01/15 16:43*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/01/15 16:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*09/01/15 16:43*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.024	U	0.047	0.024	ug/L		08/25/15 17:39	08/27/15 00:07	1
Benzo[a]pyrene	0.024	U	0.047	0.024	ug/L		08/25/15 17:39	08/27/15 00:07	1
Benzo[b]fluoranthene	0.024	U	0.047	0.024	ug/L		08/25/15 17:39	08/27/15 00:07	1
Hexachlorobenzene	0.013	U	0.019	0.013	ug/L		08/25/15 17:39	08/27/15 00:07	1
Hexachlorobutadiene	0.19	U	0.38	0.19	ug/L		08/25/15 17:39	08/27/15 00:07	1
N-Nitrosodimethylamine	0.19	U	0.75	0.19	ug/L		08/25/15 17:39	08/27/15 00:07	1
Pentachlorophenol	0.094	U *	0.28	0.094	ug/L		08/25/15 17:39	08/27/15 00:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*97*		*10 - 120*	*08/25/15 17:39*	*08/27/15 00:07*	*1*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*	*08/25/15 17:39*	*08/27/15 00:07*	*1*
Nitrobenzene-d5	*80*		*27 - 120*	*08/25/15 17:39*	*08/27/15 00:07*	*1*
Terphenyl-d14	*101*		*13 - 120*	*08/25/15 17:39*	*08/27/15 00:07*	*1*
2-Fluorophenol	*60*		*10 - 120*	*08/25/15 17:39*	*08/27/15 00:07*	*1*
Phenol-d5	*38*		*10 - 120*	*08/25/15 17:39*	*08/27/15 00:07*	*1*

Client Sample ID: SR-3 Seep 2-081915
Date Collected: 08/19/15 11:15
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.29	U	1.8	0.29	ug/L		08/26/15 09:03	08/26/15 20:37	1
1,2,4,5-Tetrachlorobenzene	1.9	U	8.9	1.9	ug/L		08/26/15 09:03	08/26/15 20:37	1
2,3,4,6-Tetrachlorophenol	6.2	U	8.9	6.2	ug/L		08/26/15 09:03	08/26/15 20:37	1
2,4,5-Trichlorophenol	6.3	U	8.9	6.3	ug/L		08/26/15 09:03	08/26/15 20:37	1
2,4,6-Trichlorophenol	6.1	U	8.9	6.1	ug/L		08/26/15 09:03	08/26/15 20:37	1
2,4-Dichlorophenol	5.0	U	8.9	5.0	ug/L		08/26/15 09:03	08/26/15 20:37	1
2,4-Dimethylphenol	3.8	U	8.9	3.8	ug/L		08/26/15 09:03	08/26/15 20:37	1
2,4-Dinitrophenol	5.3	U	22	5.3	ug/L		08/26/15 09:03	08/26/15 20:37	1
2,4-Dinitrotoluene	2.9	U	8.9	2.9	ug/L		08/26/15 09:03	08/26/15 20:37	1
2,6-Dinitrotoluene	2.1	U	8.9	2.1	ug/L		08/26/15 09:03	08/26/15 20:37	1
2-Chloronaphthalene	2.5	U	8.9	2.5	ug/L		08/26/15 09:03	08/26/15 20:37	1
2-Chlorophenol	4.3	U	8.9	4.3	ug/L		08/26/15 09:03	08/26/15 20:37	1
2-Methylnaphthalene	0.36	U	1.8	0.36	ug/L		08/26/15 09:03	08/26/15 20:37	1
2-Methylphenol	2.1	U	8.9	2.1	ug/L		08/26/15 09:03	08/26/15 20:37	1
2-Nitroaniline	3.3	U	22	3.3	ug/L		08/26/15 09:03	08/26/15 20:37	1
2-Nitrophenol	4.7	U	8.9	4.7	ug/L		08/26/15 09:03	08/26/15 20:37	1
3,3'-Dichlorobenzidine	2.9	U	8.9	2.9	ug/L		08/26/15 09:03	08/26/15 20:37	1
3 & 4 Methylphenol	2.0	U	8.9	2.0	ug/L		08/26/15 09:03	08/26/15 20:37	1
3-Nitroaniline	2.4	U	22	2.4	ug/L		08/26/15 09:03	08/26/15 20:37	1
4,6-Dinitro-2-methylphenol	8.3	U	22	8.3	ug/L		08/26/15 09:03	08/26/15 20:37	1
4-Bromophenyl phenyl ether	2.4	U	8.9	2.4	ug/L		08/26/15 09:03	08/26/15 20:37	1
4-Chloro-3-methylphenol	4.0	U	8.9	4.0	ug/L		08/26/15 09:03	08/26/15 20:37	1
4-Chloroaniline	3.8	U	8.9	3.8	ug/L		08/26/15 09:03	08/26/15 20:37	1
4-Chlorophenyl phenyl ether	2.5	U	8.9	2.5	ug/L		08/26/15 09:03	08/26/15 20:37	1
4-Nitroaniline	2.8	U	22	2.8	ug/L		08/26/15 09:03	08/26/15 20:37	1
4-Nitrophenol	4.8	U	22	4.8	ug/L		08/26/15 09:03	08/26/15 20:37	1
Acenaphthylene	0.31	U	1.8	0.31	ug/L		08/26/15 09:03	08/26/15 20:37	1
Acetophenone	2.1	U	8.9	2.1	ug/L		08/26/15 09:03	08/26/15 20:37	1
Anthracene	0.34	U	1.8	0.34	ug/L		08/26/15 09:03	08/26/15 20:37	1
Benzaldehyde	5.1	U *	8.9	5.1	ug/L		08/26/15 09:03	08/26/15 20:37	1
Benzo[g,h,i]perylene	0.55	U	1.8	0.55	ug/L		08/26/15 09:03	08/26/15 20:37	1
Benzo[k]fluoranthene	0.33	U	1.8	0.33	ug/L		08/26/15 09:03	08/26/15 20:37	1
Bis(2-chloroethoxy)methane	2.8	U	8.9	2.8	ug/L		08/26/15 09:03	08/26/15 20:37	1
Bis(2-chloroethyl)ether	2.5	U	8.9	2.5	ug/L		08/26/15 09:03	08/26/15 20:37	1
Butyl benzyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 09:03	08/26/15 20:37	1
Bis(2-ethylhexyl) phthalate	5.4	U	8.9	5.4	ug/L		08/26/15 09:03	08/26/15 20:37	1
Carbazole	2.5	U	8.9	2.5	ug/L		08/26/15 09:03	08/26/15 20:37	1
Caprolactam	2.1	U	8.9	2.1	ug/L		08/26/15 09:03	08/26/15 20:37	1
Chrysene	0.29	U	1.8	0.29	ug/L		08/26/15 09:03	08/26/15 20:37	1
Dibenz(a,h)anthracene	0.40	U	1.8	0.40	ug/L		08/26/15 09:03	08/26/15 20:37	1
Dibenzofuran	2.6	U	8.9	2.6	ug/L		08/26/15 09:03	08/26/15 20:37	1
Diethyl phthalate	2.7	U	8.9	2.7	ug/L		08/26/15 09:03	08/26/15 20:37	1
Dimethyl phthalate	2.8	U	8.9	2.8	ug/L		08/26/15 09:03	08/26/15 20:37	1
Di-n-butyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 09:03	08/26/15 20:37	1
Fluoranthene	0.29	U	1.8	0.29	ug/L		08/26/15 09:03	08/26/15 20:37	1
Fluorene	0.29	U	1.8	0.29	ug/L		08/26/15 09:03	08/26/15 20:37	1
Hexachlorocyclopentadiene	1.6	U	8.9	1.6	ug/L		08/26/15 09:03	08/26/15 20:37	1
Hexachloroethane	1.7	U	8.9	1.7	ug/L		08/26/15 09:03	08/26/15 20:37	1
Indeno[1,2,3-cd]pyrene	0.37	U	1.8	0.37	ug/L		08/26/15 09:03	08/26/15 20:37	1

Client Sample ID: SR-3 Seep 2-081915
Date Collected: 08/19/15 11:15
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	2.8	U	8.9	2.8	ug/L		08/26/15 09:03	08/26/15 20:37	1
Naphthalene	0.33	U	1.8	0.33	ug/L		08/26/15 09:03	08/26/15 20:37	1
Nitrobenzene	2.4	U	8.9	2.4	ug/L		08/26/15 09:03	08/26/15 20:37	1
N-Nitrosodi-n-propylamine	3.0	U	8.9	3.0	ug/L		08/26/15 09:03	08/26/15 20:37	1
N-Nitrosodiphenylamine	3.2	U	8.9	3.2	ug/L		08/26/15 09:03	08/26/15 20:37	1
Phenanthrene	0.38	U	1.8	0.38	ug/L		08/26/15 09:03	08/26/15 20:37	1
Phenol	1.3	U	8.9	1.3	ug/L		08/26/15 09:03	08/26/15 20:37	1
Pyrene	0.31	U	1.8	0.31	ug/L		08/26/15 09:03	08/26/15 20:37	1
Diphenyl	2.0	U	8.9	2.0	ug/L		08/26/15 09:03	08/26/15 20:37	1
Di-n-octyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 09:03	08/26/15 20:37	1
2,2'-oxybis[1-chloropropane]	2.5	U	8.9	2.5	ug/L		08/26/15 09:03	08/26/15 20:37	1
Atrazine	2.6	U	8.9	2.6	ug/L		08/26/15 09:03	08/26/15 20:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
n-Hexadecanoic acid	*4.3*	*J N*	*ug/L*		*7.85*	*57-10-3*	*08/26/15 09:03*	*08/26/15 20:37*	*1*
Octadecanoic acid	*4.1*	*J N*	*ug/L*		*8.49*	*57-11-4*	*08/26/15 09:03*	*08/26/15 20:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*89*		*10 - 120*	*08/26/15 09:03*	*08/26/15 20:37*	*1*
2-Fluorobiphenyl (Surr)	*75*		*29 - 120*	*08/26/15 09:03*	*08/26/15 20:37*	*1*
2-Fluorophenol (Surr)	*38*		*10 - 120*	*08/26/15 09:03*	*08/26/15 20:37*	*1*
Nitrobenzene-d5 (Surr)	*74*		*27 - 120*	*08/26/15 09:03*	*08/26/15 20:37*	*1*
Phenol-d5 (Surr)	*23*		*10 - 120*	*08/26/15 09:03*	*08/26/15 20:37*	*1*
Terphenyl-d14 (Surr)	*78*		*13 - 120*	*08/26/15 09:03*	*08/26/15 20:37*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/02/15 06:09	09/03/15 19:38	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/02/15 06:09	09/03/15 19:38	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/02/15 06:09	09/03/15 19:38	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/02/15 06:09	09/03/15 19:38	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/02/15 06:09	09/03/15 19:38	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/02/15 06:09	09/03/15 19:38	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/02/15 06:09	09/03/15 19:38	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/02/15 06:09	09/03/15 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*107*		*10 - 150*	*09/02/15 06:09*	*09/03/15 19:38*	*1*
Tetrachloro-m-xylene	*97*		*10 - 150*	*09/02/15 06:09*	*09/03/15 19:38*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.54**		1.00	0.70	mg/L			08/28/15 17:36	1
Sulfate	**1.52**		1.00	0.60	mg/L			08/28/15 17:36	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.063**		0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 20:50	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:50	1
Arsenic	**0.0027**	**B**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:50	1
Barium	**0.22**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:50	1

Client Sample ID: SR-3 Seep 2-081915
Date Collected: 08/19/15 11:15
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-1
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:50	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 20:50	1
Calcium	**24.8**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:50	1
Chromium	**0.0021**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:50	1
Cobalt	**0.00069**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:50	1
Copper	**0.0012**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:50	1
Iron	**43.2**		0.025	0.010	mg/L		08/24/15 09:53	08/24/15 20:50	1
Lead	**0.00081**	**J**	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:50	1
Magnesium	**3.8**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:50	1
Manganese	**0.81**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:50	1
Nickel	**0.0012**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:50	1
Potassium	**1.6**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:50	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 20:50	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/26/15 00:28	1
Sodium	**4.7**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:50	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:50	1
Vanadium	**0.0040**	**B**	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 22:48	1
Zinc	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 20:50	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 19:33	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:33	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:33	1
Barium	**0.18**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:33	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:33	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 19:33	1
Calcium	**24.4**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:33	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:33	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:33	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:33	1
Iron	**0.018**	**J**	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:33	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:33	1
Magnesium	**3.9**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:33	1
Manganese	**0.84**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:33	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:33	1
Potassium	**1.5**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:33	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 19:33	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:33	1
Sodium	**3.5**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:33	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:33	1
Vanadium	**0.00097**	**J B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 19:33	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:33	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 18:18	08/29/15 20:35	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: SR-3 Seep 2-081915
Date Collected: 08/19/15 11:15
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-1
Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 02:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/22/15 14:09	08/25/15 13:41	1
Bicarbonate Alkalinity as CaCO3	**91.4**		10.0	5.0	mg/L			08/22/15 15:24	1
Total Alkalinity as CaCO3	**91.4**		10.0	5.0	mg/L			08/22/15 15:24	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: SR-3 Pond-081915
Date Collected: 08/19/15 11:45
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-2
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.6	J	10	0.27	ug/L			08/27/15 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/27/15 17:15*	*1*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*		*08/27/15 17:15*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*08/27/15 17:15*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/27/15 17:15*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/29/15 21:51	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/29/15 21:51	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/29/15 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*132*	*X*	*70 - 130*		*08/29/15 21:51*	*1*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*08/29/15 21:51*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/29/15 21:51*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/29/15 21:51*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 17:10	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/01/15 17:10	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 17:10	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 17:10	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/01/15 17:10	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/01/15 17:10	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/01/15 17:10	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/01/15 17:10	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/01/15 17:10	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/01/15 17:10	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 17:10	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/01/15 17:10	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/01/15 17:10	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/01/15 17:10	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/01/15 17:10	1
Acetone	2.7	U	25	2.7	ug/L			09/01/15 17:10	1
Benzene	0.20	U	1.0	0.20	ug/L			09/01/15 17:10	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/01/15 17:10	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/01/15 17:10	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/01/15 17:10	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/01/15 17:10	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 17:10	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/01/15 17:10	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/01/15 17:10	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/01/15 17:10	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/01/15 17:10	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/01/15 17:10	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 17:10	1

Client Sample ID: SR-3 Pond-081915
Date Collected: 08/19/15 11:45
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/01/15 17:10	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/01/15 17:10	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/01/15 17:10	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/01/15 17:10	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/01/15 17:10	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/01/15 17:10	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/01/15 17:10	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/01/15 17:10	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/01/15 17:10	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/01/15 17:10	1
Styrene	0.28	U	1.0	0.28	ug/L			09/01/15 17:10	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/01/15 17:10	1
Toluene	0.17	U	1.0	0.17	ug/L			09/01/15 17:10	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/01/15 17:10	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 17:10	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/01/15 17:10	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/01/15 17:10	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/01/15 17:10	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/01/15 17:10	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/01/15 17:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/15 17:10*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/01/15 17:10*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*09/01/15 17:10*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 130*		*09/01/15 17:10*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/01/15 17:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/01/15 17:10*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.022	U	0.044	0.022	ug/L		08/25/15 17:39	08/27/15 00:34	1
Benzo[a]pyrene	0.022	U	0.044	0.022	ug/L		08/25/15 17:39	08/27/15 00:34	1
Benzo[b]fluoranthene	0.022	U	0.044	0.022	ug/L		08/25/15 17:39	08/27/15 00:34	1
Hexachlorobenzene	0.012	U	0.018	0.012	ug/L		08/25/15 17:39	08/27/15 00:34	1
Hexachlorobutadiene	0.18	U	0.35	0.18	ug/L		08/25/15 17:39	08/27/15 00:34	1
N-Nitrosodimethylamine	0.18	U	0.70	0.18	ug/L		08/25/15 17:39	08/27/15 00:34	1
Pentachlorophenol	0.088	U *	0.26	0.088	ug/L		08/25/15 17:39	08/27/15 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*94*		*10 - 120*	*08/25/15 17:39*	*08/27/15 00:34*	*1*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*	*08/25/15 17:39*	*08/27/15 00:34*	*1*
Nitrobenzene-d5	*74*		*27 - 120*	*08/25/15 17:39*	*08/27/15 00:34*	*1*
Terphenyl-d14	*99*		*13 - 120*	*08/25/15 17:39*	*08/27/15 00:34*	*1*
2-Fluorophenol	*51*		*10 - 120*	*08/25/15 17:39*	*08/27/15 00:34*	*1*
Phenol-d5	*34*		*10 - 120*	*08/25/15 17:39*	*08/27/15 00:34*	*1*

Client Sample ID: SR-3 Pond-081915
Date Collected: 08/19/15 11:45
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.29	U	1.8	0.29	ug/L		08/26/15 09:03	08/26/15 21:00	1
1,2,4,5-Tetrachlorobenzene	1.9	U	8.9	1.9	ug/L		08/26/15 09:03	08/26/15 21:00	1
2,3,4,6-Tetrachlorophenol	6.2	U	8.9	6.2	ug/L		08/26/15 09:03	08/26/15 21:00	1
2,4,5-Trichlorophenol	6.3	U	8.9	6.3	ug/L		08/26/15 09:03	08/26/15 21:00	1
2,4,6-Trichlorophenol	6.1	U	8.9	6.1	ug/L		08/26/15 09:03	08/26/15 21:00	1
2,4-Dichlorophenol	5.0	U	8.9	5.0	ug/L		08/26/15 09:03	08/26/15 21:00	1
2,4-Dimethylphenol	3.8	U	8.9	3.8	ug/L		08/26/15 09:03	08/26/15 21:00	1
2,4-Dinitrophenol	5.3	U	22	5.3	ug/L		08/26/15 09:03	08/26/15 21:00	1
2,4-Dinitrotoluene	2.9	U	8.9	2.9	ug/L		08/26/15 09:03	08/26/15 21:00	1
2,6-Dinitrotoluene	2.1	U	8.9	2.1	ug/L		08/26/15 09:03	08/26/15 21:00	1
2-Chloronaphthalene	2.5	U	8.9	2.5	ug/L		08/26/15 09:03	08/26/15 21:00	1
2-Chlorophenol	4.3	U	8.9	4.3	ug/L		08/26/15 09:03	08/26/15 21:00	1
2-Methylnaphthalene	0.36	U	1.8	0.36	ug/L		08/26/15 09:03	08/26/15 21:00	1
2-Methylphenol	2.1	U	8.9	2.1	ug/L		08/26/15 09:03	08/26/15 21:00	1
2-Nitroaniline	3.3	U	22	3.3	ug/L		08/26/15 09:03	08/26/15 21:00	1
2-Nitrophenol	4.7	U	8.9	4.7	ug/L		08/26/15 09:03	08/26/15 21:00	1
3,3'-Dichlorobenzidine	2.9	U	8.9	2.9	ug/L		08/26/15 09:03	08/26/15 21:00	1
3 & 4 Methylphenol	2.0	U	8.9	2.0	ug/L		08/26/15 09:03	08/26/15 21:00	1
3-Nitroaniline	2.4	U	22	2.4	ug/L		08/26/15 09:03	08/26/15 21:00	1
4,6-Dinitro-2-methylphenol	8.3	U	22	8.3	ug/L		08/26/15 09:03	08/26/15 21:00	1
4-Bromophenyl phenyl ether	2.4	U	8.9	2.4	ug/L		08/26/15 09:03	08/26/15 21:00	1
4-Chloro-3-methylphenol	4.0	U	8.9	4.0	ug/L		08/26/15 09:03	08/26/15 21:00	1
4-Chloroaniline	3.8	U	8.9	3.8	ug/L		08/26/15 09:03	08/26/15 21:00	1
4-Chlorophenyl phenyl ether	2.5	U	8.9	2.5	ug/L		08/26/15 09:03	08/26/15 21:00	1
4-Nitroaniline	2.8	U	22	2.8	ug/L		08/26/15 09:03	08/26/15 21:00	1
4-Nitrophenol	4.8	U	22	4.8	ug/L		08/26/15 09:03	08/26/15 21:00	1
Acenaphthylene	0.31	U	1.8	0.31	ug/L		08/26/15 09:03	08/26/15 21:00	1
Acetophenone	2.1	U	8.9	2.1	ug/L		08/26/15 09:03	08/26/15 21:00	1
Anthracene	0.34	U	1.8	0.34	ug/L		08/26/15 09:03	08/26/15 21:00	1
Benzaldehyde	5.1	U *	8.9	5.1	ug/L		08/26/15 09:03	08/26/15 21:00	1
Benzo[g,h,i]perylene	0.55	U	1.8	0.55	ug/L		08/26/15 09:03	08/26/15 21:00	1
Benzo[k]fluoranthene	0.33	U	1.8	0.33	ug/L		08/26/15 09:03	08/26/15 21:00	1
Bis(2-chloroethoxy)methane	2.8	U	8.9	2.8	ug/L		08/26/15 09:03	08/26/15 21:00	1
Bis(2-chloroethyl)ether	2.5	U	8.9	2.5	ug/L		08/26/15 09:03	08/26/15 21:00	1
Butyl benzyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 09:03	08/26/15 21:00	1
Bis(2-ethylhexyl) phthalate	5.4	U	8.9	5.4	ug/L		08/26/15 09:03	08/26/15 21:00	1
Carbazole	2.5	U	8.9	2.5	ug/L		08/26/15 09:03	08/26/15 21:00	1
Caprolactam	2.1	U	8.9	2.1	ug/L		08/26/15 09:03	08/26/15 21:00	1
Chrysene	0.29	U	1.8	0.29	ug/L		08/26/15 09:03	08/26/15 21:00	1
Dibenz(a,h)anthracene	0.40	U	1.8	0.40	ug/L		08/26/15 09:03	08/26/15 21:00	1
Dibenzofuran	2.6	U	8.9	2.6	ug/L		08/26/15 09:03	08/26/15 21:00	1
Diethyl phthalate	2.7	U	8.9	2.7	ug/L		08/26/15 09:03	08/26/15 21:00	1
Dimethyl phthalate	2.8	U	8.9	2.8	ug/L		08/26/15 09:03	08/26/15 21:00	1
Di-n-butyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 09:03	08/26/15 21:00	1
Fluoranthene	0.29	U	1.8	0.29	ug/L		08/26/15 09:03	08/26/15 21:00	1
Fluorene	0.29	U	1.8	0.29	ug/L		08/26/15 09:03	08/26/15 21:00	1
Hexachlorocyclopentadiene	1.6	U	8.9	1.6	ug/L		08/26/15 09:03	08/26/15 21:00	1
Hexachloroethane	1.7	U	8.9	1.7	ug/L		08/26/15 09:03	08/26/15 21:00	1
Indeno[1,2,3-cd]pyrene	0.37	U	1.8	0.37	ug/L		08/26/15 09:03	08/26/15 21:00	1

Client Sample ID: SR-3 Pond-081915
Date Collected: 08/19/15 11:45
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	2.8	U	8.9	2.8	ug/L		08/26/15 09:03	08/26/15 21:00	1
Naphthalene	0.33	U	1.8	0.33	ug/L		08/26/15 09:03	08/26/15 21:00	1
Nitrobenzene	2.4	U	8.9	2.4	ug/L		08/26/15 09:03	08/26/15 21:00	1
N-Nitrosodi-n-propylamine	3.0	U	8.9	3.0	ug/L		08/26/15 09:03	08/26/15 21:00	1
N-Nitrosodiphenylamine	3.2	U	8.9	3.2	ug/L		08/26/15 09:03	08/26/15 21:00	1
Phenanthrene	0.38	U	1.8	0.38	ug/L		08/26/15 09:03	08/26/15 21:00	1
Phenol	1.3	U	8.9	1.3	ug/L		08/26/15 09:03	08/26/15 21:00	1
Pyrene	0.31	U	1.8	0.31	ug/L		08/26/15 09:03	08/26/15 21:00	1
Diphenyl	2.0	U	8.9	2.0	ug/L		08/26/15 09:03	08/26/15 21:00	1
Di-n-octyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 09:03	08/26/15 21:00	1
2,2'-oxybis[1-chloropropane]	2.5	U	8.9	2.5	ug/L		08/26/15 09:03	08/26/15 21:00	1
Atrazine	2.6	U	8.9	2.6	ug/L		08/26/15 09:03	08/26/15 21:00	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Diethyltoluamide	*3.3*	*J N*	*ug/L*		*6.54*	*134-62-3*	*08/26/15 09:03*	*08/26/15 21:00*	*1*
Tridecanoic acid	*5.8*	*J N*	*ug/L*		*7.85*	*638-53-9*	*08/26/15 09:03*	*08/26/15 21:00*	*1*
Octadecanoic acid	*5.3*	*J N*	*ug/L*		*8.49*	*57-11-4*	*08/26/15 09:03*	*08/26/15 21:00*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*99*		*10 - 120*	*08/26/15 09:03*	*08/26/15 21:00*	*1*
2-Fluorobiphenyl (Surr)	*82*		*29 - 120*	*08/26/15 09:03*	*08/26/15 21:00*	*1*
2-Fluorophenol (Surr)	*40*		*10 - 120*	*08/26/15 09:03*	*08/26/15 21:00*	*1*
Nitrobenzene-d5 (Surr)	*76*		*27 - 120*	*08/26/15 09:03*	*08/26/15 21:00*	*1*
Phenol-d5 (Surr)	*25*		*10 - 120*	*08/26/15 09:03*	*08/26/15 21:00*	*1*
Terphenyl-d14 (Surr)	*89*		*13 - 120*	*08/26/15 09:03*	*08/26/15 21:00*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.38	U	0.45	0.38	ug/L		09/02/15 06:09	09/03/15 19:54	1
PCB-1221	0.30	U	0.45	0.30	ug/L		09/02/15 06:09	09/03/15 19:54	1
PCB-1232	0.36	U	0.45	0.36	ug/L		09/02/15 06:09	09/03/15 19:54	1
PCB-1242	0.20	U	0.45	0.20	ug/L		09/02/15 06:09	09/03/15 19:54	1
PCB-1248	0.13	U	0.45	0.13	ug/L		09/02/15 06:09	09/03/15 19:54	1
PCB-1254	0.15	U	0.45	0.15	ug/L		09/02/15 06:09	09/03/15 19:54	1
PCB-1260	0.16	U	0.45	0.16	ug/L		09/02/15 06:09	09/03/15 19:54	1
Polychlorinated biphenyls, Total	0.38	U	0.45	0.38	ug/L		09/02/15 06:09	09/03/15 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*84*		*10 - 150*	*09/02/15 06:09*	*09/03/15 19:54*	*1*
Tetrachloro-m-xylene	*69*		*10 - 150*	*09/02/15 06:09*	*09/03/15 19:54*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.20**		1.00	0.70	mg/L			08/28/15 18:48	1
Sulfate	**1.12**		1.00	0.60	mg/L			08/28/15 18:48	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 20:56	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:56	1
Arsenic	**0.0018**	**J B**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:56	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: SR-3 Pond-081915
Date Collected: 08/19/15 11:45
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-2
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.075**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:56	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:56	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 20:56	1
Calcium	**27.6**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:56	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:56	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:56	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:56	1
Iron	**0.54**		0.025	0.010	mg/L		08/24/15 09:53	08/24/15 20:56	1
Lead	**0.00028**	**J**	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:56	1
Magnesium	**4.5**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:56	1
Manganese	**0.052**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:56	1
Nickel	**0.00071**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 20:56	1
Potassium	**1.7**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:56	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 20:56	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/26/15 00:33	1
Sodium	**6.3**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 20:56	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 20:56	1
Vanadium	**0.00093**	**J B**	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 22:53	1
Zinc	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 20:56	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 19:49	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:49	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:49	1
Barium	**0.071**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:49	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:49	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 19:49	1
Calcium	**26.5**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:49	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:49	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:49	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:49	1
Iron	**0.062**		0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:49	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:49	1
Magnesium	**4.4**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:49	1
Manganese	**0.020**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:49	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:49	1
Potassium	**1.6**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:49	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 19:49	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:49	1
Sodium	**10.9**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:49	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:49	1
Vanadium	**0.0010**	**J B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 19:49	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:49	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 18:18	08/29/15 20:37	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: SR-3 Pond-081915
Date Collected: 08/19/15 11:45
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-2
Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 02:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/22/15 14:09	08/25/15 13:42	1
Bicarbonate Alkalinity as CaCO3	**79.4**		10.0	5.0	mg/L			08/22/15 15:34	1
Total Alkalinity as CaCO3	**79.4**		10.0	5.0	mg/L			08/22/15 15:34	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: SR-3 Seep 1-081915
Date Collected: 08/19/15 12:10
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-3
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.0**	**J**	10	0.27	ug/L			08/27/15 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*08/27/15 17:44*	*1*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*		*08/27/15 17:44*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*08/27/15 17:44*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/27/15 17:44*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/29/15 22:20	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/29/15 22:20	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/29/15 22:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*08/29/15 22:20*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/29/15 22:20*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/29/15 22:20*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/29/15 22:20*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 17:37	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/01/15 17:37	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 17:37	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 17:37	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/01/15 17:37	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/01/15 17:37	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/01/15 17:37	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/01/15 17:37	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/01/15 17:37	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/01/15 17:37	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 17:37	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/01/15 17:37	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/01/15 17:37	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/01/15 17:37	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/01/15 17:37	1
Acetone	2.7	U	25	2.7	ug/L			09/01/15 17:37	1
Benzene	**0.33**	**J**	1.0	0.20	ug/L			09/01/15 17:37	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/01/15 17:37	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/01/15 17:37	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/01/15 17:37	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/01/15 17:37	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 17:37	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/01/15 17:37	1
Chloroethane	**0.83**	**J**	1.0	0.36	ug/L			09/01/15 17:37	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/01/15 17:37	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/01/15 17:37	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/01/15 17:37	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 17:37	1

Client Sample ID: SR-3 Seep 1-081915
Date Collected: 08/19/15 12:10
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/01/15 17:37	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/01/15 17:37	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/01/15 17:37	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/01/15 17:37	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/01/15 17:37	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/01/15 17:37	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/01/15 17:37	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/01/15 17:37	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/01/15 17:37	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/01/15 17:37	1
Styrene	0.28	U	1.0	0.28	ug/L			09/01/15 17:37	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/01/15 17:37	1
Toluene	0.17	U	1.0	0.17	ug/L			09/01/15 17:37	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/01/15 17:37	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 17:37	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/01/15 17:37	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/01/15 17:37	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/01/15 17:37	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/01/15 17:37	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/01/15 17:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/15 17:37*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/01/15 17:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*09/01/15 17:37*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*09/01/15 17:37*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*09/01/15 17:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*09/01/15 17:37*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.023	U	0.045	0.023	ug/L		08/25/15 17:39	08/27/15 01:00	1
Benzo[a]pyrene	0.023	U	0.045	0.023	ug/L		08/25/15 17:39	08/27/15 01:00	1
Benzo[b]fluoranthene	0.023	U	0.045	0.023	ug/L		08/25/15 17:39	08/27/15 01:00	1
Hexachlorobenzene	0.013	U	0.018	0.013	ug/L		08/25/15 17:39	08/27/15 01:00	1
Hexachlorobutadiene	0.18	U	0.36	0.18	ug/L		08/25/15 17:39	08/27/15 01:00	1
N-Nitrosodimethylamine	0.18	U	0.73	0.18	ug/L		08/25/15 17:39	08/27/15 01:00	1
Pentachlorophenol	0.091	U *	0.27	0.091	ug/L		08/25/15 17:39	08/27/15 01:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*82*		*10 - 120*	*08/25/15 17:39*	*08/27/15 01:00*	*1*
2-Fluorobiphenyl (Surr)	*68*		*29 - 120*	*08/25/15 17:39*	*08/27/15 01:00*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*08/25/15 17:39*	*08/27/15 01:00*	*1*
Terphenyl-d14	*87*		*13 - 120*	*08/25/15 17:39*	*08/27/15 01:00*	*1*
2-Fluorophenol	*51*		*10 - 120*	*08/25/15 17:39*	*08/27/15 01:00*	*1*
Phenol-d5	*33*		*10 - 120*	*08/25/15 17:39*	*08/27/15 01:00*	*1*

Client Sample ID: SR-3 Seep 1-081915
Date Collected: 08/19/15 12:10
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.29	U	1.8	0.29	ug/L		08/26/15 09:03	08/26/15 21:24	1
1,2,4,5-Tetrachlorobenzene	1.9	U	8.9	1.9	ug/L		08/26/15 09:03	08/26/15 21:24	1
2,3,4,6-Tetrachlorophenol	6.2	U	8.9	6.2	ug/L		08/26/15 09:03	08/26/15 21:24	1
2,4,5-Trichlorophenol	6.3	U	8.9	6.3	ug/L		08/26/15 09:03	08/26/15 21:24	1
2,4,6-Trichlorophenol	6.1	U	8.9	6.1	ug/L		08/26/15 09:03	08/26/15 21:24	1
2,4-Dichlorophenol	5.0	U	8.9	5.0	ug/L		08/26/15 09:03	08/26/15 21:24	1
2,4-Dimethylphenol	3.8	U	8.9	3.8	ug/L		08/26/15 09:03	08/26/15 21:24	1
2,4-Dinitrophenol	5.3	U	22	5.3	ug/L		08/26/15 09:03	08/26/15 21:24	1
2,4-Dinitrotoluene	2.9	U	8.9	2.9	ug/L		08/26/15 09:03	08/26/15 21:24	1
2,6-Dinitrotoluene	2.1	U	8.9	2.1	ug/L		08/26/15 09:03	08/26/15 21:24	1
2-Chloronaphthalene	2.5	U	8.9	2.5	ug/L		08/26/15 09:03	08/26/15 21:24	1
2-Chlorophenol	4.3	U	8.9	4.3	ug/L		08/26/15 09:03	08/26/15 21:24	1
2-Methylnaphthalene	0.36	U	1.8	0.36	ug/L		08/26/15 09:03	08/26/15 21:24	1
2-Methylphenol	2.1	U	8.9	2.1	ug/L		08/26/15 09:03	08/26/15 21:24	1
2-Nitroaniline	3.3	U	22	3.3	ug/L		08/26/15 09:03	08/26/15 21:24	1
2-Nitrophenol	4.7	U	8.9	4.7	ug/L		08/26/15 09:03	08/26/15 21:24	1
3,3'-Dichlorobenzidine	2.9	U	8.9	2.9	ug/L		08/26/15 09:03	08/26/15 21:24	1
3 & 4 Methylphenol	2.0	U	8.9	2.0	ug/L		08/26/15 09:03	08/26/15 21:24	1
3-Nitroaniline	2.4	U	22	2.4	ug/L		08/26/15 09:03	08/26/15 21:24	1
4,6-Dinitro-2-methylphenol	8.3	U	22	8.3	ug/L		08/26/15 09:03	08/26/15 21:24	1
4-Bromophenyl phenyl ether	2.4	U	8.9	2.4	ug/L		08/26/15 09:03	08/26/15 21:24	1
4-Chloro-3-methylphenol	4.0	U	8.9	4.0	ug/L		08/26/15 09:03	08/26/15 21:24	1
4-Chloroaniline	3.8	U	8.9	3.8	ug/L		08/26/15 09:03	08/26/15 21:24	1
4-Chlorophenyl phenyl ether	2.5	U	8.9	2.5	ug/L		08/26/15 09:03	08/26/15 21:24	1
4-Nitroaniline	2.8	U	22	2.8	ug/L		08/26/15 09:03	08/26/15 21:24	1
4-Nitrophenol	4.8	U	22	4.8	ug/L		08/26/15 09:03	08/26/15 21:24	1
Acenaphthylene	0.31	U	1.8	0.31	ug/L		08/26/15 09:03	08/26/15 21:24	1
Acetophenone	2.1	U	8.9	2.1	ug/L		08/26/15 09:03	08/26/15 21:24	1
Anthracene	0.34	U	1.8	0.34	ug/L		08/26/15 09:03	08/26/15 21:24	1
Benzaldehyde	5.1	U *	8.9	5.1	ug/L		08/26/15 09:03	08/26/15 21:24	1
Benzo[g,h,i]perylene	0.55	U	1.8	0.55	ug/L		08/26/15 09:03	08/26/15 21:24	1
Benzo[k]fluoranthene	0.33	U	1.8	0.33	ug/L		08/26/15 09:03	08/26/15 21:24	1
Bis(2-chloroethoxy)methane	2.8	U	8.9	2.8	ug/L		08/26/15 09:03	08/26/15 21:24	1
Bis(2-chloroethyl)ether	2.5	U	8.9	2.5	ug/L		08/26/15 09:03	08/26/15 21:24	1
Butyl benzyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 09:03	08/26/15 21:24	1
Bis(2-ethylhexyl) phthalate	5.4	U	8.9	5.4	ug/L		08/26/15 09:03	08/26/15 21:24	1
Carbazole	2.5	U	8.9	2.5	ug/L		08/26/15 09:03	08/26/15 21:24	1
Caprolactam	2.1	U	8.9	2.1	ug/L		08/26/15 09:03	08/26/15 21:24	1
Chrysene	0.29	U	1.8	0.29	ug/L		08/26/15 09:03	08/26/15 21:24	1
Dibenz(a,h)anthracene	0.40	U	1.8	0.40	ug/L		08/26/15 09:03	08/26/15 21:24	1
Dibenzofuran	2.6	U	8.9	2.6	ug/L		08/26/15 09:03	08/26/15 21:24	1
Diethyl phthalate	2.7	U	8.9	2.7	ug/L		08/26/15 09:03	08/26/15 21:24	1
Dimethyl phthalate	2.8	U	8.9	2.8	ug/L		08/26/15 09:03	08/26/15 21:24	1
Di-n-butyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 09:03	08/26/15 21:24	1
Fluoranthene	0.29	U	1.8	0.29	ug/L		08/26/15 09:03	08/26/15 21:24	1
Fluorene	0.29	U	1.8	0.29	ug/L		08/26/15 09:03	08/26/15 21:24	1
Hexachlorocyclopentadiene	1.6	U	8.9	1.6	ug/L		08/26/15 09:03	08/26/15 21:24	1
Hexachloroethane	1.7	U	8.9	1.7	ug/L		08/26/15 09:03	08/26/15 21:24	1
Indeno[1,2,3-cd]pyrene	0.37	U	1.8	0.37	ug/L		08/26/15 09:03	08/26/15 21:24	1

Client Sample ID: SR-3 Seep 1-081915
Date Collected: 08/19/15 12:10
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	2.8	U	8.9	2.8	ug/L		08/26/15 09:03	08/26/15 21:24	1
Naphthalene	0.33	U	1.8	0.33	ug/L		08/26/15 09:03	08/26/15 21:24	1
Nitrobenzene	2.4	U	8.9	2.4	ug/L		08/26/15 09:03	08/26/15 21:24	1
N-Nitrosodi-n-propylamine	3.0	U	8.9	3.0	ug/L		08/26/15 09:03	08/26/15 21:24	1
N-Nitrosodiphenylamine	3.2	U	8.9	3.2	ug/L		08/26/15 09:03	08/26/15 21:24	1
Phenanthrene	0.38	U	1.8	0.38	ug/L		08/26/15 09:03	08/26/15 21:24	1
Phenol	1.3	U	8.9	1.3	ug/L		08/26/15 09:03	08/26/15 21:24	1
Pyrene	0.31	U	1.8	0.31	ug/L		08/26/15 09:03	08/26/15 21:24	1
Diphenyl	2.0	U	8.9	2.0	ug/L		08/26/15 09:03	08/26/15 21:24	1
Di-n-octyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 09:03	08/26/15 21:24	1
2,2'-oxybis[1-chloropropane]	2.5	U	8.9	2.5	ug/L		08/26/15 09:03	08/26/15 21:24	1
Atrazine	2.6	U	8.9	2.6	ug/L		08/26/15 09:03	08/26/15 21:24	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
n-Hexadecanoic acid	*4.0*	*J N*	*ug/L*		*7.85*	*57-10-3*	*08/26/15 09:03*	*08/26/15 21:24*	*1*
Octadecanoic acid	*3.5*	*J N*	*ug/L*		*8.49*	*57-11-4*	*08/26/15 09:03*	*08/26/15 21:24*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*98*		*10 - 120*	*08/26/15 09:03*	*08/26/15 21:24*	*1*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*	*08/26/15 09:03*	*08/26/15 21:24*	*1*
2-Fluorophenol (Surr)	*40*		*10 - 120*	*08/26/15 09:03*	*08/26/15 21:24*	*1*
Nitrobenzene-d5 (Surr)	*75*		*27 - 120*	*08/26/15 09:03*	*08/26/15 21:24*	*1*
Phenol-d5 (Surr)	*26*		*10 - 120*	*08/26/15 09:03*	*08/26/15 21:24*	*1*
Terphenyl-d14 (Surr)	*84*		*13 - 120*	*08/26/15 09:03*	*08/26/15 21:24*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/02/15 06:09	09/03/15 20:09	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/02/15 06:09	09/03/15 20:09	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/02/15 06:09	09/03/15 20:09	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/02/15 06:09	09/03/15 20:09	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/02/15 06:09	09/03/15 20:09	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/02/15 06:09	09/03/15 20:09	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/02/15 06:09	09/03/15 20:09	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/02/15 06:09	09/03/15 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*106*		*10 - 150*	*09/02/15 06:09*	*09/03/15 20:09*	*1*
Tetrachloro-m-xylene	*92*		*10 - 150*	*09/02/15 06:09*	*09/03/15 20:09*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.58**		1.00	0.70	mg/L			08/28/15 19:12	1
Sulfate	**0.95**	**J**	1.00	0.60	mg/L			08/28/15 19:12	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.60**		0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 21:01	1
Antimony	**0.0013**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:01	1
Arsenic	**0.0047**	**B**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:01	1
Barium	**0.27**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:01	1

Client Sample ID: SR-3 Seep 1-081915
Date Collected: 08/19/15 12:10
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-3
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:01	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 21:01	1
Calcium	**26.1**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:01	1
Chromium	**0.0027**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:01	1
Cobalt	**0.0034**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:01	1
Copper	**0.0061**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:01	1
Iron	**74.4**		0.025	0.010	mg/L		08/24/15 09:53	08/24/15 21:01	1
Lead	**0.0043**		0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 21:01	1
Magnesium	**4.0**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:01	1
Manganese	**1.1**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:01	1
Nickel	**0.0046**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:01	1
Potassium	**1.6**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:01	1
Selenium	**0.00098**	**J**	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 21:01	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/26/15 00:38	1
Sodium	**3.5**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:01	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 21:01	1
Vanadium	**0.0048**	**B**	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 22:58	1
Zinc	**0.039**		0.025	0.010	mg/L		08/24/15 09:53	08/24/15 21:01	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 19:54	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:54	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:54	1
Barium	**0.15**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:54	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:54	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 19:54	1
Calcium	**23.5**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:54	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:54	1
Cobalt	**0.0012**	**J**	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:54	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:54	1
Iron	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:54	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:54	1
Magnesium	**3.7**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:54	1
Manganese	**0.84**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:54	1
Nickel	**0.00092**	**J**	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:54	1
Potassium	**1.3**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:54	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 19:54	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:54	1
Sodium	**3.4**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:54	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:54	1
Vanadium	**0.00095**	**J B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 19:54	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:54	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 18:18	08/29/15 20:45	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: SR-3 Seep 1-081915
Date Collected: 08/19/15 12:10
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-3
Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 02:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/22/15 14:09	08/25/15 13:46	1
Bicarbonate Alkalinity as CaCO3	**82.5**		10.0	5.0	mg/L			08/22/15 15:38	1
Total Alkalinity as CaCO3	**82.5**		10.0	5.0	mg/L			08/22/15 15:38	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: Dup-04-081915
Date Collected: 08/19/15 12:00
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-4
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.44	J	10	0.27	ug/L			08/27/15 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/27/15 18:12*	*1*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*		*08/27/15 18:12*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/27/15 18:12*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/27/15 18:12*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/31/15 17:43	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/31/15 17:43	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/31/15 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/31/15 17:43*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/31/15 17:43*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/31/15 17:43*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/31/15 17:43*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 18:04	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/01/15 18:04	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 18:04	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 18:04	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/01/15 18:04	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/01/15 18:04	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/01/15 18:04	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/01/15 18:04	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/01/15 18:04	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/01/15 18:04	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 18:04	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/01/15 18:04	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/01/15 18:04	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/01/15 18:04	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/01/15 18:04	1
Acetone	2.7	U	25	2.7	ug/L			09/01/15 18:04	1
Benzene	0.20	U	1.0	0.20	ug/L			09/01/15 18:04	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/01/15 18:04	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/01/15 18:04	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/01/15 18:04	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/01/15 18:04	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 18:04	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/01/15 18:04	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/01/15 18:04	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/01/15 18:04	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/01/15 18:04	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/01/15 18:04	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 18:04	1

Client Sample ID: Dup-04-081915
Date Collected: 08/19/15 12:00
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/01/15 18:04	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/01/15 18:04	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/01/15 18:04	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/01/15 18:04	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/01/15 18:04	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/01/15 18:04	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/01/15 18:04	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/01/15 18:04	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/01/15 18:04	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/01/15 18:04	1
Styrene	0.28	U	1.0	0.28	ug/L			09/01/15 18:04	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/01/15 18:04	1
Toluene	0.17	U	1.0	0.17	ug/L			09/01/15 18:04	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/01/15 18:04	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 18:04	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/01/15 18:04	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/01/15 18:04	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/01/15 18:04	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/01/15 18:04	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/01/15 18:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/15 18:04*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/01/15 18:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*09/01/15 18:04*	*1*
Dibromofluoromethane (Surr)	*118*		*70 - 130*		*09/01/15 18:04*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*09/01/15 18:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/01/15 18:04*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.024	U	0.048	0.024	ug/L		08/25/15 17:39	08/27/15 01:26	1
Benzo[a]pyrene	0.024	U	0.048	0.024	ug/L		08/25/15 17:39	08/27/15 01:26	1
Benzo[b]fluoranthene	0.024	U	0.048	0.024	ug/L		08/25/15 17:39	08/27/15 01:26	1
Hexachlorobenzene	0.013	U	0.019	0.013	ug/L		08/25/15 17:39	08/27/15 01:26	1
Hexachlorobutadiene	0.19	U	0.38	0.19	ug/L		08/25/15 17:39	08/27/15 01:26	1
N-Nitrosodimethylamine	0.19	U	0.77	0.19	ug/L		08/25/15 17:39	08/27/15 01:26	1
Pentachlorophenol	0.096	U *	0.29	0.096	ug/L		08/25/15 17:39	08/27/15 01:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*82*		*10 - 120*	*08/25/15 17:39*	*08/27/15 01:26*	*1*
2-Fluorobiphenyl (Surr)	*71*		*29 - 120*	*08/25/15 17:39*	*08/27/15 01:26*	*1*
Nitrobenzene-d5	*72*		*27 - 120*	*08/25/15 17:39*	*08/27/15 01:26*	*1*
Terphenyl-d14	*95*		*13 - 120*	*08/25/15 17:39*	*08/27/15 01:26*	*1*
2-Fluorophenol	*54*		*10 - 120*	*08/25/15 17:39*	*08/27/15 01:26*	*1*
Phenol-d5	*37*		*10 - 120*	*08/25/15 17:39*	*08/27/15 01:26*	*1*

Client Sample ID: Dup-04-081915
Date Collected: 08/19/15 12:00
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/26/15 09:03	08/26/15 21:47	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/26/15 09:03	08/26/15 21:47	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/26/15 09:03	08/26/15 21:47	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/26/15 09:03	08/26/15 21:47	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/26/15 09:03	08/26/15 21:47	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/26/15 09:03	08/26/15 21:47	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/26/15 09:03	08/26/15 21:47	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/26/15 09:03	08/26/15 21:47	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/26/15 09:03	08/26/15 21:47	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/26/15 09:03	08/26/15 21:47	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 21:47	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/26/15 09:03	08/26/15 21:47	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/26/15 09:03	08/26/15 21:47	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/26/15 09:03	08/26/15 21:47	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/26/15 09:03	08/26/15 21:47	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/26/15 09:03	08/26/15 21:47	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/26/15 09:03	08/26/15 21:47	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/26/15 09:03	08/26/15 21:47	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/26/15 09:03	08/26/15 21:47	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/26/15 09:03	08/26/15 21:47	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/26/15 09:03	08/26/15 21:47	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/26/15 09:03	08/26/15 21:47	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/26/15 09:03	08/26/15 21:47	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 21:47	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/26/15 09:03	08/26/15 21:47	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/26/15 09:03	08/26/15 21:47	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/26/15 09:03	08/26/15 21:47	1
Acetophenone	2.3	U	10	2.3	ug/L		08/26/15 09:03	08/26/15 21:47	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/26/15 09:03	08/26/15 21:47	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/26/15 09:03	08/26/15 21:47	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/26/15 09:03	08/26/15 21:47	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/26/15 09:03	08/26/15 21:47	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/26/15 09:03	08/26/15 21:47	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 21:47	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 09:03	08/26/15 21:47	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/26/15 09:03	08/26/15 21:47	1
Carbazole	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 21:47	1
Caprolactam	2.4	U	10	2.4	ug/L		08/26/15 09:03	08/26/15 21:47	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/26/15 09:03	08/26/15 21:47	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/26/15 09:03	08/26/15 21:47	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/26/15 09:03	08/26/15 21:47	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/26/15 09:03	08/26/15 21:47	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/26/15 09:03	08/26/15 21:47	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 09:03	08/26/15 21:47	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/26/15 09:03	08/26/15 21:47	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/26/15 09:03	08/26/15 21:47	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/26/15 09:03	08/26/15 21:47	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/26/15 09:03	08/26/15 21:47	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/26/15 09:03	08/26/15 21:47	1

Client Sample ID: Dup-04-081915

Date Collected: 08/19/15 12:00
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-4

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	3.1	U	10	3.1	ug/L		08/26/15 09:03	08/26/15 21:47	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/26/15 09:03	08/26/15 21:47	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/26/15 09:03	08/26/15 21:47	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/26/15 09:03	08/26/15 21:47	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/26/15 09:03	08/26/15 21:47	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/26/15 09:03	08/26/15 21:47	1
Phenol	1.5	U	10	1.5	ug/L		08/26/15 09:03	08/26/15 21:47	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/26/15 09:03	08/26/15 21:47	1
Diphenyl	2.2	U	10	2.2	ug/L		08/26/15 09:03	08/26/15 21:47	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 09:03	08/26/15 21:47	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 21:47	1
Atrazine	2.9	U	10	2.9	ug/L		08/26/15 09:03	08/26/15 21:47	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/15 09:03*	*08/26/15 21:47*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*99*		*10 - 120*	*08/26/15 09:03*	*08/26/15 21:47*	*1*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*	*08/26/15 09:03*	*08/26/15 21:47*	*1*
2-Fluorophenol (Surr)	*39*		*10 - 120*	*08/26/15 09:03*	*08/26/15 21:47*	*1*
Nitrobenzene-d5 (Surr)	*74*		*27 - 120*	*08/26/15 09:03*	*08/26/15 21:47*	*1*
Phenol-d5 (Surr)	*26*		*10 - 120*	*08/26/15 09:03*	*08/26/15 21:47*	*1*
Terphenyl-d14 (Surr)	*89*		*13 - 120*	*08/26/15 09:03*	*08/26/15 21:47*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/02/15 06:09	09/03/15 20:25	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/02/15 06:09	09/03/15 20:25	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/02/15 06:09	09/03/15 20:25	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/02/15 06:09	09/03/15 20:25	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/02/15 06:09	09/03/15 20:25	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/02/15 06:09	09/03/15 20:25	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/02/15 06:09	09/03/15 20:25	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/02/15 06:09	09/03/15 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*68*		*10 - 150*	*09/02/15 06:09*	*09/03/15 20:25*	*1*
Tetrachloro-m-xylene	*58*		*10 - 150*	*09/02/15 06:09*	*09/03/15 20:25*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.11**		1.00	0.70	mg/L			08/28/15 19:36	1
Sulfate	**3.98**		1.00	0.60	mg/L			08/28/15 19:36	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.20**		0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 21:06	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:06	1
Arsenic	**0.0019**	**J B**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:06	1
Barium	**0.039**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:06	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:06	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: Dup-04-081915
Date Collected: 08/19/15 12:00
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-4
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 21:06	1
Calcium	**27.3**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:06	1
Chromium	**0.00053**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:06	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:06	1
Copper	**0.0011**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:06	1
Iron	**1.9**		0.025	0.010	mg/L		08/24/15 09:53	08/24/15 21:06	1
Lead	**0.00044**	**J**	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 21:06	1
Magnesium	**5.6**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:06	1
Manganese	**0.31**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:06	1
Nickel	**0.0010**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:06	1
Potassium	**1.2**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:06	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 21:06	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/26/15 00:43	1
Sodium	**12.1**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:06	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 21:06	1
Vanadium	**0.0015**	**J B**	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 23:03	1
Zinc	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 21:06	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 19:59	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:59	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:59	1
Barium	**0.029**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:59	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:59	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 19:59	1
Calcium	**26.4**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:59	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:59	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:59	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:59	1
Iron	**0.037**		0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:59	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:59	1
Magnesium	**5.6**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:59	1
Manganese	**0.034**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:59	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:59	1
Potassium	**1.1**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:59	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 19:59	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 19:59	1
Sodium	**5.7**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 19:59	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 19:59	1
Vanadium	**0.0010**	**J B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 19:59	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 19:59	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 18:18	08/29/15 20:47	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 02:17	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: Dup-04-081915
Date Collected: 08/19/15 12:00
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/22/15 14:09	08/25/15 13:43	1
Bicarbonate Alkalinity as CaCO3	**83.0**		10.0	5.0	mg/L			08/22/15 15:43	1
Total Alkalinity as CaCO3	**83.0**		10.0	5.0	mg/L			08/22/15 15:43	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: SW-NOB-02-081915
Date Collected: 08/19/15 14:30
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-5
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/27/15 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/27/15 18:41*	*1*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*		*08/27/15 18:41*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*08/27/15 18:41*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/27/15 18:41*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/31/15 18:11	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/31/15 18:11	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/31/15 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*08/31/15 18:11*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/31/15 18:11*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/31/15 18:11*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/31/15 18:11*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 18:32	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/01/15 18:32	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 18:32	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 18:32	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/01/15 18:32	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/01/15 18:32	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/01/15 18:32	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/01/15 18:32	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/01/15 18:32	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/01/15 18:32	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 18:32	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/01/15 18:32	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/01/15 18:32	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/01/15 18:32	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/01/15 18:32	1
Acetone	2.7	U	25	2.7	ug/L			09/01/15 18:32	1
Benzene	0.20	U	1.0	0.20	ug/L			09/01/15 18:32	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/01/15 18:32	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/01/15 18:32	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/01/15 18:32	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/01/15 18:32	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 18:32	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/01/15 18:32	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/01/15 18:32	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/01/15 18:32	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/01/15 18:32	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/01/15 18:32	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 18:32	1

Client Sample ID: SW-NOB-02-081915
Date Collected: 08/19/15 14:30
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/01/15 18:32	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/01/15 18:32	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/01/15 18:32	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/01/15 18:32	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/01/15 18:32	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/01/15 18:32	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/01/15 18:32	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/01/15 18:32	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/01/15 18:32	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/01/15 18:32	1
Styrene	0.28	U	1.0	0.28	ug/L			09/01/15 18:32	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/01/15 18:32	1
Toluene	0.17	U	1.0	0.17	ug/L			09/01/15 18:32	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/01/15 18:32	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 18:32	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/01/15 18:32	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/01/15 18:32	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/01/15 18:32	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/01/15 18:32	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/01/15 18:32	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/15 18:32*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/01/15 18:32*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*09/01/15 18:32*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 130*		*09/01/15 18:32*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*09/01/15 18:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*09/01/15 18:32*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.024	U	0.048	0.024	ug/L		08/25/15 17:39	08/27/15 01:52	1
Benzo[a]pyrene	0.024	U	0.048	0.024	ug/L		08/25/15 17:39	08/27/15 01:52	1
Benzo[b]fluoranthene	0.024	U	0.048	0.024	ug/L		08/25/15 17:39	08/27/15 01:52	1
Hexachlorobenzene	0.013	U	0.019	0.013	ug/L		08/25/15 17:39	08/27/15 01:52	1
Hexachlorobutadiene	0.19	U	0.38	0.19	ug/L		08/25/15 17:39	08/27/15 01:52	1
N-Nitrosodimethylamine	0.19	U	0.77	0.19	ug/L		08/25/15 17:39	08/27/15 01:52	1
Pentachlorophenol	0.096	U *	0.29	0.096	ug/L		08/25/15 17:39	08/27/15 01:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*63*		*10 - 120*	*08/25/15 17:39*	*08/27/15 01:52*	*1*
2-Fluorobiphenyl (Surr)	*62*		*29 - 120*	*08/25/15 17:39*	*08/27/15 01:52*	*1*
Nitrobenzene-d5	*62*		*27 - 120*	*08/25/15 17:39*	*08/27/15 01:52*	*1*
Terphenyl-d14	*85*		*13 - 120*	*08/25/15 17:39*	*08/27/15 01:52*	*1*
2-Fluorophenol	*46*		*10 - 120*	*08/25/15 17:39*	*08/27/15 01:52*	*1*
Phenol-d5	*32*		*10 - 120*	*08/25/15 17:39*	*08/27/15 01:52*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: SW-NOB-02-081915
Date Collected: 08/19/15 14:30
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/26/15 09:03	08/26/15 22:11	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/26/15 09:03	08/26/15 22:11	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/26/15 09:03	08/26/15 22:11	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/26/15 09:03	08/26/15 22:11	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/26/15 09:03	08/26/15 22:11	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/26/15 09:03	08/26/15 22:11	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/26/15 09:03	08/26/15 22:11	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/26/15 09:03	08/26/15 22:11	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/26/15 09:03	08/26/15 22:11	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/26/15 09:03	08/26/15 22:11	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 22:11	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/26/15 09:03	08/26/15 22:11	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/26/15 09:03	08/26/15 22:11	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/26/15 09:03	08/26/15 22:11	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/26/15 09:03	08/26/15 22:11	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/26/15 09:03	08/26/15 22:11	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/26/15 09:03	08/26/15 22:11	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/26/15 09:03	08/26/15 22:11	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/26/15 09:03	08/26/15 22:11	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/26/15 09:03	08/26/15 22:11	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/26/15 09:03	08/26/15 22:11	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/26/15 09:03	08/26/15 22:11	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/26/15 09:03	08/26/15 22:11	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 22:11	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/26/15 09:03	08/26/15 22:11	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/26/15 09:03	08/26/15 22:11	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/26/15 09:03	08/26/15 22:11	1
Acetophenone	2.3	U	10	2.3	ug/L		08/26/15 09:03	08/26/15 22:11	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/26/15 09:03	08/26/15 22:11	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/26/15 09:03	08/26/15 22:11	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/26/15 09:03	08/26/15 22:11	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/26/15 09:03	08/26/15 22:11	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/26/15 09:03	08/26/15 22:11	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 22:11	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 09:03	08/26/15 22:11	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/26/15 09:03	08/26/15 22:11	1
Carbazole	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 22:11	1
Caprolactam	2.4	U	10	2.4	ug/L		08/26/15 09:03	08/26/15 22:11	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/26/15 09:03	08/26/15 22:11	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/26/15 09:03	08/26/15 22:11	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/26/15 09:03	08/26/15 22:11	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/26/15 09:03	08/26/15 22:11	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/26/15 09:03	08/26/15 22:11	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 09:03	08/26/15 22:11	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/26/15 09:03	08/26/15 22:11	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/26/15 09:03	08/26/15 22:11	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/26/15 09:03	08/26/15 22:11	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/26/15 09:03	08/26/15 22:11	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/26/15 09:03	08/26/15 22:11	1

Client Sample ID: SW-NOB-02-081915
Date Collected: 08/19/15 14:30
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	3.1	U	10	3.1	ug/L		08/26/15 09:03	08/26/15 22:11	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/26/15 09:03	08/26/15 22:11	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/26/15 09:03	08/26/15 22:11	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/26/15 09:03	08/26/15 22:11	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/26/15 09:03	08/26/15 22:11	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/26/15 09:03	08/26/15 22:11	1
Phenol	1.5	U	10	1.5	ug/L		08/26/15 09:03	08/26/15 22:11	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/26/15 09:03	08/26/15 22:11	1
Diphenyl	2.2	U	10	2.2	ug/L		08/26/15 09:03	08/26/15 22:11	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 09:03	08/26/15 22:11	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 22:11	1
Atrazine	2.9	U	10	2.9	ug/L		08/26/15 09:03	08/26/15 22:11	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/15 09:03*	*08/26/15 22:11*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*109*		*10 - 120*	*08/26/15 09:03*	*08/26/15 22:11*	*1*
2-Fluorobiphenyl (Surr)	*86*		*29 - 120*	*08/26/15 09:03*	*08/26/15 22:11*	*1*
2-Fluorophenol (Surr)	*44*		*10 - 120*	*08/26/15 09:03*	*08/26/15 22:11*	*1*
Nitrobenzene-d5 (Surr)	*82*		*27 - 120*	*08/26/15 09:03*	*08/26/15 22:11*	*1*
Phenol-d5 (Surr)	*28*		*10 - 120*	*08/26/15 09:03*	*08/26/15 22:11*	*1*
Terphenyl-d14 (Surr)	*101*		*13 - 120*	*08/26/15 09:03*	*08/26/15 22:11*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/02/15 06:09	09/03/15 20:41	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/02/15 06:09	09/03/15 20:41	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/02/15 06:09	09/03/15 20:41	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/02/15 06:09	09/03/15 20:41	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/02/15 06:09	09/03/15 20:41	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/02/15 06:09	09/03/15 20:41	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/02/15 06:09	09/03/15 20:41	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/02/15 06:09	09/03/15 20:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*85*		*10 - 150*	*09/02/15 06:09*	*09/03/15 20:41*	*1*
Tetrachloro-m-xylene	*71*		*10 - 150*	*09/02/15 06:09*	*09/03/15 20:41*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.42**		1.00	0.70	mg/L			08/28/15 20:00	1
Sulfate	**6.20**		1.00	0.60	mg/L			08/28/15 20:00	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.53**		0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 21:22	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:22	1
Arsenic	**0.0015**	**J B**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:22	1
Barium	**0.015**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:22	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:22	1

Client Sample ID: SW-NOB-02-081915
Date Collected: 08/19/15 14:30
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-5
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 21:22	1
Calcium	**12.0**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:22	1
Chromium	**0.0012**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:22	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:22	1
Copper	**0.0018**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:22	1
Iron	**1.1**		0.025	0.010	mg/L		08/24/15 09:53	08/24/15 21:22	1
Lead	**0.0012**	**J**	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 21:22	1
Magnesium	**5.0**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:22	1
Manganese	**0.093**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:22	1
Nickel	**0.0017**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:22	1
Potassium	**1.1**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:22	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 21:22	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/26/15 00:59	1
Sodium	**3.3**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:22	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 21:22	1
Vanadium	**0.0030**	**B**	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 23:09	1
Zinc	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 21:22	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.018**	**J**	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 20:04	1
Antimony	**0.00057**	**J**	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:04	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:04	1
Barium	**0.0064**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:04	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:04	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 20:04	1
Calcium	**11.1**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 20:04	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:04	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:04	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:04	1
Iron	**0.16**		0.025	0.010	mg/L		08/26/15 09:20	08/26/15 20:04	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 20:04	1
Magnesium	**4.7**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 20:04	1
Manganese	**0.015**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:04	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:04	1
Potassium	**0.94**	**J**	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 20:04	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 20:04	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:04	1
Sodium	**12.6**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 20:04	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 20:04	1
Vanadium	**0.0020**	**B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 20:04	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 20:04	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 18:18	08/29/15 20:49	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 02:20	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: SW-NOB-02-081915
Date Collected: 08/19/15 14:30
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-5
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/22/15 14:09	08/25/15 13:44	1
Bicarbonate Alkalinity as CaCO3	**43.3**		10.0	5.0	mg/L			08/22/15 15:49	1
Total Alkalinity as CaCO3	**43.3**		10.0	5.0	mg/L			08/22/15 15:49	1

Client Sample ID: SW-PAB-04-081915

Date Collected: 08/19/15 15:00
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-6

Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/27/15 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/27/15 19:10*	*1*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*		*08/27/15 19:10*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*08/27/15 19:10*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/27/15 19:10*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/31/15 18:40	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/31/15 18:40	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/31/15 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/31/15 18:40*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/31/15 18:40*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/31/15 18:40*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/31/15 18:40*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 18:59	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/01/15 18:59	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 18:59	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 18:59	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/01/15 18:59	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/01/15 18:59	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/01/15 18:59	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/01/15 18:59	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/01/15 18:59	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/01/15 18:59	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 18:59	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/01/15 18:59	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/01/15 18:59	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/01/15 18:59	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/01/15 18:59	1
Acetone	2.7	U	25	2.7	ug/L			09/01/15 18:59	1
Benzene	0.20	U	1.0	0.20	ug/L			09/01/15 18:59	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/01/15 18:59	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/01/15 18:59	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/01/15 18:59	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/01/15 18:59	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 18:59	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/01/15 18:59	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/01/15 18:59	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/01/15 18:59	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/01/15 18:59	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/01/15 18:59	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 18:59	1

Client Sample ID: SW-PAB-04-081915
Date Collected: 08/19/15 15:00
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/01/15 18:59	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/01/15 18:59	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/01/15 18:59	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/01/15 18:59	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/01/15 18:59	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/01/15 18:59	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/01/15 18:59	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/01/15 18:59	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/01/15 18:59	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/01/15 18:59	1
Styrene	0.28	U	1.0	0.28	ug/L			09/01/15 18:59	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/01/15 18:59	1
Toluene	0.17	U	1.0	0.17	ug/L			09/01/15 18:59	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/01/15 18:59	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 18:59	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/01/15 18:59	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/01/15 18:59	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/01/15 18:59	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/01/15 18:59	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/01/15 18:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/15 18:59*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/01/15 18:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*09/01/15 18:59*	*1*
Dibromofluoromethane (Surr)	*118*		*70 - 130*		*09/01/15 18:59*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*09/01/15 18:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*09/01/15 18:59*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.024	U	0.048	0.024	ug/L		08/25/15 17:39	08/27/15 02:19	1
Benzo[a]pyrene	0.024	U	0.048	0.024	ug/L		08/25/15 17:39	08/27/15 02:19	1
Benzo[b]fluoranthene	0.024	U	0.048	0.024	ug/L		08/25/15 17:39	08/27/15 02:19	1
Hexachlorobenzene	0.013	U	0.019	0.013	ug/L		08/25/15 17:39	08/27/15 02:19	1
Hexachlorobutadiene	0.19	U	0.38	0.19	ug/L		08/25/15 17:39	08/27/15 02:19	1
N-Nitrosodimethylamine	0.19	U	0.77	0.19	ug/L		08/25/15 17:39	08/27/15 02:19	1
Pentachlorophenol	0.096	U *	0.29	0.096	ug/L		08/25/15 17:39	08/27/15 02:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*81*		*10 - 120*	*08/25/15 17:39*	*08/27/15 02:19*	*1*
2-Fluorobiphenyl (Surr)	*81*		*29 - 120*	*08/25/15 17:39*	*08/27/15 02:19*	*1*
Nitrobenzene-d5	*79*		*27 - 120*	*08/25/15 17:39*	*08/27/15 02:19*	*1*
Terphenyl-d14	*98*		*13 - 120*	*08/25/15 17:39*	*08/27/15 02:19*	*1*
2-Fluorophenol	*57*		*10 - 120*	*08/25/15 17:39*	*08/27/15 02:19*	*1*
Phenol-d5	*37*		*10 - 120*	*08/25/15 17:39*	*08/27/15 02:19*	*1*

Client Sample ID: SW-PAB-04-081915
Date Collected: 08/19/15 15:00
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-6
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/26/15 09:03	08/26/15 22:34	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/26/15 09:03	08/26/15 22:34	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/26/15 09:03	08/26/15 22:34	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/26/15 09:03	08/26/15 22:34	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/26/15 09:03	08/26/15 22:34	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/26/15 09:03	08/26/15 22:34	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/26/15 09:03	08/26/15 22:34	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/26/15 09:03	08/26/15 22:34	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/26/15 09:03	08/26/15 22:34	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/26/15 09:03	08/26/15 22:34	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 22:34	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/26/15 09:03	08/26/15 22:34	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/26/15 09:03	08/26/15 22:34	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/26/15 09:03	08/26/15 22:34	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/26/15 09:03	08/26/15 22:34	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/26/15 09:03	08/26/15 22:34	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/26/15 09:03	08/26/15 22:34	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/26/15 09:03	08/26/15 22:34	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/26/15 09:03	08/26/15 22:34	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/26/15 09:03	08/26/15 22:34	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/26/15 09:03	08/26/15 22:34	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/26/15 09:03	08/26/15 22:34	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/26/15 09:03	08/26/15 22:34	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 22:34	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/26/15 09:03	08/26/15 22:34	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/26/15 09:03	08/26/15 22:34	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/26/15 09:03	08/26/15 22:34	1
Acetophenone	2.3	U	10	2.3	ug/L		08/26/15 09:03	08/26/15 22:34	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/26/15 09:03	08/26/15 22:34	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/26/15 09:03	08/26/15 22:34	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/26/15 09:03	08/26/15 22:34	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/26/15 09:03	08/26/15 22:34	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/26/15 09:03	08/26/15 22:34	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 22:34	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 09:03	08/26/15 22:34	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/26/15 09:03	08/26/15 22:34	1
Carbazole	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 22:34	1
Caprolactam	2.4	U	10	2.4	ug/L		08/26/15 09:03	08/26/15 22:34	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/26/15 09:03	08/26/15 22:34	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/26/15 09:03	08/26/15 22:34	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/26/15 09:03	08/26/15 22:34	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/26/15 09:03	08/26/15 22:34	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/26/15 09:03	08/26/15 22:34	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 09:03	08/26/15 22:34	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/26/15 09:03	08/26/15 22:34	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/26/15 09:03	08/26/15 22:34	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/26/15 09:03	08/26/15 22:34	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/26/15 09:03	08/26/15 22:34	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/26/15 09:03	08/26/15 22:34	1

Client Sample ID: SW-PAB-04-081915
Date Collected: 08/19/15 15:00
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-6
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	3.1	U	10	3.1	ug/L		08/26/15 09:03	08/26/15 22:34	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/26/15 09:03	08/26/15 22:34	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/26/15 09:03	08/26/15 22:34	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/26/15 09:03	08/26/15 22:34	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/26/15 09:03	08/26/15 22:34	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/26/15 09:03	08/26/15 22:34	1
Phenol	1.5	U	10	1.5	ug/L		08/26/15 09:03	08/26/15 22:34	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/26/15 09:03	08/26/15 22:34	1
Diphenyl	2.2	U	10	2.2	ug/L		08/26/15 09:03	08/26/15 22:34	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 09:03	08/26/15 22:34	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 22:34	1
Atrazine	2.9	U	10	2.9	ug/L		08/26/15 09:03	08/26/15 22:34	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tetradecanoic acid	*3.4*	*J N*	*ug/L*		*7.85*	*544-63-8*	*08/26/15 09:03*	*08/26/15 22:34*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*102*		*10 - 120*	*08/26/15 09:03*	*08/26/15 22:34*	*1*
2-Fluorobiphenyl (Surr)	*86*		*29 - 120*	*08/26/15 09:03*	*08/26/15 22:34*	*1*
2-Fluorophenol (Surr)	*43*		*10 - 120*	*08/26/15 09:03*	*08/26/15 22:34*	*1*
Nitrobenzene-d5 (Surr)	*81*		*27 - 120*	*08/26/15 09:03*	*08/26/15 22:34*	*1*
Phenol-d5 (Surr)	*28*		*10 - 120*	*08/26/15 09:03*	*08/26/15 22:34*	*1*
Terphenyl-d14 (Surr)	*97*		*13 - 120*	*08/26/15 09:03*	*08/26/15 22:34*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/02/15 06:09	09/03/15 20:56	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/02/15 06:09	09/03/15 20:56	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/02/15 06:09	09/03/15 20:56	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/02/15 06:09	09/03/15 20:56	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/02/15 06:09	09/03/15 20:56	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/02/15 06:09	09/03/15 20:56	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/02/15 06:09	09/03/15 20:56	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/02/15 06:09	09/03/15 20:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*101*		*10 - 150*	*09/02/15 06:09*	*09/03/15 20:56*	*1*
Tetrachloro-m-xylene	*84*		*10 - 150*	*09/02/15 06:09*	*09/03/15 20:56*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.41**		1.00	0.70	mg/L			08/28/15 20:24	1
Sulfate	**3.95**		1.00	0.60	mg/L			08/28/15 20:24	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.20**		0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 21:27	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:27	1
Arsenic	**0.0020**	**B**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:27	1
Barium	**0.041**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:27	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:27	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: SW-PAB-04-081915
Date Collected: 08/19/15 15:00
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-6
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 21:27	1
Calcium	**27.5**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:27	1
Chromium	**0.0037**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:27	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:27	1
Copper	**0.0012**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:27	1
Iron	**2.0**		0.025	0.010	mg/L		08/24/15 09:53	08/24/15 21:27	1
Lead	**0.00049**	**J**	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 21:27	1
Magnesium	**5.7**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:27	1
Manganese	**0.36**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:27	1
Nickel	**0.0011**	**J**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:27	1
Potassium	**1.2**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:27	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 21:27	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/26/15 01:04	1
Sodium	**20.9**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:27	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 21:27	1
Vanadium	**0.0015**	**J B**	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 23:14	1
Zinc	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 21:27	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 20:10	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:10	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:10	1
Barium	**0.030**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:10	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:10	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 20:10	1
Calcium	**27.3**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 20:10	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:10	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:10	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:10	1
Iron	**0.042**		0.025	0.010	mg/L		08/26/15 09:20	08/26/15 20:10	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 20:10	1
Magnesium	**5.8**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 20:10	1
Manganese	**0.023**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:10	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:10	1
Potassium	**1.1**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 20:10	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 20:10	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:10	1
Sodium	**6.0**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 20:10	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 20:10	1
Vanadium	**0.0011**	**J B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 20:10	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 20:10	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 18:18	08/29/15 20:52	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 02:22	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: SW-PAB-04-081915
Date Collected: 08/19/15 15:00
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-6
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/26/15 13:30	08/28/15 11:56	1
Bicarbonate Alkalinity as CaCO3	**83.0**		10.0	5.0	mg/L			08/22/15 15:54	1
Total Alkalinity as CaCO3	**83.0**		10.0	5.0	mg/L			08/22/15 15:54	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: RW-10 (120-130)-081915
Date Collected: 08/19/15 09:25
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-7
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/27/15 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/27/15 19:38*	*1*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*		*08/27/15 19:38*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/27/15 19:38*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/27/15 19:38*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/31/15 19:09	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/31/15 19:09	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/31/15 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*166*	*X*	*70 - 130*		*08/31/15 19:09*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/31/15 19:09*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/31/15 19:09*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/31/15 19:09*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 19:26	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/01/15 19:26	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 19:26	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 19:26	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/01/15 19:26	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/01/15 19:26	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/01/15 19:26	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/01/15 19:26	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/01/15 19:26	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/01/15 19:26	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 19:26	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/01/15 19:26	1
2-Butanone (MEK)	**5.3**	**J**	50	2.6	ug/L			09/01/15 19:26	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/01/15 19:26	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/01/15 19:26	1
Acetone	**43**		25	2.7	ug/L			09/01/15 19:26	1
Benzene	0.20	U	1.0	0.20	ug/L			09/01/15 19:26	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/01/15 19:26	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/01/15 19:26	1
Carbon disulfide	**3.2**		1.0	0.22	ug/L			09/01/15 19:26	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/01/15 19:26	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 19:26	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/01/15 19:26	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/01/15 19:26	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/01/15 19:26	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/01/15 19:26	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/01/15 19:26	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 19:26	1

Client Sample ID: RW-10 (120-130)-081915

Date Collected: 08/19/15 09:25
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/01/15 19:26	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/01/15 19:26	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/01/15 19:26	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/01/15 19:26	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/01/15 19:26	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/01/15 19:26	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/01/15 19:26	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/01/15 19:26	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/01/15 19:26	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/01/15 19:26	1
Styrene	0.28	U	1.0	0.28	ug/L			09/01/15 19:26	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/01/15 19:26	1
Toluene	**0.22**	**J**	1.0	0.17	ug/L			09/01/15 19:26	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/01/15 19:26	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 19:26	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/01/15 19:26	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/01/15 19:26	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/01/15 19:26	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/01/15 19:26	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/01/15 19:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*27*	*J*	*ug/L*		*1.11*			*09/01/15 19:26*	*1*
Isopropyl alcohol	*48*	*J*	*ug/L*		*2.07*	*67-63-0*		*09/01/15 19:26*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/01/15 19:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*09/01/15 19:26*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*09/01/15 19:26*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*09/01/15 19:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*09/01/15 19:26*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.024	U	0.047	0.024	ug/L		08/25/15 17:39	08/27/15 02:45	1
Benzo[a]pyrene	0.024	U	0.047	0.024	ug/L		08/25/15 17:39	08/27/15 02:45	1
Benzo[b]fluoranthene	0.024	U	0.047	0.024	ug/L		08/25/15 17:39	08/27/15 02:45	1
Hexachlorobenzene	0.013	U	0.019	0.013	ug/L		08/25/15 17:39	08/27/15 02:45	1
Hexachlorobutadiene	0.19	U	0.38	0.19	ug/L		08/25/15 17:39	08/27/15 02:45	1
N-Nitrosodimethylamine	0.19	U	0.75	0.19	ug/L		08/25/15 17:39	08/27/15 02:45	1
Pentachlorophenol	0.094	U *	0.28	0.094	ug/L		08/25/15 17:39	08/27/15 02:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*81*		*10 - 120*	*08/25/15 17:39*	*08/27/15 02:45*	*1*
2-Fluorobiphenyl (Surr)	*59*		*29 - 120*	*08/25/15 17:39*	*08/27/15 02:45*	*1*
Nitrobenzene-d5	*68*		*27 - 120*	*08/25/15 17:39*	*08/27/15 02:45*	*1*
Terphenyl-d14	*79*		*13 - 120*	*08/25/15 17:39*	*08/27/15 02:45*	*1*
2-Fluorophenol	*48*		*10 - 120*	*08/25/15 17:39*	*08/27/15 02:45*	*1*
Phenol-d5	*34*		*10 - 120*	*08/25/15 17:39*	*08/27/15 02:45*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: RW-10 (120-130)-081915
Date Collected: 08/19/15 09:25
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-7
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/26/15 09:03	08/26/15 22:58	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/26/15 09:03	08/26/15 22:58	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/26/15 09:03	08/26/15 22:58	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/26/15 09:03	08/26/15 22:58	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/26/15 09:03	08/26/15 22:58	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/26/15 09:03	08/26/15 22:58	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/26/15 09:03	08/26/15 22:58	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/26/15 09:03	08/26/15 22:58	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/26/15 09:03	08/26/15 22:58	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/26/15 09:03	08/26/15 22:58	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 22:58	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/26/15 09:03	08/26/15 22:58	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/26/15 09:03	08/26/15 22:58	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/26/15 09:03	08/26/15 22:58	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/26/15 09:03	08/26/15 22:58	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/26/15 09:03	08/26/15 22:58	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/26/15 09:03	08/26/15 22:58	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/26/15 09:03	08/26/15 22:58	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/26/15 09:03	08/26/15 22:58	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/26/15 09:03	08/26/15 22:58	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/26/15 09:03	08/26/15 22:58	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/26/15 09:03	08/26/15 22:58	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/26/15 09:03	08/26/15 22:58	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 22:58	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/26/15 09:03	08/26/15 22:58	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/26/15 09:03	08/26/15 22:58	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/26/15 09:03	08/26/15 22:58	1
Acetophenone	2.3	U	10	2.3	ug/L		08/26/15 09:03	08/26/15 22:58	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/26/15 09:03	08/26/15 22:58	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/26/15 09:03	08/26/15 22:58	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/26/15 09:03	08/26/15 22:58	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/26/15 09:03	08/26/15 22:58	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/26/15 09:03	08/26/15 22:58	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 22:58	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 09:03	08/26/15 22:58	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/26/15 09:03	08/26/15 22:58	1
Carbazole	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 22:58	1
Caprolactam	2.4	U	10	2.4	ug/L		08/26/15 09:03	08/26/15 22:58	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/26/15 09:03	08/26/15 22:58	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/26/15 09:03	08/26/15 22:58	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/26/15 09:03	08/26/15 22:58	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/26/15 09:03	08/26/15 22:58	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/26/15 09:03	08/26/15 22:58	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 09:03	08/26/15 22:58	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/26/15 09:03	08/26/15 22:58	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/26/15 09:03	08/26/15 22:58	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/26/15 09:03	08/26/15 22:58	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/26/15 09:03	08/26/15 22:58	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/26/15 09:03	08/26/15 22:58	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: RW-10 (120-130)-081915
Date Collected: 08/19/15 09:25
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-7
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	3.1	U	10	3.1	ug/L		08/26/15 09:03	08/26/15 22:58	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/26/15 09:03	08/26/15 22:58	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/26/15 09:03	08/26/15 22:58	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/26/15 09:03	08/26/15 22:58	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/26/15 09:03	08/26/15 22:58	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/26/15 09:03	08/26/15 22:58	1
Phenol	**8.6**	**J**	10	1.5	ug/L		08/26/15 09:03	08/26/15 22:58	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/26/15 09:03	08/26/15 22:58	1
Diphenyl	2.2	U	10	2.2	ug/L		08/26/15 09:03	08/26/15 22:58	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 09:03	08/26/15 22:58	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 22:58	1
Atrazine	2.9	U	10	2.9	ug/L		08/26/15 09:03	08/26/15 22:58	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
2-Naphthalenecarboxylic acid	*5.6*	*J N*	*ug/L*		*7.04*	*93-09-4*	*08/26/15 09:03*	*08/26/15 22:58*	*1*
1H-Pyrrole, 3,5-dimethyl-2-phenyl-	*3.5*	*J N*	*ug/L*		*7.31*	*3274-53-1*	*08/26/15 09:03*	*08/26/15 22:58*	*1*
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca -6,	*7.7*	*J N*	*ug/L*		*7.73*	*82304-66-3*	*08/26/15 09:03*	*08/26/15 22:58*	*1*
n-Hexadecanoic acid	*9.9*	*J N*	*ug/L*		*7.85*	*57-10-3*	*08/26/15 09:03*	*08/26/15 22:58*	*1*
3,5-di-tert-Butyl-4-hydroxyphenylprop ion	*15*	*J N*	*ug/L*		*7.95*	*20170-32-5*	*08/26/15 09:03*	*08/26/15 22:58*	*1*
Octadecanoic acid	*8.7*	*J N*	*ug/L*		*8.49*	*57-11-4*	*08/26/15 09:03*	*08/26/15 22:58*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*100*		*10 - 120*	*08/26/15 09:03*	*08/26/15 22:58*	*1*
2-Fluorobiphenyl (Surr)	*75*		*29 - 120*	*08/26/15 09:03*	*08/26/15 22:58*	*1*
2-Fluorophenol (Surr)	*39*		*10 - 120*	*08/26/15 09:03*	*08/26/15 22:58*	*1*
Nitrobenzene-d5 (Surr)	*74*		*27 - 120*	*08/26/15 09:03*	*08/26/15 22:58*	*1*
Phenol-d5 (Surr)	*25*		*10 - 120*	*08/26/15 09:03*	*08/26/15 22:58*	*1*
Terphenyl-d14 (Surr)	*92*		*13 - 120*	*08/26/15 09:03*	*08/26/15 22:58*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/02/15 06:09	09/03/15 21:12	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/02/15 06:09	09/03/15 21:12	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/02/15 06:09	09/03/15 21:12	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/02/15 06:09	09/03/15 21:12	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/02/15 06:09	09/03/15 21:12	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/02/15 06:09	09/03/15 21:12	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/02/15 06:09	09/03/15 21:12	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/02/15 06:09	09/03/15 21:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*89*		*10 - 150*	*09/02/15 06:09*	*09/03/15 21:12*	*1*
Tetrachloro-m-xylene	*70*		*10 - 150*	*09/02/15 06:09*	*09/03/15 21:12*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.09**		1.00	0.70	mg/L			08/28/15 20:48	1
Sulfate	**134**		1.00	0.60	mg/L			08/28/15 20:48	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: RW-10 (120-130)-081915
Date Collected: 08/19/15 09:25
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-7
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.17**		0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 21:32	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:32	1
Arsenic	**0.0075**	**B**	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:32	1
Barium	**0.017**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:32	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:32	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 21:32	1
Calcium	**50.8**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:32	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:32	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:32	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:32	1
Iron	**0.028**		0.025	0.010	mg/L		08/24/15 09:53	08/24/15 21:32	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 21:32	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:32	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:32	1
Nickel	**0.013**		0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 21:32	1
Potassium	**28.6**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:32	1
Selenium	**0.0033**		0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 21:32	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/26/15 01:09	1
Sodium	**65.8**		1.0	0.13	mg/L		08/24/15 09:53	08/24/15 21:32	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 21:32	1
Vanadium	**0.0088**	**B**	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 23:29	1
Zinc	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 21:32	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.13**		0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 20:15	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:15	1
Arsenic	**0.0067**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:15	1
Barium	**0.015**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:15	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:15	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 20:15	1
Calcium	**46.0**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 20:15	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:15	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:15	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:15	1
Iron	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 20:15	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 20:15	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 20:15	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:15	1
Nickel	**0.011**		0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:15	1
Potassium	**24.6**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 20:15	1
Selenium	**0.0027**		0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 20:15	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 20:15	1
Sodium	**64.9**		1.0	0.13	mg/L		08/26/15 09:20	08/26/15 20:15	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 20:15	1
Vanadium	**0.0071**	**B**	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 20:15	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 20:15	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: RW-10 (120-130)-081915
Date Collected: 08/19/15 09:25
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-7
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 18:18	08/29/15 20:54	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 02:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/22/15 14:09	08/25/15 13:44	1
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/22/15 16:02	1
Total Alkalinity as CaCO3	**121**		10.0	5.0	mg/L			08/22/15 16:02	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: TB-10-082015
Date Collected: 08/20/15 00:01
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-8
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/27/15 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/27/15 15:20*	*1*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*		*08/27/15 15:20*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*08/27/15 15:20*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/27/15 15:20*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/31/15 19:37	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/31/15 19:37	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/31/15 19:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*08/31/15 19:37*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/31/15 19:37*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/31/15 19:37*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*08/31/15 19:37*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 15:48	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/01/15 15:48	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 15:48	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 15:48	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/01/15 15:48	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/01/15 15:48	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/01/15 15:48	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/01/15 15:48	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/01/15 15:48	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/01/15 15:48	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 15:48	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/01/15 15:48	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/01/15 15:48	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/01/15 15:48	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/01/15 15:48	1
Acetone	**3.5**	**J**	25	2.7	ug/L			09/01/15 15:48	1
Benzene	0.20	U	1.0	0.20	ug/L			09/01/15 15:48	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/01/15 15:48	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/01/15 15:48	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/01/15 15:48	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/01/15 15:48	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 15:48	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/01/15 15:48	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/01/15 15:48	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/01/15 15:48	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/01/15 15:48	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/01/15 15:48	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 15:48	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: TB-10-082015
Date Collected: 08/20/15 00:01
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/01/15 15:48	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/01/15 15:48	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/01/15 15:48	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/01/15 15:48	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/01/15 15:48	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/01/15 15:48	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/01/15 15:48	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/01/15 15:48	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/01/15 15:48	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/01/15 15:48	1
Styrene	0.28	U	1.0	0.28	ug/L			09/01/15 15:48	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/01/15 15:48	1
Toluene	0.17	U	1.0	0.17	ug/L			09/01/15 15:48	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/01/15 15:48	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 15:48	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/01/15 15:48	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/01/15 15:48	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/01/15 15:48	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/01/15 15:48	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/01/15 15:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/15 15:48*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/01/15 15:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*09/01/15 15:48*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*09/01/15 15:48*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*09/01/15 15:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*		*09/01/15 15:48*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-278001/7
Matrix: Water
Analysis Batch: 278001

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 12:10	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/01/15 12:10	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 12:10	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 12:10	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/01/15 12:10	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/01/15 12:10	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/01/15 12:10	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/01/15 12:10	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/01/15 12:10	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/01/15 12:10	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 12:10	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/01/15 12:10	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/01/15 12:10	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/01/15 12:10	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/01/15 12:10	1
Acetone	2.7	U	25	2.7	ug/L			09/01/15 12:10	1
Benzene	0.20	U	1.0	0.20	ug/L			09/01/15 12:10	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/01/15 12:10	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/01/15 12:10	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/01/15 12:10	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/01/15 12:10	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 12:10	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/01/15 12:10	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/01/15 12:10	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/01/15 12:10	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/01/15 12:10	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/01/15 12:10	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 12:10	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			09/01/15 12:10	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/01/15 12:10	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/01/15 12:10	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/01/15 12:10	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/01/15 12:10	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/01/15 12:10	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/01/15 12:10	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/01/15 12:10	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/01/15 12:10	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/01/15 12:10	1
Styrene	0.28	U	1.0	0.28	ug/L			09/01/15 12:10	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/01/15 12:10	1
Toluene	0.17	U	1.0	0.17	ug/L			09/01/15 12:10	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/01/15 12:10	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 12:10	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/01/15 12:10	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/01/15 12:10	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/01/15 12:10	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/01/15 12:10	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/01/15 12:10	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					09/01/15 12:10	1
Total Alkanes TIC	None		ug/L					09/01/15 12:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130		09/01/15 12:10	1
Dibromofluoromethane (Surr)	107		70 - 130		09/01/15 12:10	1
Toluene-d8 (Surr)	97		70 - 130		09/01/15 12:10	1
1,2-Dichloroethane-d4 (Surr)	117		70 - 130		09/01/15 12:10	1

Lab Sample ID: LCS 490-278001/4
Matrix: Water
Analysis Batch: 278001

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	23.2		ug/L		116	78 - 135
Freon-113	20.0	18.4		ug/L		92	77 - 129
1,1,2,2-Tetrachloroethane	20.0	19.4		ug/L		97	69 - 131
1,1,2-Trichloroethane	20.0	18.9		ug/L		95	80 - 124
1,1-Dichloroethane	20.0	22.2		ug/L		111	78 - 125
1,1-Dichloroethene	20.0	18.2		ug/L		91	79 - 124
1,2,4-Trichlorobenzene	20.0	20.9		ug/L		105	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	17.1		ug/L		86	54 - 125
1,2-Dichlorobenzene	20.0	18.7		ug/L		93	80 - 121
1,2-Dichloropropane	20.0	19.2		ug/L		96	75 - 120
1,3-Dichlorobenzene	20.0	19.5		ug/L		98	80 - 122
1,4-Dichlorobenzene	20.0	19.0		ug/L		95	80 - 120
2-Butanone (MEK)	100	106		ug/L		106	62 - 133
2-Hexanone	100	111		ug/L		111	60 - 142
4-Methyl-2-pentanone (MIBK)	100	98.3		ug/L		98	60 - 137
Acetone	100	79.5		ug/L		80	54 - 145
Benzene	20.0	21.7		ug/L		108	80 - 121
Bromoform	20.0	18.2		ug/L		91	46 - 145
Bromomethane	20.0	18.9		ug/L		94	41 - 150
Carbon disulfide	20.0	18.3		ug/L		91	77 - 126
Carbon tetrachloride	20.0	23.1		ug/L		115	64 - 147
Chlorobenzene	20.0	19.1		ug/L		96	80 - 120
Chlorodibromomethane	20.0	18.3		ug/L		92	69 - 133
Chloroethane	20.0	17.7		ug/L		88	72 - 120
Chloroform	20.0	22.4		ug/L		112	73 - 129
Chloromethane	20.0	11.8		ug/L		59	12 - 150
cis-1,2-Dichloroethene	20.0	23.5		ug/L		117	76 - 125
cis-1,3-Dichloropropene	20.0	20.0		ug/L		100	74 - 140
Cyclohexane	20.0	26.8	*	ug/L		134	73 - 122
Dichlorobromomethane	20.0	18.9		ug/L		95	75 - 129
Dichlorodifluoromethane	20.0	19.9		ug/L		100	37 - 127
Ethylbenzene	20.0	20.4		ug/L		102	80 - 130
1,2-Dibromoethane	20.0	19.5		ug/L		97	80 - 129
Isopropylbenzene	20.0	21.3		ug/L		107	80 - 141
Methyl acetate	100	71.3		ug/L		71	64 - 150
Methyl tert-butyl ether	20.0	17.4		ug/L		87	72 - 133
Methylcyclohexane	20.0	20.6		ug/L		103	71 - 129
Methylene Chloride	20.0	18.2		ug/L		91	79 - 123
Styrene	20.0	21.0		ug/L		105	80 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 490-278001/4
Matrix: Water
Analysis Batch: 278001

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	20.0	20.2		ug/L		101	80 - 126
Toluene	20.0	19.5		ug/L		98	80 - 126
trans-1,2-Dichloroethene	20.0	17.3		ug/L		86	79 - 126
trans-1,3-Dichloropropene	20.0	19.6		ug/L		98	63 - 134
Trichloroethene	20.0	19.2		ug/L		96	80 - 123
Trichlorofluoromethane	20.0	16.6		ug/L		83	65 - 124
Vinyl chloride	20.0	18.6		ug/L		93	68 - 120
1,2-Dichloroethane	20.0	23.9		ug/L		120	77 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*

Lab Sample ID: 230-603-I-5 MS
Matrix: Water
Analysis Batch: 278001

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.19	U	50.0	62.8		ug/L		126	76 - 149
Freon-113	0.15	U	50.0	54.2		ug/L		108	72 - 148
1,1,2,2-Tetrachloroethane	0.19	U	50.0	49.7		ug/L		99	56 - 143
1,1,2-Trichloroethane	0.19	U	50.0	48.2		ug/L		96	74 - 134
1,1-Dichloroethane	0.24	U	50.0	66.5		ug/L		133	71 - 139
1,1-Dichloroethene	0.25	U	50.0	53.7		ug/L		107	70 - 142
1,2,4-Trichlorobenzene	0.20	U	50.0	51.5		ug/L		103	60 - 136
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	45.4		ug/L		91	52 - 126
1,2-Dichlorobenzene	0.19	U	50.0	48.9		ug/L		98	79 - 128
1,2-Dichloropropane	0.25	U	50.0	54.9		ug/L		110	67 - 131
1,3-Dichlorobenzene	0.18	U	50.0	50.7		ug/L		101	77 - 131
1,4-Dichlorobenzene	0.17	U	50.0	48.1		ug/L		96	78 - 126
2-Butanone (MEK)	2.6	U	250	283		ug/L		113	50 - 138
2-Hexanone	1.3	U	250	279		ug/L		111	50 - 150
4-Methyl-2-pentanone (MIBK)	0.81	U	250	265		ug/L		106	50 - 147
Acetone	2.7	U	250	217		ug/L		87	45 - 141
Benzene	0.20	U	50.0	57.5		ug/L		115	75 - 133
Bromoform	0.29	U	50.0	51.3		ug/L		103	42 - 147
Bromomethane	0.35	U	50.0	55.7		ug/L		111	16 - 163
Carbon disulfide	0.22	U	50.0	53.0		ug/L		106	48 - 152
Carbon tetrachloride	0.18	U	50.0	62.9		ug/L		126	62 - 164
Chlorobenzene	0.18	U	50.0	52.2		ug/L		104	80 - 129
Chlorodibromomethane	0.25	U	50.0	48.5		ug/L		97	66 - 140
Chloroethane	0.36	U	50.0	57.0		ug/L		114	58 - 137
Chloroform	0.23	U	50.0	66.5		ug/L		133	66 - 138
Chloromethane	0.36	U	50.0	36.8		ug/L		74	10 - 169
cis-1,2-Dichloroethene	0.21	U F1	50.0	68.7		ug/L		137	68 - 138
cis-1,3-Dichloropropene	0.17	U	50.0	52.0		ug/L		104	71 - 141

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 230-603-I-5 MS
Matrix: Water
Analysis Batch: 278001

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	0.13	U F1 *	50.0	71.3		ug/L		143	58 - 144
Dichlorobromomethane	0.17	U	50.0	55.6		ug/L		111	70 - 140
Dichlorodifluoromethane	0.17	U	50.0	53.2		ug/L		106	40 - 127
Ethylbenzene	0.19	U	50.0	57.3		ug/L		115	79 - 139
1,2-Dibromoethane	0.21	U	50.0	50.7		ug/L		101	75 - 137
Isopropylbenzene	0.33	U	50.0	61.9		ug/L		124	80 - 153
Methyl acetate	0.58	U	250	187		ug/L		75	30 - 165
Methyl tert-butyl ether	0.17	U	50.0	47.4		ug/L		95	66 - 141
Methylcyclohexane	0.090	U	50.0	64.1		ug/L		128	59 - 151
Methylene Chloride	0.22	U	50.0	48.5		ug/L		97	64 - 139
Styrene	0.28	U	50.0	58.8		ug/L		118	61 - 148
Tetrachloroethene	0.14	U	50.0	51.2		ug/L		102	72 - 145
Toluene	0.17	U	50.0	52.6		ug/L		105	75 - 136
trans-1,2-Dichloroethene	0.23	U	50.0	52.1		ug/L		104	66 - 143
trans-1,3-Dichloropropene	0.17	U	50.0	52.2		ug/L		104	59 - 135
Trichloroethene	0.20	U	50.0	56.6		ug/L		113	73 - 144
Trichlorofluoromethane	0.21	U	50.0	54.3		ug/L		109	58 - 139
Vinyl chloride	0.18	U	50.0	55.4		ug/L		111	56 - 129
1,2-Dichloroethane	0.20	U	50.0	57.4		ug/L		115	64 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*

Lab Sample ID: 230-603-K-5 MSD
Matrix: Water
Analysis Batch: 278001

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.19	U	50.0	73.0		ug/L		146	76 - 149	15	17
Freon-113	0.15	U	50.0	53.7		ug/L		107	72 - 148	1	18
1,1,2,2-Tetrachloroethane	0.19	U	50.0	48.5		ug/L		97	56 - 143	2	20
1,1,2-Trichloroethane	0.19	U	50.0	48.3		ug/L		97	74 - 134	0	15
1,1-Dichloroethane	0.24	U	50.0	66.6		ug/L		133	71 - 139	0	17
1,1-Dichloroethene	0.25	U	50.0	55.1		ug/L		110	70 - 142	3	17
1,2,4-Trichlorobenzene	0.20	U	50.0	55.3		ug/L		111	60 - 136	7	19
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	46.7		ug/L		93	52 - 126	3	24
1,2-Dichlorobenzene	0.19	U	50.0	50.7		ug/L		101	79 - 128	4	15
1,2-Dichloropropane	0.25	U	50.0	54.5		ug/L		109	67 - 131	1	17
1,3-Dichlorobenzene	0.18	U	50.0	50.6		ug/L		101	77 - 131	0	15
1,4-Dichlorobenzene	0.17	U	50.0	48.4		ug/L		97	78 - 126	1	15
2-Butanone (MEK)	2.6	U	250	298		ug/L		119	50 - 138	5	19
2-Hexanone	1.3	U	250	281		ug/L		112	50 - 150	1	15
4-Methyl-2-pentanone (MIBK)	0.81	U	250	274		ug/L		109	50 - 147	3	17
Acetone	2.7	U	250	224		ug/L		89	45 - 141	3	21
Benzene	0.20	U	50.0	57.1		ug/L		114	75 - 133	1	17

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 230-603-K-5 MSD
Matrix: Water
Analysis Batch: 278001

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	0.29	U	50.0	49.0		ug/L		98	42 - 147	5	16
Bromomethane	0.35	U	50.0	63.5		ug/L		127	16 - 163	13	50
Carbon disulfide	0.22	U	50.0	53.6		ug/L		107	48 - 152	1	21
Carbon tetrachloride	0.18	U	50.0	69.0		ug/L		138	62 - 164	9	19
Chlorobenzene	0.18	U	50.0	51.3		ug/L		103	80 - 129	2	14
Chlorodibromomethane	0.25	U	50.0	48.4		ug/L		97	66 - 140	0	15
Chloroethane	0.36	U	50.0	56.3		ug/L		113	58 - 137	1	20
Chloroform	0.23	U	50.0	66.6		ug/L		133	66 - 138	0	18
Chloromethane	0.36	U	50.0	38.9		ug/L		78	10 - 169	5	31
cis-1,2-Dichloroethene	0.21	U F1	50.0	69.3	F1	ug/L		139	68 - 138	1	17
cis-1,3-Dichloropropene	0.17	U	50.0	51.4		ug/L		103	71 - 141	1	15
Cyclohexane	0.13	U F1 *	50.0	83.6	F1	ug/L		167	58 - 144	16	16
Dichlorobromomethane	0.17	U	50.0	53.8		ug/L		108	70 - 140	3	18
Dichlorodifluoromethane	0.17	U	50.0	52.2		ug/L		104	40 - 127	2	18
Ethylbenzene	0.19	U	50.0	57.2		ug/L		114	79 - 139	0	15
1,2-Dibromoethane	0.21	U	50.0	49.6		ug/L		99	75 - 137	2	15
Isopropylbenzene	0.33	U	50.0	59.7		ug/L		119	80 - 153	4	16
Methyl acetate	0.58	U	250	195		ug/L		78	30 - 165	4	31
Methyl tert-butyl ether	0.17	U	50.0	49.1		ug/L		98	66 - 141	3	16
Methylcyclohexane	0.090	U	50.0	63.7		ug/L		127	59 - 151	1	19
Methylene Chloride	0.22	U	50.0	50.3		ug/L		101	64 - 139	4	17
Styrene	0.28	U	50.0	57.9		ug/L		116	61 - 148	2	24
Tetrachloroethene	0.14	U	50.0	52.8		ug/L		106	72 - 145	3	16
Toluene	0.17	U	50.0	52.2		ug/L		104	75 - 136	1	15
trans-1,2-Dichloroethene	0.23	U	50.0	52.7		ug/L		105	66 - 143	1	16
trans-1,3-Dichloropropene	0.17	U	50.0	52.0		ug/L		104	59 - 135	0	14
Trichloroethene	0.20	U	50.0	56.3		ug/L		113	73 - 144	1	17
Trichlorofluoromethane	0.21	U	50.0	54.5		ug/L		109	58 - 139	0	18
Vinyl chloride	0.18	U	50.0	57.4		ug/L		115	56 - 129	4	17
1,2-Dichloroethane	0.20	U	50.0	57.1		ug/L		114	64 - 136	1	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*118*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-276673/7
Matrix: Water
Analysis Batch: 276673

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/27/15 14:42	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/27/15 14:42	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/27/15 14:42	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/27/15 14:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/27/15 14:42*	*1*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*		*08/27/15 14:42*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/27/15 14:42*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/27/15 14:42*	*1*

Lab Sample ID: LCS 490-276673/3
Matrix: Water
Analysis Batch: 276673

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.500	0.377		ug/L		75	70 - 131		
1,2-Dibromo-3-Chloropropane			0.500	0.380		ug/L		76	40 - 160		
1,4-Dioxane			10.0	9.19	J	ug/L		92	40 - 160		
Ethylene Dibromide			0.500	0.337	*	ug/L		67	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 490-276673/4
Matrix: Water
Analysis Batch: 276673

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.500	0.387		ug/L		77	70 - 131	3	19
1,2-Dibromo-3-Chloropropane			0.500	0.366		ug/L		73	40 - 160	4	20
1,4-Dioxane			10.0	9.22	J	ug/L		92	40 - 160	0	20
Ethylene Dibromide			0.500	0.328	*	ug/L		66	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: MB 490-277393/7
Matrix: Water
Analysis Batch: 277393

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/29/15 15:11	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/29/15 15:11	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/29/15 15:11	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/29/15 15:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/29/15 15:11*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/29/15 15:11*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/29/15 15:11*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/29/15 15:11*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-277393/3
Matrix: Water
Analysis Batch: 277393

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.500	0.501		ug/L		100	70 - 131
1,2-Dibromo-3-Chloropropane	0.500	0.499		ug/L		100	40 - 160
1,4-Dioxane	10.0	10.9		ug/L		109	40 - 160
Ethylene Dibromide	0.500	0.489		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 490-277393/4
Matrix: Water
Analysis Batch: 277393

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.500	0.517		ug/L		103	70 - 131	3	19
1,2-Dibromo-3-Chloropropane	0.500	0.496		ug/L		99	40 - 160	0	20
1,4-Dioxane	10.0	12.2		ug/L		122	40 - 160	12	20
Ethylene Dibromide	0.500	0.489		ug/L		98	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Lab Sample ID: MB 490-277754/26
Matrix: Water
Analysis Batch: 277754

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/31/15 16:46	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/31/15 16:46	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/31/15 16:46	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/31/15 16:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*08/31/15 16:46*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*08/31/15 16:46*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/31/15 16:46*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/31/15 16:46*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-277754/10
Matrix: Water
Analysis Batch: 277754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.500	0.558		ug/L		112	70 - 131
1,2-Dibromo-3-Chloropropane	0.500	0.563		ug/L		113	40 - 160
1,4-Dioxane	10.0	11.9		ug/L		119	40 - 160
Ethylene Dibromide	0.500	0.553		ug/L		111	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 490-277754/11
Matrix: Water
Analysis Batch: 277754

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.500	0.543		ug/L		109	70 - 131	3	19
1,2-Dibromo-3-Chloropropane	0.500	0.511		ug/L		102	40 - 160	10	20
1,4-Dioxane	10.0	10.9		ug/L		109	40 - 160	9	20
Ethylene Dibromide	0.500	0.531		ug/L		106	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-276223/1-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276223

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/26/15 09:03	08/26/15 19:26	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/26/15 09:03	08/26/15 19:26	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/26/15 09:03	08/26/15 19:26	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/26/15 09:03	08/26/15 19:26	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/26/15 09:03	08/26/15 19:26	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/26/15 09:03	08/26/15 19:26	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/26/15 09:03	08/26/15 19:26	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/26/15 09:03	08/26/15 19:26	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/26/15 09:03	08/26/15 19:26	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/26/15 09:03	08/26/15 19:26	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 19:26	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/26/15 09:03	08/26/15 19:26	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/26/15 09:03	08/26/15 19:26	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-276223/1-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276223

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	2.3	U	10	2.3	ug/L		08/26/15 09:03	08/26/15 19:26	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/26/15 09:03	08/26/15 19:26	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/26/15 09:03	08/26/15 19:26	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/26/15 09:03	08/26/15 19:26	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/26/15 09:03	08/26/15 19:26	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/26/15 09:03	08/26/15 19:26	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/26/15 09:03	08/26/15 19:26	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/26/15 09:03	08/26/15 19:26	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/26/15 09:03	08/26/15 19:26	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/26/15 09:03	08/26/15 19:26	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 19:26	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/26/15 09:03	08/26/15 19:26	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/26/15 09:03	08/26/15 19:26	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/26/15 09:03	08/26/15 19:26	1
Acetophenone	2.3	U	10	2.3	ug/L		08/26/15 09:03	08/26/15 19:26	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/26/15 09:03	08/26/15 19:26	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/26/15 09:03	08/26/15 19:26	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/26/15 09:03	08/26/15 19:26	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/26/15 09:03	08/26/15 19:26	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/26/15 09:03	08/26/15 19:26	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 19:26	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 09:03	08/26/15 19:26	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/26/15 09:03	08/26/15 19:26	1
Carbazole	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 19:26	1
Caprolactam	2.4	U	10	2.4	ug/L		08/26/15 09:03	08/26/15 19:26	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/26/15 09:03	08/26/15 19:26	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/26/15 09:03	08/26/15 19:26	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/26/15 09:03	08/26/15 19:26	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/26/15 09:03	08/26/15 19:26	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/26/15 09:03	08/26/15 19:26	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 09:03	08/26/15 19:26	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/26/15 09:03	08/26/15 19:26	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/26/15 09:03	08/26/15 19:26	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/26/15 09:03	08/26/15 19:26	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/26/15 09:03	08/26/15 19:26	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/26/15 09:03	08/26/15 19:26	1
Isophorone	3.1	U	10	3.1	ug/L		08/26/15 09:03	08/26/15 19:26	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/26/15 09:03	08/26/15 19:26	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/26/15 09:03	08/26/15 19:26	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/26/15 09:03	08/26/15 19:26	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/26/15 09:03	08/26/15 19:26	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/26/15 09:03	08/26/15 19:26	1
Phenol	1.5	U	10	1.5	ug/L		08/26/15 09:03	08/26/15 19:26	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/26/15 09:03	08/26/15 19:26	1
Diphenyl	2.2	U	10	2.2	ug/L		08/26/15 09:03	08/26/15 19:26	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 09:03	08/26/15 19:26	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/26/15 09:03	08/26/15 19:26	1
Atrazine	2.9	U	10	2.9	ug/L		08/26/15 09:03	08/26/15 19:26	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-276223/1-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276223

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L				08/26/15 09:03	08/26/15 19:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	101		10 - 120	08/26/15 09:03	08/26/15 19:26	1
2-Fluorobiphenyl (Surr)	81		29 - 120	08/26/15 09:03	08/26/15 19:26	1
2-Fluorophenol (Surr)	47		10 - 120	08/26/15 09:03	08/26/15 19:26	1
Nitrobenzene-d5 (Surr)	76		27 - 120	08/26/15 09:03	08/26/15 19:26	1
Phenol-d5 (Surr)	32		10 - 120	08/26/15 09:03	08/26/15 19:26	1
Terphenyl-d14 (Surr)	97		13 - 120	08/26/15 09:03	08/26/15 19:26	1

Lab Sample ID: LCS 490-276223/2-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276223

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	40.0	27.4		ug/L		68	46 - 120
1,2,4,5-Tetrachlorobenzene	40.0	28.8		ug/L		72	25 - 120
2,3,4,6-Tetrachlorophenol	40.0	33.4		ug/L		83	31 - 148
2,4,5-Trichlorophenol	40.0	30.5		ug/L		76	40 - 129
2,4,6-Trichlorophenol	40.0	30.1		ug/L		75	39 - 135
2,4-Dichlorophenol	40.0	26.9		ug/L		67	38 - 120
2,4-Dimethylphenol	40.0	26.2		ug/L		66	21 - 126
2,4-Dinitrophenol	80.0	41.6		ug/L		52	20 - 150
2,4-Dinitrotoluene	40.0	31.1		ug/L		78	46 - 132
2,6-Dinitrotoluene	40.0	29.7		ug/L		74	54 - 128
2-Chloronaphthalene	40.0	26.6		ug/L		66	39 - 120
2-Chlorophenol	40.0	23.2		ug/L		58	40 - 120
2-Methylnaphthalene	40.0	25.4		ug/L		63	31 - 120
2-Methylphenol	40.0	23.0		ug/L		58	38 - 120
2-Nitroaniline	40.0	29.8		ug/L		75	46 - 131
2-Nitrophenol	40.0	26.6		ug/L		67	32 - 120
3,3'-Dichlorobenzidine	40.0	25.3		ug/L		63	46 - 129
3 & 4 Methylphenol	40.0	19.4		ug/L		49	33 - 120
3-Nitroaniline	40.0	26.6		ug/L		67	54 - 121
4,6-Dinitro-2-methylphenol	80.0	59.8		ug/L		75	19 - 150
4-Bromophenyl phenyl ether	40.0	29.6		ug/L		74	47 - 127
4-Chloro-3-methylphenol	40.0	28.7		ug/L		72	44 - 120
4-Chloroaniline	40.0	22.1		ug/L		55	44 - 120
4-Chlorophenyl phenyl ether	40.0	29.4		ug/L		73	50 - 120
4-Nitroaniline	40.0	28.5		ug/L		71	55 - 123
4-Nitrophenol	80.0	24.7	J	ug/L		31	10 - 120
Acenaphthylene	40.0	27.2		ug/L		68	48 - 120
Acetophenone	40.0	25.9		ug/L		65	52 - 133
Anthracene	40.0	29.6		ug/L		74	58 - 130
Benzaldehyde	40.0	41.9		ug/L		105	34 - 120
Benzo[g,h,i]perylene	40.0	30.5		ug/L		76	51 - 123
Benzo[k]fluoranthene	40.0	29.1		ug/L		73	51 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-276223/2-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276223

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethoxy)methane	40.0	23.6		ug/L		59	44 - 120
Bis(2-chloroethyl)ether	40.0	22.5		ug/L		56	47 - 120
Butyl benzyl phthalate	40.0	27.8		ug/L		70	51 - 146
Bis(2-ethylhexyl) phthalate	40.0	32.1		ug/L		80	47 - 138
Carbazole	40.0	29.1		ug/L		73	54 - 123
Caprolactam	40.0	6.89	J	ug/L		17	10 - 120
Chrysene	40.0	27.0		ug/L		68	55 - 120
Dibenz(a,h)anthracene	40.0	32.9		ug/L		82	50 - 125
Dibenzofuran	40.0	27.7		ug/L		69	50 - 120
Diethyl phthalate	40.0	32.2		ug/L		81	54 - 128
Dimethyl phthalate	40.0	30.1		ug/L		75	53 - 127
Di-n-butyl phthalate	40.0	33.1		ug/L		83	54 - 140
Fluoranthene	40.0	31.5		ug/L		79	56 - 120
Fluorene	40.0	29.3		ug/L		73	52 - 120
Hexachlorocyclopentadiene	40.0	27.7		ug/L		69	17 - 120
Hexachloroethane	40.0	24.2		ug/L		60	30 - 120
Indeno[1,2,3-cd]pyrene	40.0	31.7		ug/L		79	54 - 125
Isophorone	40.0	26.5		ug/L		66	47 - 120
Naphthalene	40.0	24.3		ug/L		61	37 - 120
Nitrobenzene	40.0	25.0		ug/L		62	36 - 120
N-Nitrosodi-n-propylamine	40.0	25.9		ug/L		65	51 - 120
N-Nitrosodiphenylamine	80.0	57.1		ug/L		71	58 - 149
Phenanthrene	40.0	28.2		ug/L		71	56 - 120
Phenol	40.0	10.6		ug/L		26	14 - 120
Pyrene	40.0	25.3		ug/L		63	53 - 129
Diphenyl	40.0	26.8		ug/L		67	10 - 146
Di-n-octyl phthalate	40.0	30.0		ug/L		75	50 - 142
2,2'-oxybis[1-chloropropane]	40.0	21.3		ug/L		53	44 - 120
Atrazine	40.0	30.9		ug/L		77	24 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*92*		*10 - 120*
2-Fluorobiphenyl (Surr)	*73*		*29 - 120*
2-Fluorophenol (Surr)	*41*		*10 - 120*
Nitrobenzene-d5 (Surr)	*68*		*27 - 120*
Phenol-d5 (Surr)	*28*		*10 - 120*
Terphenyl-d14 (Surr)	*73*		*13 - 120*

Lab Sample ID: LCSD 490-276223/3-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 276223

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	40.0	32.8		ug/L		82	46 - 120	18	31
1,2,4,5-Tetrachlorobenzene	40.0	34.8		ug/L		87	25 - 120	19	50
2,3,4,6-Tetrachlorophenol	40.0	39.4		ug/L		99	31 - 148	17	50
2,4,5-Trichlorophenol	40.0	35.7		ug/L		89	40 - 129	16	34
2,4,6-Trichlorophenol	40.0	35.1		ug/L		88	39 - 135	15	40

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-276223/3-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 276223

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dichlorophenol	40.0	32.2		ug/L		81	38 - 120	18	30
2,4-Dimethylphenol	40.0	31.4		ug/L		79	21 - 126	18	48
2,4-Dinitrophenol	80.0	54.9		ug/L		69	20 - 150	27	31
2,4-Dinitrotoluene	40.0	37.0		ug/L		93	46 - 132	17	26
2,6-Dinitrotoluene	40.0	35.1		ug/L		88	54 - 128	16	29
2-Chloronaphthalene	40.0	32.1		ug/L		80	39 - 120	19	36
2-Chlorophenol	40.0	27.6		ug/L		69	40 - 120	17	46
2-Methylnaphthalene	40.0	30.3		ug/L		76	31 - 120	18	35
2-Methylphenol	40.0	26.7		ug/L		67	38 - 120	15	32
2-Nitroaniline	40.0	35.1		ug/L		88	46 - 131	16	24
2-Nitrophenol	40.0	31.6		ug/L		79	32 - 120	17	31
3,3'-Dichlorobenzidine	40.0	32.0		ug/L		80	46 - 129	23	30
3 & 4 Methylphenol	40.0	22.6		ug/L		57	33 - 120	15	34
3-Nitroaniline	40.0	31.0		ug/L		78	54 - 121	15	26
4,6-Dinitro-2-methylphenol	80.0	71.1		ug/L		89	19 - 150	17	34
4-Bromophenyl phenyl ether	40.0	35.4		ug/L		88	47 - 127	18	29
4-Chloro-3-methylphenol	40.0	33.5		ug/L		84	44 - 120	15	22
4-Chloroaniline	40.0	26.8		ug/L		67	44 - 120	19	26
4-Chlorophenyl phenyl ether	40.0	35.2		ug/L		88	50 - 120	18	29
4-Nitroaniline	40.0	33.7		ug/L		84	55 - 123	17	26
4-Nitrophenol	80.0	29.4		ug/L		37	10 - 120	18	38
Acenaphthylene	40.0	32.6		ug/L		82	48 - 120	18	31
Acetophenone	40.0	31.0		ug/L		77	52 - 133	18	50
Anthracene	40.0	35.0		ug/L		88	58 - 130	17	28
Benzaldehyde	40.0	48.9	*	ug/L		122	34 - 120	16	50
Benzo[g,h,i]perylene	40.0	36.1		ug/L		90	51 - 123	17	27
Benzo[k]fluoranthene	40.0	35.4		ug/L		88	51 - 120	20	32
Bis(2-chloroethoxy)methane	40.0	28.7		ug/L		72	44 - 120	20	31
Bis(2-chloroethyl)ether	40.0	26.6		ug/L		66	47 - 120	16	38
Butyl benzyl phthalate	40.0	31.7		ug/L		79	51 - 146	13	31
Bis(2-ethylhexyl) phthalate	40.0	36.6		ug/L		91	47 - 138	13	28
Carbazole	40.0	34.5		ug/L		86	54 - 123	17	29
Caprolactam	40.0	9.05	J	ug/L		23	10 - 120	27	50
Chrysene	40.0	31.5		ug/L		79	55 - 120	15	27
Dibenz(a,h)anthracene	40.0	39.6		ug/L		99	50 - 125	19	28
Dibenzofuran	40.0	33.1		ug/L		83	50 - 120	18	29
Diethyl phthalate	40.0	37.7		ug/L		94	54 - 128	16	28
Dimethyl phthalate	40.0	35.6		ug/L		89	53 - 127	17	27
Di-n-butyl phthalate	40.0	38.6		ug/L		97	54 - 140	15	27
Fluoranthene	40.0	36.7		ug/L		92	56 - 120	15	28
Fluorene	40.0	34.7		ug/L		87	52 - 120	17	28
Hexachlorocyclopentadiene	40.0	34.8		ug/L		87	17 - 120	23	43
Hexachloroethane	40.0	29.5		ug/L		74	30 - 120	20	45
Indeno[1,2,3-cd]pyrene	40.0	38.1		ug/L		95	54 - 125	18	27
Isophorone	40.0	31.5		ug/L		79	47 - 120	17	31
Naphthalene	40.0	30.1		ug/L		75	37 - 120	21	37
Nitrobenzene	40.0	29.8		ug/L		75	36 - 120	18	28
N-Nitrosodi-n-propylamine	40.0	30.4		ug/L		76	51 - 120	16	37

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-276223/3-A
Matrix: Water
Analysis Batch: 276363

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 276223

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
N-Nitrosodiphenylamine			80.0	68.7		ug/L		86	58 - 149	19	26
Phenanthrene			40.0	33.6		ug/L		84	56 - 120	17	26
Phenol			40.0	12.3		ug/L		31	14 - 120	15	42
Pyrene			40.0	30.3		ug/L		76	53 - 129	18	29
Diphenyl			40.0	32.3		ug/L		81	10 - 146	19	50
Di-n-octyl phthalate			40.0	35.2		ug/L		88	50 - 142	16	28
2,2'-oxybis[1-chloropropane]			40.0	26.1		ug/L		65	44 - 120	20	36
Atrazine			40.0	37.8		ug/L		95	24 - 133	20	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*105*		*10 - 120*
2-Fluorobiphenyl (Surr)	*83*		*29 - 120*
2-Fluorophenol (Surr)	*42*		*10 - 120*
Nitrobenzene-d5 (Surr)	*75*		*27 - 120*
Phenol-d5 (Surr)	*29*		*10 - 120*
Terphenyl-d14 (Surr)	*79*		*13 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 490-276166/1-A
Matrix: Water
Analysis Batch: 276355

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276166

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/25/15 17:39	08/26/15 22:22	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/25/15 17:39	08/26/15 22:22	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/25/15 17:39	08/26/15 22:22	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/25/15 17:39	08/26/15 22:22	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/25/15 17:39	08/26/15 22:22	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/25/15 17:39	08/26/15 22:22	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/25/15 17:39	08/26/15 22:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*75*		*10 - 120*	*08/25/15 17:39*	*08/26/15 22:22*	*1*
2-Fluorobiphenyl (Surr)	*63*		*29 - 120*	*08/25/15 17:39*	*08/26/15 22:22*	*1*
Nitrobenzene-d5	*68*		*27 - 120*	*08/25/15 17:39*	*08/26/15 22:22*	*1*
Terphenyl-d14	*91*		*13 - 120*	*08/25/15 17:39*	*08/26/15 22:22*	*1*
2-Fluorophenol	*52*		*10 - 120*	*08/25/15 17:39*	*08/26/15 22:22*	*1*
Phenol-d5	*34*		*10 - 120*	*08/25/15 17:39*	*08/26/15 22:22*	*1*

Lab Sample ID: LCS 490-276166/2-A
Matrix: Water
Analysis Batch: 276355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276166

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene			0.800	0.712		ug/L		89	57 - 120
Benzo[a]pyrene			0.800	0.627		ug/L		78	57 - 124

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 490-276166/2-A
Matrix: Water
Analysis Batch: 276355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276166

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[b]fluoranthene	0.800	0.660		ug/L		83	51 - 125
Hexachlorobenzene	0.800	0.576		ug/L		72	48 - 131
Hexachlorobutadiene	0.800	0.415		ug/L		52	28 - 120
N-Nitrosodimethylamine	0.800	0.386	J	ug/L		48	20 - 120
Pentachlorophenol	1.60	0.767		ug/L		48	21 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*90*		*10 - 120*
2-Fluorobiphenyl (Surr)	*77*		*29 - 120*
Nitrobenzene-d5	*82*		*27 - 120*
Terphenyl-d14	*91*		*13 - 120*
2-Fluorophenol	*53*		*10 - 120*
Phenol-d5	*36*		*10 - 120*

Lab Sample ID: LCSD 490-276166/3-A
Matrix: Water
Analysis Batch: 276355

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 276166

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	0.728		ug/L		91	57 - 120	2	27
Benzo[a]pyrene	0.800	0.645		ug/L		81	57 - 124	3	27
Benzo[b]fluoranthene	0.800	0.695		ug/L		87	51 - 125	5	39
Hexachlorobenzene	0.800	0.539		ug/L		67	48 - 131	7	28
Hexachlorobutadiene	0.800	0.367	J	ug/L		46	28 - 120	12	30
N-Nitrosodimethylamine	0.800	0.400	J	ug/L		50	20 - 120	4	32
Pentachlorophenol	1.60	0.486	*	ug/L		30	21 - 150	45	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*88*		*10 - 120*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*
Nitrobenzene-d5	*84*		*27 - 120*
Terphenyl-d14	*96*		*13 - 120*
2-Fluorophenol	*55*		*10 - 120*
Phenol-d5	*37*		*10 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-278338/1-A
Matrix: Water
Analysis Batch: 278890

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 278338

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/02/15 06:09	09/03/15 19:07	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/02/15 06:09	09/03/15 19:07	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/02/15 06:09	09/03/15 19:07	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/02/15 06:09	09/03/15 19:07	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/02/15 06:09	09/03/15 19:07	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 490-278338/1-A
Matrix: Water
Analysis Batch: 278890

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 278338

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1254	0.17	U	0.50	0.17	ug/L		09/02/15 06:09	09/03/15 19:07	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/02/15 06:09	09/03/15 19:07	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/02/15 06:09	09/03/15 19:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*78*		*10 - 150*	*09/02/15 06:09*	*09/03/15 19:07*	*1*
Tetrachloro-m-xylene	*67*		*10 - 150*	*09/02/15 06:09*	*09/03/15 19:07*	*1*

Lab Sample ID: LCS 490-278338/2-A
Matrix: Water
Analysis Batch: 278890

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 278338

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	4.00		ug/L		100	23 - 139
PCB-1260	4.00	3.83		ug/L		96	36 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*116*		*10 - 150*
Tetrachloro-m-xylene	*101*		*10 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 490-277332/6
Matrix: Water
Analysis Batch: 277332

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			08/28/15 16:24	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/28/15 16:24	1

Lab Sample ID: LCS 490-277332/7
Matrix: Water
Analysis Batch: 277332

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	99.00		mg/L		99	80 - 120
Sulfate	100	102.5		mg/L		103	80 - 120

Lab Sample ID: LCSD 490-277332/8
Matrix: Water
Analysis Batch: 277332

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	98.56		mg/L		99	80 - 120	0	20
Sulfate	100	101.4		mg/L		101	80 - 120	1	20

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 490-85658-1 MS
Matrix: Water
Analysis Batch: 277332

Client Sample ID: SR-3 Seep 2-081915
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.54		100	99.33		mg/L		98	80 - 120
Sulfate	1.52		100	103.4		mg/L		102	80 - 120

Lab Sample ID: 490-85658-1 MSD
Matrix: Water
Analysis Batch: 277332

Client Sample ID: SR-3 Seep 2-081915
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.54		100	94.54		mg/L		93	80 - 120	5	20
Sulfate	1.52		100	98.24		mg/L		97	80 - 120	5	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 490-275634/1-A
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/24/15 09:53	08/24/15 19:22	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Arsenic	0.00111	J	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/24/15 09:53	08/24/15 19:22	1
Calcium	0.13	U	1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:22	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Iron	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 19:22	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 19:22	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:22	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/24/15 19:22	1
Potassium	0.13	U	1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:22	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/24/15 09:53	08/24/15 19:22	1
Sodium	0.13	U	1.0	0.13	mg/L		08/24/15 09:53	08/24/15 19:22	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/24/15 09:53	08/24/15 19:22	1
Zinc	0.010	U	0.025	0.010	mg/L		08/24/15 09:53	08/24/15 19:22	1

Lab Sample ID: MB 490-275634/1-A
Matrix: Water
Analysis Batch: 276307

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.00050	U	0.0020	0.00050	mg/L		08/24/15 09:53	08/25/15 22:59	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 490-275634/1-A
Matrix: Water
Analysis Batch: 279689

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	0.000997	J	0.0020	0.00010	mg/L		08/24/15 09:53	09/07/15 14:38	1

Lab Sample ID: LCS 490-275634/2-A
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.03		mg/L		103	80 - 120
Antimony	0.100	0.106		mg/L		106	80 - 120
Arsenic	0.100	0.105		mg/L		105	80 - 120
Barium	0.100	0.107		mg/L		107	80 - 120
Beryllium	0.100	0.111		mg/L		111	80 - 120
Cadmium	0.100	0.0980		mg/L		98	80 - 120
Calcium	10.0	10.08		mg/L		101	80 - 120
Chromium	0.100	0.0996		mg/L		100	80 - 120
Cobalt	0.100	0.104		mg/L		104	80 - 120
Copper	0.100	0.0986		mg/L		99	80 - 120
Iron	1.00	1.13		mg/L		113	80 - 120
Lead	0.100	0.107		mg/L		107	80 - 120
Magnesium	10.0	9.98		mg/L		100	80 - 120
Manganese	0.100	0.108		mg/L		108	80 - 120
Nickel	0.100	0.102		mg/L		102	80 - 120
Potassium	10.0	10.38		mg/L		104	80 - 120
Selenium	0.100	0.0929		mg/L		93	80 - 120
Sodium	10.0	10.04		mg/L		100	80 - 120
Thallium	0.100	0.106		mg/L		106	80 - 120
Zinc	0.100	0.0915		mg/L		91	80 - 120

Lab Sample ID: LCS 490-275634/2-A
Matrix: Water
Analysis Batch: 276307

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.100	0.106		mg/L		106	80 - 120

Lab Sample ID: LCS 490-275634/2-A
Matrix: Water
Analysis Batch: 279689

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	0.100	0.104		mg/L		104	80 - 120

Lab Sample ID: 490-85229-J-12-B MS
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0096	U	1.00	0.998		mg/L		100	75 - 125
Antimony	0.00050	U	0.100	0.106		mg/L		106	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85229-J-12-B MS
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0023	B	0.100	0.0967		mg/L		94	75 - 125
Barium	0.12		0.100	0.223		mg/L		105	75 - 125
Beryllium	0.00050	U	0.100	0.112		mg/L		112	75 - 125
Cadmium	0.00040	U	0.100	0.0976		mg/L		98	75 - 125
Calcium	81.3		10.0	91.47	4	mg/L		102	75 - 125
Chromium	0.0021		0.100	0.0994		mg/L		97	75 - 125
Cobalt	0.00050	U	0.100	0.0992		mg/L		99	75 - 125
Copper	0.0015	J	0.100	0.0992		mg/L		98	75 - 125
Iron	20.0		1.00	22.04	4	mg/L		200	75 - 125
Lead	0.00039	J	0.100	0.106		mg/L		106	75 - 125
Magnesium	22.7		10.0	32.63		mg/L		100	75 - 125
Manganese	1.2		0.100	1.33	4	mg/L		93	75 - 125
Nickel	0.0052		0.100	0.103		mg/L		98	75 - 125
Potassium	4.5		10.0	14.52		mg/L		100	75 - 125
Selenium	0.00060	U	0.100	0.0900		mg/L		90	75 - 125
Sodium	85.7		10.0	98.57	4	mg/L		129	75 - 125
Thallium	0.00051	J	0.100	0.105		mg/L		104	75 - 125
Zinc	0.96		0.100	1.44	E 4	mg/L		474	75 - 125

Lab Sample ID: 490-85229-J-12-B MS
Matrix: Water
Analysis Batch: 276307

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.00050	U	0.100	0.101		mg/L		101	75 - 125

Lab Sample ID: 490-85229-J-12-B MS
Matrix: Water
Analysis Batch: 279689

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	0.0010	J B	0.100	0.101		mg/L		100	75 - 125

Lab Sample ID: 490-85229-J-12-C MSD
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0096	U	1.00	1.00		mg/L		100	75 - 125	0	20
Antimony	0.00050	U	0.100	0.106		mg/L		106	75 - 125	0	20
Arsenic	0.0023	B	0.100	0.0989		mg/L		97	75 - 125	2	20
Barium	0.12		0.100	0.225		mg/L		107	75 - 125	1	20
Beryllium	0.00050	U	0.100	0.112		mg/L		112	75 - 125	0	20
Cadmium	0.00040	U	0.100	0.0982		mg/L		98	75 - 125	1	20
Calcium	81.3		10.0	92.06	4	mg/L		108	75 - 125	1	20
Chromium	0.0021		0.100	0.101		mg/L		99	75 - 125	1	20
Cobalt	0.00050	U	0.100	0.100		mg/L		100	75 - 125	1	20
Copper	0.0015	J	0.100	0.0997		mg/L		98	75 - 125	0	20
Iron	20.0		1.00	22.16	4	mg/L		212	75 - 125	1	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85229-J-12-C MSD
Matrix: Water
Analysis Batch: 275984

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.00039	J	0.100	0.107		mg/L		107	75 - 125	1	20
Magnesium	22.7		10.0	32.49		mg/L		98	75 - 125	0	20
Manganese	1.2		0.100	1.36	4	mg/L		116	75 - 125	2	20
Nickel	0.0052		0.100	0.104		mg/L		99	75 - 125	1	20
Potassium	4.5		10.0	14.71		mg/L		102	75 - 125	1	20
Selenium	0.00060	U	0.100	0.0915		mg/L		91	75 - 125	2	20
Sodium	85.7		10.0	97.13	4	mg/L		114	75 - 125	1	20
Thallium	0.00051	J	0.100	0.106		mg/L		106	75 - 125	1	20
Zinc	0.96		0.100	1.32	E 4	mg/L		361	75 - 125	8	20

Lab Sample ID: 490-85229-J-12-C MSD
Matrix: Water
Analysis Batch: 276307

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.00050	U	0.100	0.103		mg/L		103	75 - 125	2	20

Lab Sample ID: 490-85229-J-12-C MSD
Matrix: Water
Analysis Batch: 279689

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275634

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	0.0010	J B	0.100	0.102		mg/L		101	75 - 125	1	20

Lab Sample ID: MB 490-276235/1-A
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 276235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 09:20	08/26/15 17:45	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 09:20	08/26/15 17:45	1
Calcium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 17:45	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Iron	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 17:45	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 17:45	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 17:45	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Potassium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 17:45	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 09:20	08/26/15 17:45	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 09:20	08/26/15 17:45	1
Sodium	0.13	U	1.0	0.13	mg/L		08/26/15 09:20	08/26/15 17:45	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 09:20	08/26/15 17:45	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 490-276235/1-A
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 276235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	0.000855	J	0.0020	0.00010	mg/L		08/26/15 09:20	08/26/15 17:45	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 09:20	08/26/15 17:45	1

Lab Sample ID: LCS 490-276235/2-A
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 276235

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	0.970		mg/L		97	80 - 120
Antimony	0.100	0.106		mg/L		106	80 - 120
Arsenic	0.100	0.102		mg/L		102	80 - 120
Barium	0.100	0.103		mg/L		103	80 - 120
Beryllium	0.100	0.103		mg/L		103	80 - 120
Cadmium	0.100	0.0974		mg/L		97	80 - 120
Calcium	10.0	9.41		mg/L		94	80 - 120
Chromium	0.100	0.0941		mg/L		94	80 - 120
Cobalt	0.100	0.0995		mg/L		100	80 - 120
Copper	0.100	0.0957		mg/L		96	80 - 120
Iron	1.00	1.03		mg/L		103	80 - 120
Lead	0.100	0.101		mg/L		101	80 - 120
Magnesium	10.0	9.38		mg/L		94	80 - 120
Manganese	0.100	0.0997		mg/L		100	80 - 120
Nickel	0.100	0.0955		mg/L		96	80 - 120
Potassium	10.0	9.53		mg/L		95	80 - 120
Selenium	0.100	0.0901		mg/L		90	80 - 120
Silver	0.100	0.0949		mg/L		95	80 - 120
Sodium	10.0	9.40		mg/L		94	80 - 120
Thallium	0.100	0.0978		mg/L		98	80 - 120
Vanadium	0.100	0.0956		mg/L		96	80 - 120
Zinc	0.100	0.0900		mg/L		90	80 - 120

Lab Sample ID: 490-85759-A-1-D MS
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 276235

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0096	U	1.00	1.03		mg/L		103	75 - 125
Antimony	0.00050	U	0.100	0.111		mg/L		111	75 - 125
Arsenic	0.0032		0.100	0.104		mg/L		101	75 - 125
Barium	2.1	E	0.100	2.24	E 4	mg/L		116	75 - 125
Beryllium	0.00050	U	0.100	0.108		mg/L		108	75 - 125
Cadmium	0.00040	U	0.100	0.102		mg/L		102	75 - 125
Calcium	29.2		10.0	39.31		mg/L		101	75 - 125
Chromium	0.00050	U	0.100	0.0992		mg/L		99	75 - 125
Cobalt	0.0022		0.100	0.109		mg/L		107	75 - 125
Copper	0.00050	U	0.100	0.102		mg/L		102	75 - 125
Iron	26.8		1.00	28.66	4	mg/L		182	75 - 125
Lead	0.00020	U	0.100	0.107		mg/L		107	75 - 125
Magnesium	18.2		10.0	28.31		mg/L		101	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85759-A-1-D MS
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 276235

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	15.7	E	0.100	16.17	E 4	mg/L		520	75 - 125
Nickel	0.00050	U	0.100	0.101		mg/L		101	75 - 125
Potassium	4.6		10.0	14.72		mg/L		101	75 - 125
Selenium	0.00060	U	0.100	0.0940		mg/L		94	75 - 125
Silver	0.00050	U	0.100	0.0995		mg/L		99	75 - 125
Sodium	7.3		10.0	17.27		mg/L		100	75 - 125
Thallium	0.00054	J	0.100	0.103		mg/L		103	75 - 125
Vanadium	0.00075	J B	0.100	0.101		mg/L		101	75 - 125
Zinc	0.010	U	0.100	0.0973		mg/L		97	75 - 125

Lab Sample ID: 490-85759-A-1-E MSD
Matrix: Water
Analysis Batch: 276838

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 276235

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0096	U	1.00	1.01		mg/L		101	75 - 125	2	20
Antimony	0.00050	U	0.100	0.109		mg/L		109	75 - 125	3	20
Arsenic	0.0032		0.100	0.101		mg/L		98	75 - 125	3	20
Barium	2.1	E	0.100	2.18	E 4	mg/L		62	75 - 125	2	20
Beryllium	0.00050	U	0.100	0.103		mg/L		103	75 - 125	5	20
Cadmium	0.00040	U	0.100	0.0994		mg/L		99	75 - 125	3	20
Calcium	29.2		10.0	38.60		mg/L		94	75 - 125	2	20
Chromium	0.00050	U	0.100	0.0979		mg/L		98	75 - 125	1	20
Cobalt	0.0022		0.100	0.107		mg/L		105	75 - 125	2	20
Copper	0.00050	U	0.100	0.0992		mg/L		99	75 - 125	2	20
Iron	26.8		1.00	27.43	4	mg/L		59	75 - 125	4	20
Lead	0.00020	U	0.100	0.104		mg/L		104	75 - 125	3	20
Magnesium	18.2		10.0	28.02		mg/L		98	75 - 125	1	20
Manganese	15.7	E	0.100	15.57	E 4	mg/L		-80	75 - 125	4	20
Nickel	0.00050	U	0.100	0.0976		mg/L		98	75 - 125	3	20
Potassium	4.6		10.0	14.50		mg/L		99	75 - 125	2	20
Selenium	0.00060	U	0.100	0.0928		mg/L		93	75 - 125	1	20
Silver	0.00050	U	0.100	0.0967		mg/L		97	75 - 125	3	20
Sodium	7.3		10.0	17.07		mg/L		98	75 - 125	1	20
Thallium	0.00054	J	0.100	0.102		mg/L		101	75 - 125	2	20
Vanadium	0.00075	J B	0.100	0.101		mg/L		100	75 - 125	0	20
Zinc	0.010	U	0.100	0.0956		mg/L		96	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 490-276945/1-A
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276945

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 18:18	08/29/15 19:49	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 490-276945/2-A
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276945

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.00102		mg/L		102	80 - 120

Lab Sample ID: LCSD 490-276945/3-A
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 276945

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00100	0.000983		mg/L		98	80 - 120	4	20

Lab Sample ID: 490-85529-G-1-C MS
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 276945

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000922		mg/L		92	75 - 125

Lab Sample ID: 490-85529-G-1-D MSD
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 276945

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000902		mg/L		90	75 - 125	2	20

Lab Sample ID: MB 490-276971/1-B
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 277394

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 01:24	1

Lab Sample ID: LCS 490-276971/2-B
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 277394

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000919		mg/L		92	80 - 120

Lab Sample ID: 490-86022-E-1-K MS
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 277394

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000984		mg/L		98	75 - 125

Lab Sample ID: 490-86022-E-1-L MSD
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 277394

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.00102		mg/L		102	75 - 125	3	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 490-275516/1-A
Matrix: Water
Analysis Batch: 276105

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275516

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/22/15 14:09	08/25/15 13:38	1

Lab Sample ID: LCS 490-275516/2-A
Matrix: Water
Analysis Batch: 276105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275516

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.110		mg/L		110	90 - 110

Lab Sample ID: 490-85658-6 MS
Matrix: Water
Analysis Batch: 276105

Client Sample ID: SW-PAB-04-081915
Prep Type: Total/NA
Prep Batch: 275516

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F2 F1	0.100	0.0594	F1	mg/L		59	70 - 130

Lab Sample ID: 490-85658-6 MSD
Matrix: Water
Analysis Batch: 276105

Client Sample ID: SW-PAB-04-081915
Prep Type: Total/NA
Prep Batch: 275516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F2 F1	0.100	0.0184	F1 F2	mg/L		18	70 - 130	105	46

Lab Sample ID: 490-85658-7 DU
Matrix: Water
Analysis Batch: 276105

Client Sample ID: RW-10 (120-130)-081915
Prep Type: Total/NA
Prep Batch: 275516

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.0070	U	0.0070	U	mg/L		NC	20

Lab Sample ID: MB 490-276486/1-A
Matrix: Water
Analysis Batch: 277615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276486

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/26/15 13:30	08/28/15 11:54	1

Lab Sample ID: LCS 490-276486/2-A
Matrix: Water
Analysis Batch: 277615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276486

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.105		mg/L		105	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 490-276134/5
Matrix: Water
Analysis Batch: 276134

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/22/15 15:06	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/22/15 15:06	1

Lab Sample ID: LCS 490-276134/6
Matrix: Water
Analysis Batch: 276134

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity as CaCO3			100	92.47		mg/L		92	90 - 110		

Lab Sample ID: LCSD 490-276134/7
Matrix: Water
Analysis Batch: 276134

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Alkalinity as CaCO3			100	96.25		mg/L		96	90 - 110	4	20

Lab Sample ID: 490-85658-1 DU
Matrix: Water
Analysis Batch: 276134

Client Sample ID: SR-3 Seep 2-081915
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	91.4			93.17		mg/L				2	20
Total Alkalinity as CaCO3	91.4			93.17		mg/L				2	20

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Analysis Batch: 276673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	8260C SIM	
490-85658-2	SR-3 Pond-081915	Total/NA	Water	8260C SIM	
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	8260C SIM	
490-85658-4	Dup-04-081915	Total/NA	Water	8260C SIM	
490-85658-5	SW-NOB-02-081915	Total/NA	Water	8260C SIM	
490-85658-6	SW-PAB-04-081915	Total/NA	Water	8260C SIM	
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	8260C SIM	
490-85658-8	TB-10-082015	Total/NA	Water	8260C SIM	
LCS 490-276673/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-276673/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-276673/7	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 277393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1 - RE	SR-3 Seep 2-081915	Total/NA	Water	8260C SIM	
490-85658-2 - RE	SR-3 Pond-081915	Total/NA	Water	8260C SIM	
490-85658-3 - RE	SR-3 Seep 1-081915	Total/NA	Water	8260C SIM	
LCS 490-277393/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-277393/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-277393/7	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 277754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-4 - RE	Dup-04-081915	Total/NA	Water	8260C SIM	
490-85658-5 - RE	SW-NOB-02-081915	Total/NA	Water	8260C SIM	
490-85658-6 - RE	SW-PAB-04-081915	Total/NA	Water	8260C SIM	
490-85658-7 - RE	RW-10 (120-130)-081915	Total/NA	Water	8260C SIM	
490-85658-8 - RE	TB-10-082015	Total/NA	Water	8260C SIM	
LCS 490-277754/10	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-277754/11	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-277754/26	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 278001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
230-603-I-5 MS	Matrix Spike	Total/NA	Water	8260C	
230-603-K-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	8260C	
490-85658-2	SR-3 Pond-081915	Total/NA	Water	8260C	
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	8260C	
490-85658-4	Dup-04-081915	Total/NA	Water	8260C	
490-85658-5	SW-NOB-02-081915	Total/NA	Water	8260C	
490-85658-6	SW-PAB-04-081915	Total/NA	Water	8260C	
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	8260C	
490-85658-8	TB-10-082015	Total/NA	Water	8260C	
LCS 490-278001/4	Lab Control Sample	Total/NA	Water	8260C	
MB 490-278001/7	Method Blank	Total/NA	Water	8260C	

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Prep Batch: 276166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	3510C	
490-85658-2	SR-3 Pond-081915	Total/NA	Water	3510C	
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	3510C	
490-85658-4	Dup-04-081915	Total/NA	Water	3510C	
490-85658-5	SW-NOB-02-081915	Total/NA	Water	3510C	
490-85658-6	SW-PAB-04-081915	Total/NA	Water	3510C	
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	3510C	
LCS 490-276166/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-276166/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 490-276166/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 276223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	3510C	
490-85658-2	SR-3 Pond-081915	Total/NA	Water	3510C	
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	3510C	
490-85658-4	Dup-04-081915	Total/NA	Water	3510C	
490-85658-5	SW-NOB-02-081915	Total/NA	Water	3510C	
490-85658-6	SW-PAB-04-081915	Total/NA	Water	3510C	
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	3510C	
LCS 490-276223/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-276223/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 490-276223/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 276355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	8270D SIM	276166
490-85658-2	SR-3 Pond-081915	Total/NA	Water	8270D SIM	276166
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	8270D SIM	276166
490-85658-4	Dup-04-081915	Total/NA	Water	8270D SIM	276166
490-85658-5	SW-NOB-02-081915	Total/NA	Water	8270D SIM	276166
490-85658-6	SW-PAB-04-081915	Total/NA	Water	8270D SIM	276166
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	8270D SIM	276166
LCS 490-276166/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	276166
LCSD 490-276166/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	276166
MB 490-276166/1-A	Method Blank	Total/NA	Water	8270D SIM	276166

Analysis Batch: 276363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	8270D	276223
490-85658-2	SR-3 Pond-081915	Total/NA	Water	8270D	276223
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	8270D	276223
490-85658-4	Dup-04-081915	Total/NA	Water	8270D	276223
490-85658-5	SW-NOB-02-081915	Total/NA	Water	8270D	276223
490-85658-6	SW-PAB-04-081915	Total/NA	Water	8270D	276223
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	8270D	276223
LCS 490-276223/2-A	Lab Control Sample	Total/NA	Water	8270D	276223
LCSD 490-276223/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	276223
MB 490-276223/1-A	Method Blank	Total/NA	Water	8270D	276223

GC Semi VOA

Prep Batch: 278338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	3510C	
490-85658-2	SR-3 Pond-081915	Total/NA	Water	3510C	
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	3510C	
490-85658-4	Dup-04-081915	Total/NA	Water	3510C	
490-85658-5	SW-NOB-02-081915	Total/NA	Water	3510C	
490-85658-6	SW-PAB-04-081915	Total/NA	Water	3510C	
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	3510C	
LCS 490-278338/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-278338/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 278890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	8082A	278338
490-85658-2	SR-3 Pond-081915	Total/NA	Water	8082A	278338
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	8082A	278338
490-85658-4	Dup-04-081915	Total/NA	Water	8082A	278338
490-85658-5	SW-NOB-02-081915	Total/NA	Water	8082A	278338
490-85658-6	SW-PAB-04-081915	Total/NA	Water	8082A	278338
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	8082A	278338
LCS 490-278338/2-A	Lab Control Sample	Total/NA	Water	8082A	278338
MB 490-278338/1-A	Method Blank	Total/NA	Water	8082A	278338

HPLC/IC

Analysis Batch: 277332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	9056A	
490-85658-1 MS	SR-3 Seep 2-081915	Total/NA	Water	9056A	
490-85658-1 MSD	SR-3 Seep 2-081915	Total/NA	Water	9056A	
490-85658-2	SR-3 Pond-081915	Total/NA	Water	9056A	
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	9056A	
490-85658-4	Dup-04-081915	Total/NA	Water	9056A	
490-85658-5	SW-NOB-02-081915	Total/NA	Water	9056A	
490-85658-6	SW-PAB-04-081915	Total/NA	Water	9056A	
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	9056A	
LCS 490-277332/7	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-277332/8	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-277332/6	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 275634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-J-12-B MS	Matrix Spike	Total/NA	Water	3010A	
490-85229-J-12-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	3010A	
490-85658-2	SR-3 Pond-081915	Total/NA	Water	3010A	
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	3010A	
490-85658-4	Dup-04-081915	Total/NA	Water	3010A	
490-85658-5	SW-NOB-02-081915	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 275634 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-6	SW-PAB-04-081915	Total/NA	Water	3010A	
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	3010A	
LCS 490-275634/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-275634/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 275984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-J-12-B MS	Matrix Spike	Total/NA	Water	6020A	275634
490-85229-J-12-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	275634
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	6020A	275634
490-85658-2	SR-3 Pond-081915	Total/NA	Water	6020A	275634
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	6020A	275634
490-85658-4	Dup-04-081915	Total/NA	Water	6020A	275634
490-85658-5	SW-NOB-02-081915	Total/NA	Water	6020A	275634
490-85658-6	SW-PAB-04-081915	Total/NA	Water	6020A	275634
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	6020A	275634
LCS 490-275634/2-A	Lab Control Sample	Total/NA	Water	6020A	275634
MB 490-275634/1-A	Method Blank	Total/NA	Water	6020A	275634

Filtration Batch: 276153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1	SR-3 Seep 2-081915	Dissolved	Water	Filtration	
490-85658-2	SR-3 Pond-081915	Dissolved	Water	Filtration	
490-85658-3	SR-3 Seep 1-081915	Dissolved	Water	Filtration	
490-85658-4	Dup-04-081915	Dissolved	Water	Filtration	
490-85658-5	SW-NOB-02-081915	Dissolved	Water	Filtration	
490-85658-6	SW-PAB-04-081915	Dissolved	Water	Filtration	
490-85658-7	RW-10 (120-130)-081915	Dissolved	Water	Filtration	

Prep Batch: 276235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1	SR-3 Seep 2-081915	Dissolved	Water	3005A	276153
490-85658-2	SR-3 Pond-081915	Dissolved	Water	3005A	276153
490-85658-3	SR-3 Seep 1-081915	Dissolved	Water	3005A	276153
490-85658-4	Dup-04-081915	Dissolved	Water	3005A	276153
490-85658-5	SW-NOB-02-081915	Dissolved	Water	3005A	276153
490-85658-6	SW-PAB-04-081915	Dissolved	Water	3005A	276153
490-85658-7	RW-10 (120-130)-081915	Dissolved	Water	3005A	276153
490-85759-A-1-D MS	Matrix Spike	Dissolved	Water	3005A	
490-85759-A-1-E MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	
LCS 490-276235/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 490-276235/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 276307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-J-12-B MS	Matrix Spike	Total/NA	Water	6020A	275634
490-85229-J-12-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	275634
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	6020A	275634
490-85658-2	SR-3 Pond-081915	Total/NA	Water	6020A	275634
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	6020A	275634
490-85658-4	Dup-04-081915	Total/NA	Water	6020A	275634

Metals (Continued)

Analysis Batch: 276307 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-5	SW-NOB-02-081915	Total/NA	Water	6020A	275634
490-85658-6	SW-PAB-04-081915	Total/NA	Water	6020A	275634
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	6020A	275634
LCS 490-275634/2-A	Lab Control Sample	Total/NA	Water	6020A	275634
MB 490-275634/1-A	Method Blank	Total/NA	Water	6020A	275634

Analysis Batch: 276838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1	SR-3 Seep 2-081915	Dissolved	Water	6020A	276235
490-85658-2	SR-3 Pond-081915	Dissolved	Water	6020A	276235
490-85658-3	SR-3 Seep 1-081915	Dissolved	Water	6020A	276235
490-85658-4	Dup-04-081915	Dissolved	Water	6020A	276235
490-85658-5	SW-NOB-02-081915	Dissolved	Water	6020A	276235
490-85658-6	SW-PAB-04-081915	Dissolved	Water	6020A	276235
490-85658-7	RW-10 (120-130)-081915	Dissolved	Water	6020A	276235
490-85759-A-1-D MS	Matrix Spike	Dissolved	Water	6020A	276235
490-85759-A-1-E MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	276235
LCS 490-276235/2-A	Lab Control Sample	Total Recoverable	Water	6020A	276235
MB 490-276235/1-A	Method Blank	Total Recoverable	Water	6020A	276235

Prep Batch: 276945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-G-1-C MS	Matrix Spike	Total/NA	Water	7470A	
490-85529-G-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	7470A	
490-85658-2	SR-3 Pond-081915	Total/NA	Water	7470A	
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	7470A	
490-85658-4	Dup-04-081915	Total/NA	Water	7470A	
490-85658-5	SW-NOB-02-081915	Total/NA	Water	7470A	
490-85658-6	SW-PAB-04-081915	Total/NA	Water	7470A	
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	7470A	
LCS 490-276945/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 490-276945/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 490-276945/1-A	Method Blank	Total/NA	Water	7470A	

Filtration Batch: 276971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1	SR-3 Seep 2-081915	Dissolved	Water	Filtration	
490-85658-2	SR-3 Pond-081915	Dissolved	Water	Filtration	
490-85658-3	SR-3 Seep 1-081915	Dissolved	Water	Filtration	
490-85658-4	Dup-04-081915	Dissolved	Water	Filtration	
490-85658-5	SW-NOB-02-081915	Dissolved	Water	Filtration	
490-85658-6	SW-PAB-04-081915	Dissolved	Water	Filtration	
490-85658-7	RW-10 (120-130)-081915	Dissolved	Water	Filtration	
490-86022-E-1-K MS	Matrix Spike	Dissolved	Water	Filtration	
490-86022-E-1-L MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	
LCS 490-276971/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-276971/1-B	Method Blank	Dissolved	Water	Filtration	

Metals (Continued)

Prep Batch: 277394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1	SR-3 Seep 2-081915	Dissolved	Water	7470A	276971
490-85658-2	SR-3 Pond-081915	Dissolved	Water	7470A	276971
490-85658-3	SR-3 Seep 1-081915	Dissolved	Water	7470A	276971
490-85658-4	Dup-04-081915	Dissolved	Water	7470A	276971
490-85658-5	SW-NOB-02-081915	Dissolved	Water	7470A	276971
490-85658-6	SW-PAB-04-081915	Dissolved	Water	7470A	276971
490-85658-7	RW-10 (120-130)-081915	Dissolved	Water	7470A	276971
490-86022-E-1-K MS	Matrix Spike	Dissolved	Water	7470A	276971
490-86022-E-1-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	276971
LCS 490-276971/2-B	Lab Control Sample	Dissolved	Water	7470A	276971
MB 490-276971/1-B	Method Blank	Dissolved	Water	7470A	276971

Analysis Batch: 277632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85529-G-1-C MS	Matrix Spike	Total/NA	Water	7470A	276945
490-85529-G-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	276945
490-85658-1	SR-3 Seep 2-081915	Dissolved	Water	7470A	277394
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	7470A	276945
490-85658-2	SR-3 Pond-081915	Dissolved	Water	7470A	277394
490-85658-2	SR-3 Pond-081915	Total/NA	Water	7470A	276945
490-85658-3	SR-3 Seep 1-081915	Dissolved	Water	7470A	277394
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	7470A	276945
490-85658-4	Dup-04-081915	Dissolved	Water	7470A	277394
490-85658-4	Dup-04-081915	Total/NA	Water	7470A	276945
490-85658-5	SW-NOB-02-081915	Dissolved	Water	7470A	277394
490-85658-5	SW-NOB-02-081915	Total/NA	Water	7470A	276945
490-85658-6	SW-PAB-04-081915	Dissolved	Water	7470A	277394
490-85658-6	SW-PAB-04-081915	Total/NA	Water	7470A	276945
490-85658-7	RW-10 (120-130)-081915	Dissolved	Water	7470A	277394
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	7470A	276945
490-86022-E-1-K MS	Matrix Spike	Dissolved	Water	7470A	277394
490-86022-E-1-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	277394
LCS 490-276945/2-A	Lab Control Sample	Total/NA	Water	7470A	276945
LCS 490-276971/2-B	Lab Control Sample	Dissolved	Water	7470A	277394
LCSD 490-276945/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	276945
MB 490-276945/1-A	Method Blank	Total/NA	Water	7470A	276945
MB 490-276971/1-B	Method Blank	Dissolved	Water	7470A	277394

Analysis Batch: 279689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85229-J-12-B MS	Matrix Spike	Total/NA	Water	6020A	275634
490-85229-J-12-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	275634
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	6020A	275634
490-85658-2	SR-3 Pond-081915	Total/NA	Water	6020A	275634
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	6020A	275634
490-85658-4	Dup-04-081915	Total/NA	Water	6020A	275634
490-85658-5	SW-NOB-02-081915	Total/NA	Water	6020A	275634
490-85658-6	SW-PAB-04-081915	Total/NA	Water	6020A	275634
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	6020A	275634
LCS 490-275634/2-A	Lab Control Sample	Total/NA	Water	6020A	275634
MB 490-275634/1-A	Method Blank	Total/NA	Water	6020A	275634

General Chemistry

Prep Batch: 275516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	9012B	
490-85658-2	SR-3 Pond-081915	Total/NA	Water	9012B	
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	9012B	
490-85658-4	Dup-04-081915	Total/NA	Water	9012B	
490-85658-5	SW-NOB-02-081915	Total/NA	Water	9012B	
490-85658-6 MS	SW-PAB-04-081915	Total/NA	Water	9012B	
490-85658-6 MSD	SW-PAB-04-081915	Total/NA	Water	9012B	
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	9012B	
490-85658-7 DU	RW-10 (120-130)-081915	Total/NA	Water	9012B	
LCS 490-275516/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 490-275516/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 276105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	9012B	275516
490-85658-2	SR-3 Pond-081915	Total/NA	Water	9012B	275516
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	9012B	275516
490-85658-4	Dup-04-081915	Total/NA	Water	9012B	275516
490-85658-5	SW-NOB-02-081915	Total/NA	Water	9012B	275516
490-85658-6 MS	SW-PAB-04-081915	Total/NA	Water	9012B	275516
490-85658-6 MSD	SW-PAB-04-081915	Total/NA	Water	9012B	275516
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	9012B	275516
490-85658-7 DU	RW-10 (120-130)-081915	Total/NA	Water	9012B	275516
LCS 490-275516/2-A	Lab Control Sample	Total/NA	Water	9012B	275516
MB 490-275516/1-A	Method Blank	Total/NA	Water	9012B	275516

Analysis Batch: 276134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-1	SR-3 Seep 2-081915	Total/NA	Water	SM 2320B	
490-85658-1 DU	SR-3 Seep 2-081915	Total/NA	Water	SM 2320B	
490-85658-2	SR-3 Pond-081915	Total/NA	Water	SM 2320B	
490-85658-3	SR-3 Seep 1-081915	Total/NA	Water	SM 2320B	
490-85658-4	Dup-04-081915	Total/NA	Water	SM 2320B	
490-85658-5	SW-NOB-02-081915	Total/NA	Water	SM 2320B	
490-85658-6	SW-PAB-04-081915	Total/NA	Water	SM 2320B	
490-85658-7	RW-10 (120-130)-081915	Total/NA	Water	SM 2320B	
LCS 490-276134/6	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 490-276134/7	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 490-276134/5	Method Blank	Total/NA	Water	SM 2320B	

Prep Batch: 276486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-6	SW-PAB-04-081915	Total/NA	Water	9012B	
LCS 490-276486/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 490-276486/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 277615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85658-6	SW-PAB-04-081915	Total/NA	Water	9012B	276486
LCS 490-276486/2-A	Lab Control Sample	Total/NA	Water	9012B	276486
MB 490-276486/1-A	Method Blank	Total/NA	Water	9012B	276486

Client Sample ID: SR-3 Seep 2-081915

Lab Sample ID: 490-85658-1

Date Collected: 08/19/15 11:15

Matrix: Water

Date Received: 08/21/15 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278001	09/01/15 16:43	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276673	08/27/15 16:46	RP	TAL NSH
Total/NA	Analysis	8260C SIM	RE	1	10 mL	10 mL	277393	08/29/15 21:23	MJH	TAL NSH
Total/NA	Prep	3510C			280 mL	1 mL	276223	08/26/15 09:03	MRM	TAL NSH
Total/NA	Analysis	8270D		1	280 mL	1 mL	276363	08/26/15 20:37	SNR	TAL NSH
Total/NA	Prep	3510C			265 mL	1 mL	276166	08/25/15 17:39	MDW	TAL NSH
Total/NA	Analysis	8270D SIM		1	265 mL	1 mL	276355	08/27/15 00:07	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	278338	09/02/15 06:09	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278890	09/03/15 19:38	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		277332	08/28/15 17:36	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 19:33	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 20:50	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276307	08/26/15 00:28	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 22:48	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277394	08/27/15 21:10	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276971	08/27/15 21:10	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277632	08/30/15 02:10	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	276945	08/27/15 18:18	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	277632	08/29/15 20:35	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	275516	08/22/15 14:09	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276105	08/25/15 13:41	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276134	08/22/15 15:24	SMB	TAL NSH

Client Sample ID: SR-3 Pond-081915

Lab Sample ID: 490-85658-2

Date Collected: 08/19/15 11:45

Matrix: Water

Date Received: 08/21/15 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278001	09/01/15 17:10	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276673	08/27/15 17:15	RP	TAL NSH
Total/NA	Analysis	8260C SIM	RE	1	10 mL	10 mL	277393	08/29/15 21:51	MJH	TAL NSH
Total/NA	Prep	3510C			280 mL	1 mL	276223	08/26/15 09:03	MRM	TAL NSH
Total/NA	Analysis	8270D		1	280 mL	1 mL	276363	08/26/15 21:00	SNR	TAL NSH
Total/NA	Prep	3510C			285 mL	1 mL	276166	08/25/15 17:39	MDW	TAL NSH
Total/NA	Analysis	8270D SIM		1	285 mL	1 mL	276355	08/27/15 00:34	SNR	TAL NSH
Total/NA	Prep	3510C			280 mL	1 mL	278338	09/02/15 06:09	ET	TAL NSH
Total/NA	Analysis	8082A		1	280 mL	1 mL	278890	09/03/15 19:54	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		277332	08/28/15 18:48	JHS	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 19:49	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 20:56	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276307	08/26/15 00:33	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 22:53	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277394	08/27/15 21:10	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276971	08/27/15 21:10	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277632	08/30/15 02:12	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	276945	08/27/15 18:18	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	277632	08/29/15 20:37	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	275516	08/22/15 14:09	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276105	08/25/15 13:42	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276134	08/22/15 15:34	SMB	TAL NSH

Client Sample ID: SR-3 Seep 1-081915

Date Collected: 08/19/15 12:10
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278001	09/01/15 17:37	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276673	08/27/15 17:44	RP	TAL NSH
Total/NA	Analysis	8260C SIM	RE	1	10 mL	10 mL	277393	08/29/15 22:20	MJH	TAL NSH
Total/NA	Prep	3510C			280 mL	1 mL	276223	08/26/15 09:03	MRM	TAL NSH
Total/NA	Analysis	8270D		1	280 mL	1 mL	276363	08/26/15 21:24	SNR	TAL NSH
Total/NA	Prep	3510C			275 mL	1 mL	276166	08/25/15 17:39	MDW	TAL NSH
Total/NA	Analysis	8270D SIM		1	275 mL	1 mL	276355	08/27/15 01:00	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	278338	09/02/15 06:09	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278890	09/03/15 20:09	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		277332	08/28/15 19:12	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 19:54	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 21:01	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276307	08/26/15 00:38	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 22:58	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277394	08/27/15 21:10	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276971	08/27/15 21:10	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277632	08/30/15 02:15	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	276945	08/27/15 18:18	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	277632	08/29/15 20:45	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	275516	08/22/15 14:09	ADJ	TAL NSH

Client Sample ID: SR-3 Seep 1-081915

Lab Sample ID: 490-85658-3

Date Collected: 08/19/15 12:10

Matrix: Water

Date Received: 08/21/15 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9012B		1	50 mL	50 mL	276105	08/25/15 13:46	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276134	08/22/15 15:38	SMB	TAL NSH

Client Sample ID: Dup-04-081915

Lab Sample ID: 490-85658-4

Date Collected: 08/19/15 12:00

Matrix: Water

Date Received: 08/21/15 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278001	09/01/15 18:04	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276673	08/27/15 18:12	RP	TAL NSH
Total/NA	Analysis	8260C SIM	RE	1	10 mL	10 mL	277754	08/31/15 17:43	RP	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276223	08/26/15 09:03	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	276363	08/26/15 21:47	SNR	TAL NSH
Total/NA	Prep	3510C			260 mL	1 mL	276166	08/25/15 17:39	MDW	TAL NSH
Total/NA	Analysis	8270D SIM		1	260 mL	1 mL	276355	08/27/15 01:26	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	278338	09/02/15 06:09	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278890	09/03/15 20:25	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		277332	08/28/15 19:36	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 19:59	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 21:06	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276307	08/26/15 00:43	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 23:03	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277394	08/27/15 21:10	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276971	08/27/15 21:10	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277632	08/30/15 02:17	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	276945	08/27/15 18:18	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	277632	08/29/15 20:47	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	275516	08/22/15 14:09	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276105	08/25/15 13:43	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276134	08/22/15 15:43	SMB	TAL NSH

Client Sample ID: SW-NOB-02-081915

Lab Sample ID: 490-85658-5

Date Collected: 08/19/15 14:30

Matrix: Water

Date Received: 08/21/15 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278001	09/01/15 18:32	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276673	08/27/15 18:41	RP	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C SIM	RE	1	10 mL	10 mL	277754	08/31/15 18:11	RP	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276223	08/26/15 09:03	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	276363	08/26/15 22:11	SNR	TAL NSH
Total/NA	Prep	3510C			260 mL	1 mL	276166	08/25/15 17:39	MDW	TAL NSH
Total/NA	Analysis	8270D SIM		1	260 mL	1 mL	276355	08/27/15 01:52	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	278338	09/02/15 06:09	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278890	09/03/15 20:41	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		277332	08/28/15 20:00	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 20:04	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 21:22	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276307	08/26/15 00:59	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 23:09	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277394	08/27/15 21:10	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276971	08/27/15 21:10	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277632	08/30/15 02:20	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	276945	08/27/15 18:18	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	277632	08/29/15 20:49	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	275516	08/22/15 14:09	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276105	08/25/15 13:44	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276134	08/22/15 15:49	SMB	TAL NSH

Client Sample ID: SW-PAB-04-081915

Date Collected: 08/19/15 15:00
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278001	09/01/15 18:59	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276673	08/27/15 19:10	RP	TAL NSH
Total/NA	Analysis	8260C SIM	RE	1	10 mL	10 mL	277754	08/31/15 18:40	RP	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276223	08/26/15 09:03	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	276363	08/26/15 22:34	SNR	TAL NSH
Total/NA	Prep	3510C			260 mL	1 mL	276166	08/25/15 17:39	MDW	TAL NSH
Total/NA	Analysis	8270D SIM		1	260 mL	1 mL	276355	08/27/15 02:19	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	278338	09/02/15 06:09	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278890	09/03/15 20:56	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		277332	08/28/15 20:24	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 20:10	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 21:27	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH

Client Sample ID: SW-PAB-04-081915

Lab Sample ID: 490-85658-6

Date Collected: 08/19/15 15:00

Matrix: Water

Date Received: 08/21/15 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020A		1	50 mL	50 mL	276307	08/26/15 01:04	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 23:14	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277394	08/27/15 21:10	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276971	08/27/15 21:10	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277632	08/30/15 02:22	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	276945	08/27/15 18:18	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	277632	08/29/15 20:52	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276486	08/26/15 13:30	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	277615	08/28/15 11:56	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276134	08/22/15 15:54	SMB	TAL NSH

Client Sample ID: RW-10 (120-130)-081915

Lab Sample ID: 490-85658-7

Date Collected: 08/19/15 09:25

Matrix: Water

Date Received: 08/21/15 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278001	09/01/15 19:26	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276673	08/27/15 19:38	RP	TAL NSH
Total/NA	Analysis	8260C SIM	RE	1	10 mL	10 mL	277754	08/31/15 19:09	RP	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276223	08/26/15 09:03	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	276363	08/26/15 22:58	SNR	TAL NSH
Total/NA	Prep	3510C			265 mL	1 mL	276166	08/25/15 17:39	MDW	TAL NSH
Total/NA	Analysis	8270D SIM		1	265 mL	1 mL	276355	08/27/15 02:45	SNR	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	278338	09/02/15 06:09	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	278890	09/03/15 21:12	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		277332	08/28/15 20:48	JHS	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276153	08/25/15 17:24	ZLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276235	08/26/15 09:20	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	276838	08/26/15 20:15	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	275984	08/24/15 21:32	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276307	08/26/15 01:09	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275634	08/24/15 09:53	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	279689	09/07/15 23:29	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277394	08/27/15 21:10	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276971	08/27/15 21:10	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277632	08/30/15 02:25	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	276945	08/27/15 18:18	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	277632	08/29/15 20:54	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	275516	08/22/15 14:09	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276105	08/25/15 13:44	SDL	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Client Sample ID: RW-10 (120-130)-081915

Date Collected: 08/19/15 09:25
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276134	08/22/15 16:02	SMB	TAL NSH

Client Sample ID: TB-10-082015

Date Collected: 08/20/15 00:01
Date Received: 08/21/15 09:20

Lab Sample ID: 490-85658-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278001	09/01/15 15:48	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276673	08/27/15 15:20	RP	TAL NSH
Total/NA	Analysis	8260C SIM	RE	1	10 mL	10 mL	277754	08/31/15 19:37	RP	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
9056A	Anions, Ion Chromatography	SW846	TAL NSH
6020A	Metals (ICP/MS)	SW846	TAL NSH
7470A	Mercury (CVAA)	SW846	TAL NSH
9012B	Cyanide, Total andor Amenable	SW846	TAL NSH
SM 2320B	Alkalinity	SM	TAL NSH

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85658-1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	TN965	09-30-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total
8260C		Water	Dichlorobromomethane
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	1,4-Dioxane
8260C SIM		Water	Ethylene Dibromide
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-85658 Chain of Custody

Cooler Received/Opened On 8/21/2015 @ 920

1. Tracking # 3169 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960358

2. Temperature of rep. sample or temp blank when opened: 0.0 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA

4. Were custody seals on outside of cooler? YES..NO...NA

If yes, how many and where:

5. Were the seals intact, signed, and dated correctly? YES...NO..NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO..NA

Were these signed and dated correctly? YES...NO..NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO..NA DA 8-21-15

b. Was there any observable headspace present in any VOA vial? YES..NO..NA DA 8-21-15

14. Was there a Trip Blank in this cooler? YES..NO..NA DA 8-21-15 If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES..NO..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES..NO Was a PIPE generated? YES..NO..#

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 6/24/09

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 490
85658

COOLER RECEIPT FORM

Cooler Received/Opened On 8/21/2015 @ 0920

1. Tracking # 3180 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 94660220

2. Temperature of rep. sample or temp blank when opened: 1.0 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) MDM

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 490
85658

COOLER RECEIPT FORM

Cooler Received/Opened On 8/21/2015 @ 0920

1. Tracking # 3170 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 94660220

2. Temperature of rep. sample or temp blank when opened: 0.7 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO (NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? YES...(NO)...NA

I certify that I opened the cooler and answered questions 1-6 (intial) MSM

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? YES..(NO)..NA

b. Was there any observable headspace present in any VOA vial? YES...NO..(NA)

14. Was there a Trip Blank in this cooler? YES..(NO)..NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA

16. Was residual chlorine present? YES...NO..(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
85658

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

9/21/2015

Client Information	Sampler: Robert Lostumbery	Lab PM: Brown, Shali	Carri	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD		Analysis Requested		Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filterl)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
				Preservation Code:																		
1	SR-3 Seep 2-081915	8/19/15	11:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
2	SR-3 Pond-081915	8/19/15	11:45	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
3	SR-3 Seep 1-081915	8/19/15	12:10	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
4	Dup-04-081915	8/19/15	12:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
5	SW-NOB-02-081915	8/19/15	14:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
6	SW-PAB-04-081915	8/19/15	15:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
7	RW-10(120-130)-081915	8/19/15	09:25	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
8	TB-10-082015	8/20/15	—	—	Water	N	N	✓	✓													
					Water																	
					Water																	
					Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/20/15 915	CORNERST		8/20/15 915	TA
2		8-20-15 1230	TA		8-21-15 0920	TAN
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.0, 1.0, 0.7

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 490-85658-1

Login Number: 85658
List Number: 1
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0C, 1.0C, 0.7C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-85779-1
Client Project/Site: FORD Ringwood Mines E203361
Revision: 1

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Tim Roeper

Cathy Gartner

Authorized for release by:
10/15/2015 3:07:35 PM
Cathy Gartner, Project Manager I
(615)301-5041
cathy.gartner@testamericainc.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-85779-1	SW-PMB-02-082015	Water	08/20/15 09:30	08/22/15 10:45
490-85779-2	SW-PMB-01-082015	Water	08/20/15 10:10	08/22/15 10:45
490-85779-3	SW-03-082015	Water	08/20/15 11:00	08/22/15 10:45
490-85779-4	SW-MRB-03-082015	Water	08/20/15 11:40	08/22/15 10:45
490-85779-5	SW-MRB-02-082015	Water	08/20/15 12:15	08/22/15 10:45
490-85779-6	SW-MRB-01-082015	Water	08/20/15 14:15	08/22/15 10:45
490-85779-7	SW-MRB-00-082015	Water	08/20/15 15:00	08/22/15 10:45
490-85779-8	PMP-Pond-082015	Water	08/20/15 16:00	08/22/15 10:45
490-85779-9	RW-10A (51-61)-082015	Water	08/20/15 09:15	08/22/15 10:45
490-85779-10	RW-8 (204-214)-082015	Water	08/20/15 14:15	08/22/15 10:45
490-85779-11	TB-11-082115	Water	08/21/15 00:01	08/22/15 10:45

Job ID: 490-85779-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 490-85779-1

Revised Report
Cyanide result was revised for SW-MRB-01-082015. This replaces the final report generated on 9/21/15.

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT
The samples were received on 8/22/2015 10:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.1° C, 2.3° C, 3.0° C and 3.9° C.

VOLATILE ORGANIC COMPOUNDS (GC MS)
Samples SW-PMB-02-082015 (490-85779-1), SW-PMB-01-082015 (490-85779-2), SW-03-082015 (490-85779-3), SW-MRB-03-082015 (490-85779-4), SW-MRB-02-082015 (490-85779-5), SW-MRB-01-082015 (490-85779-6), SW-MRB-00-082015 (490-85779-7), PMP-Pond-082015 (490-85779-8), RW-10A (51-61)-082015 (490-85779-9), RW-8 (204-214)-082015 (490-85779-10) and TB-11-082115 (490-85779-11) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 09/01/2015 and 09/02/2015.

Methylene Chloride was detected in method blank MB 490-278444/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Job ID: 490-85779-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

Cyclohexane failed the recovery criteria high for LCS 490-278001/4. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.
Cyclohexane failed the recovery criteria high for LCS 490-278444/3. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS SIM)

Samples SW-PMB-02-082015 (490-85779-1), SW-PMB-01-082015 (490-85779-2), SW-03-082015 (490-85779-3), SW-MRB-03-082015 (490-85779-4), SW-MRB-02-082015 (490-85779-5), SW-MRB-01-082015 (490-85779-6), SW-MRB-00-082015 (490-85779-7), PMP-Pond-082015 (490-85779-8), RW-10A (51-61)-082015 (490-85779-9), RW-8 (204-214)-082015 (490-85779-10) and TB-11-082115 (490-85779-11) were analyzed for volatile organic compounds (GC-MS SIM) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 09/02/2015.

1,2-Dichloroethane-d4 (Surr) failed the surrogate recovery criteria high for SW-03-082015 (490-85779-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. No effect on data

The continuing calibration verification (CCV) associated with batch 490-278441 recovered above the upper control limit for 4-Bromofluorobenzene (Surr). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCVIS 490-278441/2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GC MS)

Samples SW-PMB-02-082015 (490-85779-1), SW-PMB-01-082015 (490-85779-2), SW-03-082015 (490-85779-3), SW-MRB-03-082015 (490-85779-4), SW-MRB-02-082015 (490-85779-5), SW-MRB-01-082015 (490-85779-6), SW-MRB-00-082015 (490-85779-7), PMP-Pond-082015 (490-85779-8), RW-10A (51-61)-082015 (490-85779-9) and RW-8 (204-214)-082015 (490-85779-10) were analyzed for semivolatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/26/2015 and analyzed on 08/27/2015.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 490-276471 and analytical batch 490-276721 were outside control limits. During extraction the MS/MSD were inadvertently not spiked. The associated laboratory control sample (LCS) recoveries were within acceptance limits.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples SW-PMB-02-082015 (490-85779-1), SW-PMB-01-082015 (490-85779-2), SW-03-082015 (490-85779-3), SW-MRB-03-082015 (490-85779-4), SW-MRB-02-082015 (490-85779-5), SW-MRB-01-082015 (490-85779-6), SW-MRB-00-082015 (490-85779-7), PMP-Pond-082015 (490-85779-8), RW-10A (51-61)-082015 (490-85779-9) and RW-8 (204-214)-082015 (490-85779-10) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 09/03/2015 and analyzed on 09/04/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

Samples SW-PMB-02-082015 (490-85779-1), SW-PMB-01-082015 (490-85779-2), SW-03-082015 (490-85779-3), SW-MRB-03-082015 (490-85779-4), SW-MRB-02-082015 (490-85779-5), SW-MRB-01-082015 (490-85779-6), SW-MRB-00-082015 (490-85779-7), PMP-Pond-082015 (490-85779-8), RW-10A (51-61)-082015 (490-85779-9) and RW-8 (204-214)-082015 (490-85779-10) were analyzed for polycyclic aromatic hydrocarbons (PAHs) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/27/2015 and analyzed on 08/29/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 490-85779-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

DISSOLVED METALS (ICPMS)

Samples SW-PMB-02-082015 (490-85779-1), SW-PMB-01-082015 (490-85779-2), SW-03-082015 (490-85779-3), SW-MRB-03-082015 (490-85779-4), SW-MRB-02-082015 (490-85779-5), SW-MRB-01-082015 (490-85779-6), SW-MRB-00-082015 (490-85779-7), PMP-Pond-082015 (490-85779-8), RW-10A (51-61)-082015 (490-85779-9) and RW-8 (204-214)-082015 (490-85779-10) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/26/2015 and 08/27/2015 and analyzed on 09/03/2015.

Vanadium was detected in method blank MB 490-276511/1-B at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Samples SW-03-082015 (490-85779-3)[5X] and RW-10A (51-61)-082015 (490-85779-9)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

METALS (ICPMS)

Samples SW-PMB-02-082015 (490-85779-1), SW-PMB-01-082015 (490-85779-2), SW-03-082015 (490-85779-3), SW-MRB-03-082015 (490-85779-4), SW-MRB-02-082015 (490-85779-5), SW-MRB-01-082015 (490-85779-6), SW-MRB-00-082015 (490-85779-7), PMP-Pond-082015 (490-85779-8), RW-10A (51-61)-082015 (490-85779-9) and RW-8 (204-214)-082015 (490-85779-10) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/25/2015 and analyzed on 08/26/2015 and 08/27/2015.

Vanadium was detected in method blank MB 490-275892/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Sample RW-10A (51-61)-082015 (490-85779-9)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED MERCURY (CVAA)

Samples SW-PMB-02-082015 (490-85779-1), SW-PMB-01-082015 (490-85779-2), SW-03-082015 (490-85779-3), SW-MRB-03-082015 (490-85779-4), SW-MRB-02-082015 (490-85779-5), SW-MRB-01-082015 (490-85779-6), SW-MRB-00-082015 (490-85779-7), PMP-Pond-082015 (490-85779-8), RW-10A (51-61)-082015 (490-85779-9) and RW-8 (204-214)-082015 (490-85779-10) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/27/2015 and 08/31/2015 and analyzed on 08/31/2015 and 09/02/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples SW-PMB-02-082015 (490-85779-1), SW-PMB-01-082015 (490-85779-2), SW-03-082015 (490-85779-3), SW-MRB-03-082015 (490-85779-4), SW-MRB-02-082015 (490-85779-5), SW-MRB-01-082015 (490-85779-6), SW-MRB-00-082015 (490-85779-7), PMP-Pond-082015 (490-85779-8), RW-10A (51-61)-082015 (490-85779-9) and RW-8 (204-214)-082015 (490-85779-10) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 08/31/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ALKALINITY

Samples SW-PMB-02-082015 (490-85779-1), SW-PMB-01-082015 (490-85779-2), SW-03-082015 (490-85779-3), SW-MRB-03-082015 (490-85779-4), SW-MRB-02-082015 (490-85779-5), SW-MRB-01-082015 (490-85779-6), SW-MRB-00-082015 (490-85779-7), PMP-Pond-082015 (490-85779-8), RW-10A (51-61)-082015 (490-85779-9) and RW-8 (204-214)-082015 (490-85779-10) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/25/2015.

Job ID: 490-85779-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL CYANIDE

Samples SW-PMB-02-082015 (490-85779-1), SW-PMB-01-082015 (490-85779-2), SW-03-082015 (490-85779-3), SW-MRB-03-082015 (490-85779-4), SW-MRB-02-082015 (490-85779-5), SW-MRB-01-082015 (490-85779-6), SW-MRB-00-082015 (490-85779-7), PMP-Pond-082015 (490-85779-8), RW-10A (51-61)-082015 (490-85779-9) and RW-8 (204-214)-082015 (490-85779-10) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared on 08/25/2015 and analyzed on 08/27/2015.

Cyanide, Total failed the recovery criteria low for the MS of sample RW-8 (204-214)-082015MS (490-85779-10) in batch 490-276914. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS

Samples SW-PMB-02-082015 (490-85779-1), SW-PMB-01-082015 (490-85779-2), SW-03-082015 (490-85779-3), SW-MRB-03-082015 (490-85779-4), SW-MRB-02-082015 (490-85779-5), SW-MRB-01-082015 (490-85779-6), SW-MRB-00-082015 (490-85779-7), PMP-Pond-082015 (490-85779-8), RW-10A (51-61)-082015 (490-85779-9) and RW-8 (204-214)-082015 (490-85779-10) were analyzed for anions in accordance with SW-846 Method 9056. The samples were analyzed on 08/31/2015 and 09/01/2015.

Sample SW-03-082015 (490-85779-3)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-PMB-02-082015
Date Collected: 08/20/15 09:30
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-1
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/02/15 16:31	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/02/15 16:31	1
1,4-Dioxane	**2.3**	**J**	10	0.27	ug/L			09/02/15 16:31	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/02/15 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*09/02/15 16:31*	*1*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*		*09/02/15 16:31*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/02/15 16:31*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/02/15 16:31*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 14:53	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 14:53	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 14:53	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 14:53	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 14:53	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 14:53	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 14:53	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 14:53	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 14:53	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 14:53	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 14:53	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 14:53	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 14:53	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 14:53	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 14:53	1
Acetone	2.7	U	25	2.7	ug/L			09/02/15 14:53	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 14:53	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 14:53	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 14:53	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 14:53	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 14:53	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 14:53	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 14:53	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 14:53	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 14:53	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 14:53	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 14:53	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 14:53	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/02/15 14:53	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 14:53	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 14:53	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 14:53	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 14:53	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 14:53	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 14:53	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 14:53	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 14:53	1

Client Sample ID: SW-PMB-02-082015
Date Collected: 08/20/15 09:30
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 14:53	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 14:53	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 14:53	1
Toluene	0.17	U	1.0	0.17	ug/L			09/02/15 14:53	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 14:53	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 14:53	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 14:53	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 14:53	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 14:53	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 14:53	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 14:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 14:53*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 14:53*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*09/02/15 14:53*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*09/02/15 14:53*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/02/15 14:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*124*		*70 - 130*		*09/02/15 14:53*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 15:42	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 15:42	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 15:42	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 15:42	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 15:42	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 15:42	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*85*		*10 - 120*	*08/27/15 16:15*	*08/29/15 15:42*	*1*
2-Fluorobiphenyl (Surr)	*77*		*29 - 120*	*08/27/15 16:15*	*08/29/15 15:42*	*1*
Nitrobenzene-d5	*70*		*27 - 120*	*08/27/15 16:15*	*08/29/15 15:42*	*1*
Terphenyl-d14	*87*		*13 - 120*	*08/27/15 16:15*	*08/29/15 15:42*	*1*
2-Fluorophenol	*52*		*10 - 120*	*08/27/15 16:15*	*08/29/15 15:42*	*1*
Phenol-d5	*34*		*10 - 120*	*08/27/15 16:15*	*08/29/15 15:42*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 14:07	1
1,2,4,5-Tetrachlorobenzene	1.9	U	8.9	1.9	ug/L		08/26/15 15:47	08/27/15 14:07	1
2,3,4,6-Tetrachlorophenol	6.2	U	8.9	6.2	ug/L		08/26/15 15:47	08/27/15 14:07	1
2,4,5-Trichlorophenol	6.3	U	8.9	6.3	ug/L		08/26/15 15:47	08/27/15 14:07	1
2,4,6-Trichlorophenol	6.1	U	8.9	6.1	ug/L		08/26/15 15:47	08/27/15 14:07	1
2,4-Dichlorophenol	5.0	U	8.9	5.0	ug/L		08/26/15 15:47	08/27/15 14:07	1
2,4-Dimethylphenol	3.8	U	8.9	3.8	ug/L		08/26/15 15:47	08/27/15 14:07	1
2,4-Dinitrophenol	5.3	U	22	5.3	ug/L		08/26/15 15:47	08/27/15 14:07	1
2,4-Dinitrotoluene	2.9	U	8.9	2.9	ug/L		08/26/15 15:47	08/27/15 14:07	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-PMB-02-082015
Date Collected: 08/20/15 09:30
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 14:07	1
2-Chloronaphthalene	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 14:07	1
2-Chlorophenol	4.3	U	8.9	4.3	ug/L		08/26/15 15:47	08/27/15 14:07	1
2-Methylnaphthalene	0.36	U	1.8	0.36	ug/L		08/26/15 15:47	08/27/15 14:07	1
2-Methylphenol	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 14:07	1
2-Nitroaniline	3.3	U	22	3.3	ug/L		08/26/15 15:47	08/27/15 14:07	1
2-Nitrophenol	4.7	U	8.9	4.7	ug/L		08/26/15 15:47	08/27/15 14:07	1
3,3'-Dichlorobenzidine	2.9	U	8.9	2.9	ug/L		08/26/15 15:47	08/27/15 14:07	1
3 & 4 Methylphenol	2.0	U	8.9	2.0	ug/L		08/26/15 15:47	08/27/15 14:07	1
3-Nitroaniline	2.4	U	22	2.4	ug/L		08/26/15 15:47	08/27/15 14:07	1
4,6-Dinitro-2-methylphenol	8.3	U	22	8.3	ug/L		08/26/15 15:47	08/27/15 14:07	1
4-Bromophenyl phenyl ether	2.4	U	8.9	2.4	ug/L		08/26/15 15:47	08/27/15 14:07	1
4-Chloro-3-methylphenol	4.0	U	8.9	4.0	ug/L		08/26/15 15:47	08/27/15 14:07	1
4-Chloroaniline	3.8	U	8.9	3.8	ug/L		08/26/15 15:47	08/27/15 14:07	1
4-Chlorophenyl phenyl ether	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 14:07	1
4-Nitroaniline	2.8	U	22	2.8	ug/L		08/26/15 15:47	08/27/15 14:07	1
4-Nitrophenol	4.8	U	22	4.8	ug/L		08/26/15 15:47	08/27/15 14:07	1
Acenaphthylene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 14:07	1
Acetophenone	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 14:07	1
Anthracene	0.34	U	1.8	0.34	ug/L		08/26/15 15:47	08/27/15 14:07	1
Benzaldehyde	5.1	U	8.9	5.1	ug/L		08/26/15 15:47	08/27/15 14:07	1
Benzo[g,h,i]perylene	0.55	U	1.8	0.55	ug/L		08/26/15 15:47	08/27/15 14:07	1
Benzo[k]fluoranthene	0.33	U	1.8	0.33	ug/L		08/26/15 15:47	08/27/15 14:07	1
Bis(2-chloroethoxy)methane	2.8	U	8.9	2.8	ug/L		08/26/15 15:47	08/27/15 14:07	1
Bis(2-chloroethyl)ether	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 14:07	1
Butyl benzyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 15:47	08/27/15 14:07	1
Bis(2-ethylhexyl) phthalate	5.4	U	8.9	5.4	ug/L		08/26/15 15:47	08/27/15 14:07	1
Carbazole	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 14:07	1
Caprolactam	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 14:07	1
Chrysene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 14:07	1
Dibenz(a,h)anthracene	0.40	U	1.8	0.40	ug/L		08/26/15 15:47	08/27/15 14:07	1
Dibenzofuran	2.6	U	8.9	2.6	ug/L		08/26/15 15:47	08/27/15 14:07	1
Diethyl phthalate	2.7	U	8.9	2.7	ug/L		08/26/15 15:47	08/27/15 14:07	1
Dimethyl phthalate	2.8	U	8.9	2.8	ug/L		08/26/15 15:47	08/27/15 14:07	1
Di-n-butyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 15:47	08/27/15 14:07	1
Fluoranthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 14:07	1
Fluorene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 14:07	1
Hexachlorocyclopentadiene	1.6	U	8.9	1.6	ug/L		08/26/15 15:47	08/27/15 14:07	1
Hexachloroethane	1.7	U	8.9	1.7	ug/L		08/26/15 15:47	08/27/15 14:07	1
Indeno[1,2,3-cd]pyrene	0.37	U	1.8	0.37	ug/L		08/26/15 15:47	08/27/15 14:07	1
Isophorone	2.8	U	8.9	2.8	ug/L		08/26/15 15:47	08/27/15 14:07	1
Naphthalene	0.33	U	1.8	0.33	ug/L		08/26/15 15:47	08/27/15 14:07	1
Nitrobenzene	2.4	U	8.9	2.4	ug/L		08/26/15 15:47	08/27/15 14:07	1
N-Nitrosodi-n-propylamine	3.0	U	8.9	3.0	ug/L		08/26/15 15:47	08/27/15 14:07	1
N-Nitrosodiphenylamine	3.2	U	8.9	3.2	ug/L		08/26/15 15:47	08/27/15 14:07	1
Phenanthrene	0.38	U	1.8	0.38	ug/L		08/26/15 15:47	08/27/15 14:07	1
Phenol	1.3	U	8.9	1.3	ug/L		08/26/15 15:47	08/27/15 14:07	1
Pyrene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 14:07	1
Diphenyl	2.0	U	8.9	2.0	ug/L		08/26/15 15:47	08/27/15 14:07	1

Client Sample ID: SW-PMB-02-082015
Date Collected: 08/20/15 09:30
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 15:47	08/27/15 14:07	1
2,2'-oxybis[1-chloropropane]	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 14:07	1
Atrazine	2.6	U	8.9	2.6	ug/L		08/26/15 15:47	08/27/15 14:07	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/15 15:47*	*08/27/15 14:07*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*81*		*10 - 120*	*08/26/15 15:47*	*08/27/15 14:07*	*1*
2-Fluorobiphenyl (Surr)	*64*		*29 - 120*	*08/26/15 15:47*	*08/27/15 14:07*	*1*
2-Fluorophenol (Surr)	*30*		*10 - 120*	*08/26/15 15:47*	*08/27/15 14:07*	*1*
Nitrobenzene-d5 (Surr)	*59*		*27 - 120*	*08/26/15 15:47*	*08/27/15 14:07*	*1*
Phenol-d5 (Surr)	*19*		*10 - 120*	*08/26/15 15:47*	*08/27/15 14:07*	*1*
Terphenyl-d14 (Surr)	*70*		*13 - 120*	*08/26/15 15:47*	*08/27/15 14:07*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.38	U	0.45	0.38	ug/L		09/03/15 06:55	09/04/15 14:47	1
PCB-1221	0.30	U	0.45	0.30	ug/L		09/03/15 06:55	09/04/15 14:47	1
PCB-1232	0.36	U	0.45	0.36	ug/L		09/03/15 06:55	09/04/15 14:47	1
PCB-1242	0.20	U	0.45	0.20	ug/L		09/03/15 06:55	09/04/15 14:47	1
PCB-1248	0.13	U	0.45	0.13	ug/L		09/03/15 06:55	09/04/15 14:47	1
PCB-1254	0.15	U	0.45	0.15	ug/L		09/03/15 06:55	09/04/15 14:47	1
PCB-1260	0.16	U	0.45	0.16	ug/L		09/03/15 06:55	09/04/15 14:47	1
Polychlorinated biphenyls, Total	0.38	U	0.45	0.38	ug/L		09/03/15 06:55	09/04/15 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*83*		*10 - 150*	*09/03/15 06:55*	*09/04/15 14:47*	*1*
Tetrachloro-m-xylene	*70*		*10 - 150*	*09/03/15 06:55*	*09/04/15 14:47*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**87.0**		1.00	0.70	mg/L			08/31/15 15:31	1
Sulfate	**7.16**		1.00	0.60	mg/L			08/31/15 15:31	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.013**	**J**	0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 21:19	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:19	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:19	1
Barium	**0.015**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:19	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:19	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 21:19	1
Calcium	**26.7**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:19	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:19	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:19	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:19	1
Iron	**0.25**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:19	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:19	1
Magnesium	**8.7**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:19	1
Manganese	**0.22**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:19	1

Client Sample ID: SW-PMB-02-082015
Date Collected: 08/20/15 09:30
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-1
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:19	1
Potassium	**1.3**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:19	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 15:30	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:19	1
Sodium	**56.3**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:19	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:19	1
Vanadium	**0.0015**	**J B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 21:19	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:19	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 14:00	1
Antimony	**0.00060**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:00	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:00	1
Barium	**0.018**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:00	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:00	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 14:00	1
Calcium	**46.9**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:00	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:00	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:00	1
Copper	**0.0013**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:00	1
Iron	**0.023**	**J**	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:00	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:00	1
Magnesium	**13.1**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:00	1
Manganese	**0.16**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:00	1
Nickel	**0.0087**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:00	1
Potassium	**3.8**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:00	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 14:00	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:00	1
Sodium	**51.0**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:00	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:00	1
Vanadium	**0.0011**	**J B**	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 14:00	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:00	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:08	08/31/15 22:04	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 16:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 13:44	08/27/15 11:26	1
Bicarbonate Alkalinity as CaCO3	**138**		10.0	5.0	mg/L			08/25/15 18:19	1
Total Alkalinity as CaCO3	**138**		10.0	5.0	mg/L			08/25/15 18:19	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-PMB-01-082015
Date Collected: 08/20/15 10:10
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-2
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/02/15 16:59	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/02/15 16:59	1
1,4-Dioxane	**0.73**	**J**	10	0.27	ug/L			09/02/15 16:59	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/02/15 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*09/02/15 16:59*	*1*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*		*09/02/15 16:59*	*1*
Dibromofluoromethane (Surr)	*87*		*70 - 130*		*09/02/15 16:59*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/02/15 16:59*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 15:20	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 15:20	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 15:20	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 15:20	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 15:20	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 15:20	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 15:20	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 15:20	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 15:20	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 15:20	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 15:20	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 15:20	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 15:20	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 15:20	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 15:20	1
Acetone	2.7	U	25	2.7	ug/L			09/02/15 15:20	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 15:20	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 15:20	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 15:20	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 15:20	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 15:20	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 15:20	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 15:20	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 15:20	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 15:20	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 15:20	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 15:20	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 15:20	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/02/15 15:20	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 15:20	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 15:20	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 15:20	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 15:20	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 15:20	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 15:20	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 15:20	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 15:20	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-PMB-01-082015
Date Collected: 08/20/15 10:10
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 15:20	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 15:20	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 15:20	1
Toluene	0.17	U	1.0	0.17	ug/L			09/02/15 15:20	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 15:20	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 15:20	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 15:20	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 15:20	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 15:20	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 15:20	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 15:20	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 15:20*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 15:20*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/02/15 15:20*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*09/02/15 15:20*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/02/15 15:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*120*		*70 - 130*		*09/02/15 15:20*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 16:09	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 16:09	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 16:09	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 16:09	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 16:09	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 16:09	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*88*		*10 - 120*	*08/27/15 16:15*	*08/29/15 16:09*	*1*
2-Fluorobiphenyl (Surr)	*75*		*29 - 120*	*08/27/15 16:15*	*08/29/15 16:09*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*08/27/15 16:15*	*08/29/15 16:09*	*1*
Terphenyl-d14	*92*		*13 - 120*	*08/27/15 16:15*	*08/29/15 16:09*	*1*
2-Fluorophenol	*50*		*10 - 120*	*08/27/15 16:15*	*08/29/15 16:09*	*1*
Phenol-d5	*33*		*10 - 120*	*08/27/15 16:15*	*08/29/15 16:09*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 14:31	1
1,2,4,5-Tetrachlorobenzene	1.9	U	8.9	1.9	ug/L		08/26/15 15:47	08/27/15 14:31	1
2,3,4,6-Tetrachlorophenol	6.2	U	8.9	6.2	ug/L		08/26/15 15:47	08/27/15 14:31	1
2,4,5-Trichlorophenol	6.3	U	8.9	6.3	ug/L		08/26/15 15:47	08/27/15 14:31	1
2,4,6-Trichlorophenol	6.1	U	8.9	6.1	ug/L		08/26/15 15:47	08/27/15 14:31	1
2,4-Dichlorophenol	5.0	U	8.9	5.0	ug/L		08/26/15 15:47	08/27/15 14:31	1
2,4-Dimethylphenol	3.8	U	8.9	3.8	ug/L		08/26/15 15:47	08/27/15 14:31	1
2,4-Dinitrophenol	5.3	U	22	5.3	ug/L		08/26/15 15:47	08/27/15 14:31	1
2,4-Dinitrotoluene	2.9	U	8.9	2.9	ug/L		08/26/15 15:47	08/27/15 14:31	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-PMB-01-082015
Date Collected: 08/20/15 10:10
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 14:31	1
2-Chloronaphthalene	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 14:31	1
2-Chlorophenol	4.3	U	8.9	4.3	ug/L		08/26/15 15:47	08/27/15 14:31	1
2-Methylnaphthalene	0.36	U	1.8	0.36	ug/L		08/26/15 15:47	08/27/15 14:31	1
2-Methylphenol	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 14:31	1
2-Nitroaniline	3.3	U	22	3.3	ug/L		08/26/15 15:47	08/27/15 14:31	1
2-Nitrophenol	4.7	U	8.9	4.7	ug/L		08/26/15 15:47	08/27/15 14:31	1
3,3'-Dichlorobenzidine	2.9	U	8.9	2.9	ug/L		08/26/15 15:47	08/27/15 14:31	1
3 & 4 Methylphenol	2.0	U	8.9	2.0	ug/L		08/26/15 15:47	08/27/15 14:31	1
3-Nitroaniline	2.4	U	22	2.4	ug/L		08/26/15 15:47	08/27/15 14:31	1
4,6-Dinitro-2-methylphenol	8.3	U	22	8.3	ug/L		08/26/15 15:47	08/27/15 14:31	1
4-Bromophenyl phenyl ether	2.4	U	8.9	2.4	ug/L		08/26/15 15:47	08/27/15 14:31	1
4-Chloro-3-methylphenol	4.0	U	8.9	4.0	ug/L		08/26/15 15:47	08/27/15 14:31	1
4-Chloroaniline	3.8	U	8.9	3.8	ug/L		08/26/15 15:47	08/27/15 14:31	1
4-Chlorophenyl phenyl ether	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 14:31	1
4-Nitroaniline	2.8	U	22	2.8	ug/L		08/26/15 15:47	08/27/15 14:31	1
4-Nitrophenol	4.8	U	22	4.8	ug/L		08/26/15 15:47	08/27/15 14:31	1
Acenaphthylene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 14:31	1
Acetophenone	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 14:31	1
Anthracene	0.34	U	1.8	0.34	ug/L		08/26/15 15:47	08/27/15 14:31	1
Benzaldehyde	5.1	U	8.9	5.1	ug/L		08/26/15 15:47	08/27/15 14:31	1
Benzo[g,h,i]perylene	0.55	U	1.8	0.55	ug/L		08/26/15 15:47	08/27/15 14:31	1
Benzo[k]fluoranthene	0.33	U	1.8	0.33	ug/L		08/26/15 15:47	08/27/15 14:31	1
Bis(2-chloroethoxy)methane	2.8	U	8.9	2.8	ug/L		08/26/15 15:47	08/27/15 14:31	1
Bis(2-chloroethyl)ether	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 14:31	1
Butyl benzyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 15:47	08/27/15 14:31	1
Bis(2-ethylhexyl) phthalate	5.4	U	8.9	5.4	ug/L		08/26/15 15:47	08/27/15 14:31	1
Carbazole	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 14:31	1
Caprolactam	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 14:31	1
Chrysene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 14:31	1
Dibenz(a,h)anthracene	0.40	U	1.8	0.40	ug/L		08/26/15 15:47	08/27/15 14:31	1
Dibenzofuran	2.6	U	8.9	2.6	ug/L		08/26/15 15:47	08/27/15 14:31	1
Diethyl phthalate	2.7	U	8.9	2.7	ug/L		08/26/15 15:47	08/27/15 14:31	1
Dimethyl phthalate	2.8	U	8.9	2.8	ug/L		08/26/15 15:47	08/27/15 14:31	1
Di-n-butyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 15:47	08/27/15 14:31	1
Fluoranthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 14:31	1
Fluorene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 14:31	1
Hexachlorocyclopentadiene	1.6	U	8.9	1.6	ug/L		08/26/15 15:47	08/27/15 14:31	1
Hexachloroethane	1.7	U	8.9	1.7	ug/L		08/26/15 15:47	08/27/15 14:31	1
Indeno[1,2,3-cd]pyrene	0.37	U	1.8	0.37	ug/L		08/26/15 15:47	08/27/15 14:31	1
Isophorone	2.8	U	8.9	2.8	ug/L		08/26/15 15:47	08/27/15 14:31	1
Naphthalene	0.33	U	1.8	0.33	ug/L		08/26/15 15:47	08/27/15 14:31	1
Nitrobenzene	2.4	U	8.9	2.4	ug/L		08/26/15 15:47	08/27/15 14:31	1
N-Nitrosodi-n-propylamine	3.0	U	8.9	3.0	ug/L		08/26/15 15:47	08/27/15 14:31	1
N-Nitrosodiphenylamine	3.2	U	8.9	3.2	ug/L		08/26/15 15:47	08/27/15 14:31	1
Phenanthrene	0.38	U	1.8	0.38	ug/L		08/26/15 15:47	08/27/15 14:31	1
Phenol	1.3	U	8.9	1.3	ug/L		08/26/15 15:47	08/27/15 14:31	1
Pyrene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 14:31	1
Diphenyl	2.0	U	8.9	2.0	ug/L		08/26/15 15:47	08/27/15 14:31	1

Client Sample ID: SW-PMB-01-082015
Date Collected: 08/20/15 10:10
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 15:47	08/27/15 14:31	1
2,2'-oxybis[1-chloropropane]	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 14:31	1
Atrazine	2.6	U	8.9	2.6	ug/L		08/26/15 15:47	08/27/15 14:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tridecanoic acid	*4.8*	*J N*	*ug/L*		*7.83*	*638-53-9*	*08/26/15 15:47*	*08/27/15 14:31*	*1*
Octadecanoic acid	*3.0*	*J N*	*ug/L*		*8.47*	*57-11-4*	*08/26/15 15:47*	*08/27/15 14:31*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*91*		*10 - 120*	*08/26/15 15:47*	*08/27/15 14:31*	*1*
2-Fluorobiphenyl (Surr)	*68*		*29 - 120*	*08/26/15 15:47*	*08/27/15 14:31*	*1*
2-Fluorophenol (Surr)	*31*		*10 - 120*	*08/26/15 15:47*	*08/27/15 14:31*	*1*
Nitrobenzene-d5 (Surr)	*64*		*27 - 120*	*08/26/15 15:47*	*08/27/15 14:31*	*1*
Phenol-d5 (Surr)	*20*		*10 - 120*	*08/26/15 15:47*	*08/27/15 14:31*	*1*
Terphenyl-d14 (Surr)	*76*		*13 - 120*	*08/26/15 15:47*	*08/27/15 14:31*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.37	U	0.43	0.37	ug/L		09/03/15 06:55	09/04/15 15:03	1
PCB-1221	0.29	U	0.43	0.29	ug/L		09/03/15 06:55	09/04/15 15:03	1
PCB-1232	0.34	U	0.43	0.34	ug/L		09/03/15 06:55	09/04/15 15:03	1
PCB-1242	0.19	U	0.43	0.19	ug/L		09/03/15 06:55	09/04/15 15:03	1
PCB-1248	0.13	U	0.43	0.13	ug/L		09/03/15 06:55	09/04/15 15:03	1
PCB-1254	0.15	U	0.43	0.15	ug/L		09/03/15 06:55	09/04/15 15:03	1
PCB-1260	0.16	U	0.43	0.16	ug/L		09/03/15 06:55	09/04/15 15:03	1
Polychlorinated biphenyls, Total	0.37	U	0.43	0.37	ug/L		09/03/15 06:55	09/04/15 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*89*		*10 - 150*	*09/03/15 06:55*	*09/04/15 15:03*	*1*
Tetrachloro-m-xylene	*82*		*10 - 150*	*09/03/15 06:55*	*09/04/15 15:03*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**112**		1.00	0.70	mg/L			08/31/15 15:55	1
Sulfate	**1.76**		1.00	0.60	mg/L			08/31/15 15:55	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.071**		0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 21:25	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:25	1
Arsenic	**0.0010**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:25	1
Barium	**0.055**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:25	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:25	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 21:25	1
Calcium	**49.4**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:25	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:25	1
Cobalt	**0.00055**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:25	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:25	1
Iron	**7.8**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:25	1
Lead	**0.00049**	**J**	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:25	1
Magnesium	**9.1**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:25	1

Client Sample ID: SW-PMB-01-082015

Date Collected: 08/20/15 10:10
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-2

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.8**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:25	1
Nickel	**0.00053**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:25	1
Potassium	**8.4**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:25	1
Selenium	**0.00062**	**J**	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 15:36	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:25	1
Sodium	**61.7**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:25	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:25	1
Vanadium	**0.0016**	**J B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 21:25	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:25	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 14:06	1
Antimony	**0.00091**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:06	1
Arsenic	**0.00065**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:06	1
Barium	**0.046**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:06	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:06	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 14:06	1
Calcium	**49.3**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:06	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:06	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:06	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:06	1
Iron	**0.56**		0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:06	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:06	1
Magnesium	**9.5**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:06	1
Manganese	**1.1**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:06	1
Nickel	**0.00065**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:06	1
Potassium	**8.3**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:06	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 14:06	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:06	1
Sodium	**64.3**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:06	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:06	1
Vanadium	**0.00090**	**J B**	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 14:06	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:06	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:08	08/31/15 22:06	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 17:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 13:44	08/27/15 11:26	1
Bicarbonate Alkalinity as CaCO3	**147**		10.0	5.0	mg/L			08/25/15 18:24	1
Total Alkalinity as CaCO3	**147**		10.0	5.0	mg/L			08/25/15 18:24	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-03-082015
Date Collected: 08/20/15 11:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-3
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/02/15 17:28	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/02/15 17:28	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/02/15 17:28	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/02/15 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*132*	*X*	*70 - 130*		*09/02/15 17:28*	*1*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*		*09/02/15 17:28*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*09/02/15 17:28*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/02/15 17:28*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 15:48	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 15:48	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 15:48	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 15:48	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 15:48	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 15:48	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 15:48	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 15:48	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 15:48	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 15:48	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 15:48	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 15:48	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 15:48	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 15:48	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 15:48	1
Acetone	2.7	U	25	2.7	ug/L			09/02/15 15:48	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 15:48	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 15:48	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 15:48	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 15:48	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 15:48	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 15:48	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 15:48	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 15:48	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 15:48	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 15:48	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 15:48	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 15:48	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/02/15 15:48	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 15:48	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 15:48	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 15:48	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 15:48	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 15:48	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 15:48	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 15:48	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 15:48	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-03-082015
Date Collected: 08/20/15 11:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 15:48	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 15:48	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 15:48	1
Toluene	0.17	U	1.0	0.17	ug/L			09/02/15 15:48	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 15:48	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 15:48	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 15:48	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 15:48	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 15:48	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 15:48	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 15:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 15:48*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 15:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*09/02/15 15:48*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*09/02/15 15:48*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/02/15 15:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*127*		*70 - 130*		*09/02/15 15:48*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 16:37	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 16:37	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 16:37	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 16:37	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 16:37	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 16:37	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*85*		*10 - 120*	*08/27/15 16:15*	*08/29/15 16:37*	*1*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*	*08/27/15 16:15*	*08/29/15 16:37*	*1*
Nitrobenzene-d5	*90*		*27 - 120*	*08/27/15 16:15*	*08/29/15 16:37*	*1*
Terphenyl-d14	*91*		*13 - 120*	*08/27/15 16:15*	*08/29/15 16:37*	*1*
2-Fluorophenol	*48*		*10 - 120*	*08/27/15 16:15*	*08/29/15 16:37*	*1*
Phenol-d5	*33*		*10 - 120*	*08/27/15 16:15*	*08/29/15 16:37*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.28	U	1.8	0.28	ug/L		08/26/15 15:47	08/27/15 14:54	1
1,2,4,5-Tetrachlorobenzene	1.8	U	8.8	1.8	ug/L		08/26/15 15:47	08/27/15 14:54	1
2,3,4,6-Tetrachlorophenol	6.1	U	8.8	6.1	ug/L		08/26/15 15:47	08/27/15 14:54	1
2,4,5-Trichlorophenol	6.2	U	8.8	6.2	ug/L		08/26/15 15:47	08/27/15 14:54	1
2,4,6-Trichlorophenol	6.0	U	8.8	6.0	ug/L		08/26/15 15:47	08/27/15 14:54	1
2,4-Dichlorophenol	4.9	U	8.8	4.9	ug/L		08/26/15 15:47	08/27/15 14:54	1
2,4-Dimethylphenol	3.7	U	8.8	3.7	ug/L		08/26/15 15:47	08/27/15 14:54	1
2,4-Dinitrophenol	5.2	U	22	5.2	ug/L		08/26/15 15:47	08/27/15 14:54	1
2,4-Dinitrotoluene	2.8	U	8.8	2.8	ug/L		08/26/15 15:47	08/27/15 14:54	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-03-082015
Date Collected: 08/20/15 11:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.0	U	8.8	2.0	ug/L		08/26/15 15:47	08/27/15 14:54	1
2-Chloronaphthalene	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 14:54	1
2-Chlorophenol	4.2	U	8.8	4.2	ug/L		08/26/15 15:47	08/27/15 14:54	1
2-Methylnaphthalene	0.35	U	1.8	0.35	ug/L		08/26/15 15:47	08/27/15 14:54	1
2-Methylphenol	2.0	U	8.8	2.0	ug/L		08/26/15 15:47	08/27/15 14:54	1
2-Nitroaniline	3.2	U	22	3.2	ug/L		08/26/15 15:47	08/27/15 14:54	1
2-Nitrophenol	4.6	U	8.8	4.6	ug/L		08/26/15 15:47	08/27/15 14:54	1
3,3'-Dichlorobenzidine	2.9	U	8.8	2.9	ug/L		08/26/15 15:47	08/27/15 14:54	1
3 & 4 Methylphenol	1.9	U	8.8	1.9	ug/L		08/26/15 15:47	08/27/15 14:54	1
3-Nitroaniline	2.4	U	22	2.4	ug/L		08/26/15 15:47	08/27/15 14:54	1
4,6-Dinitro-2-methylphenol	8.2	U	22	8.2	ug/L		08/26/15 15:47	08/27/15 14:54	1
4-Bromophenyl phenyl ether	2.4	U	8.8	2.4	ug/L		08/26/15 15:47	08/27/15 14:54	1
4-Chloro-3-methylphenol	3.9	U	8.8	3.9	ug/L		08/26/15 15:47	08/27/15 14:54	1
4-Chloroaniline	3.7	U	8.8	3.7	ug/L		08/26/15 15:47	08/27/15 14:54	1
4-Chlorophenyl phenyl ether	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 14:54	1
4-Nitroaniline	2.7	U	22	2.7	ug/L		08/26/15 15:47	08/27/15 14:54	1
4-Nitrophenol	4.7	U	22	4.7	ug/L		08/26/15 15:47	08/27/15 14:54	1
Acenaphthylene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 14:54	1
Acetophenone	2.0	U	8.8	2.0	ug/L		08/26/15 15:47	08/27/15 14:54	1
Anthracene	0.33	U	1.8	0.33	ug/L		08/26/15 15:47	08/27/15 14:54	1
Benzaldehyde	5.0	U	8.8	5.0	ug/L		08/26/15 15:47	08/27/15 14:54	1
Benzo[g,h,i]perylene	0.54	U	1.8	0.54	ug/L		08/26/15 15:47	08/27/15 14:54	1
Benzo[k]fluoranthene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 14:54	1
Bis(2-chloroethoxy)methane	2.7	U	8.8	2.7	ug/L		08/26/15 15:47	08/27/15 14:54	1
Bis(2-chloroethyl)ether	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 14:54	1
Butyl benzyl phthalate	2.2	U	8.8	2.2	ug/L		08/26/15 15:47	08/27/15 14:54	1
Bis(2-ethylhexyl) phthalate	5.3	U	8.8	5.3	ug/L		08/26/15 15:47	08/27/15 14:54	1
Carbazole	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 14:54	1
Caprolactam	2.1	U	8.8	2.1	ug/L		08/26/15 15:47	08/27/15 14:54	1
Chrysene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 14:54	1
Dibenz(a,h)anthracene	0.39	U	1.8	0.39	ug/L		08/26/15 15:47	08/27/15 14:54	1
Dibenzofuran	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 14:54	1
Diethyl phthalate	2.6	U	8.8	2.6	ug/L		08/26/15 15:47	08/27/15 14:54	1
Dimethyl phthalate	2.7	U	8.8	2.7	ug/L		08/26/15 15:47	08/27/15 14:54	1
Di-n-butyl phthalate	2.2	U	8.8	2.2	ug/L		08/26/15 15:47	08/27/15 14:54	1
Fluoranthene	0.28	U	1.8	0.28	ug/L		08/26/15 15:47	08/27/15 14:54	1
Fluorene	0.28	U	1.8	0.28	ug/L		08/26/15 15:47	08/27/15 14:54	1
Hexachlorocyclopentadiene	1.6	U	8.8	1.6	ug/L		08/26/15 15:47	08/27/15 14:54	1
Hexachloroethane	1.7	U	8.8	1.7	ug/L		08/26/15 15:47	08/27/15 14:54	1
Indeno[1,2,3-cd]pyrene	0.36	U	1.8	0.36	ug/L		08/26/15 15:47	08/27/15 14:54	1
Isophorone	2.7	U	8.8	2.7	ug/L		08/26/15 15:47	08/27/15 14:54	1
Naphthalene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 14:54	1
Nitrobenzene	2.4	U	8.8	2.4	ug/L		08/26/15 15:47	08/27/15 14:54	1
N-Nitrosodi-n-propylamine	3.0	U	8.8	3.0	ug/L		08/26/15 15:47	08/27/15 14:54	1
N-Nitrosodiphenylamine	3.2	U	8.8	3.2	ug/L		08/26/15 15:47	08/27/15 14:54	1
Phenanthrene	0.37	U	1.8	0.37	ug/L		08/26/15 15:47	08/27/15 14:54	1
Phenol	1.3	U	8.8	1.3	ug/L		08/26/15 15:47	08/27/15 14:54	1
Pyrene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 14:54	1
Diphenyl	1.9	U	8.8	1.9	ug/L		08/26/15 15:47	08/27/15 14:54	1

Client Sample ID: SW-03-082015

Date Collected: 08/20/15 11:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-3

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.2	U	8.8	2.2	ug/L		08/26/15 15:47	08/27/15 14:54	1
2,2'-oxybis[1-chloropropane]	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 14:54	1
Atrazine	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 14:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
9-Octadecenoic acid, (E)-	*3.2*	*J N*	*ug/L*		*8.40*	*112-79-8*	*08/26/15 15:47*	*08/27/15 14:54*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*97*		*10 - 120*	*08/26/15 15:47*	*08/27/15 14:54*	*1*
2-Fluorobiphenyl (Surr)	*64*		*29 - 120*	*08/26/15 15:47*	*08/27/15 14:54*	*1*
2-Fluorophenol (Surr)	*30*		*10 - 120*	*08/26/15 15:47*	*08/27/15 14:54*	*1*
Nitrobenzene-d5 (Surr)	*59*		*27 - 120*	*08/26/15 15:47*	*08/27/15 14:54*	*1*
Phenol-d5 (Surr)	*19*		*10 - 120*	*08/26/15 15:47*	*08/27/15 14:54*	*1*
Terphenyl-d14 (Surr)	*76*		*13 - 120*	*08/26/15 15:47*	*08/27/15 14:54*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.37	U	0.43	0.37	ug/L		09/03/15 06:55	09/04/15 15:19	1
PCB-1221	0.29	U	0.43	0.29	ug/L		09/03/15 06:55	09/04/15 15:19	1
PCB-1232	0.34	U	0.43	0.34	ug/L		09/03/15 06:55	09/04/15 15:19	1
PCB-1242	0.19	U	0.43	0.19	ug/L		09/03/15 06:55	09/04/15 15:19	1
PCB-1248	0.13	U	0.43	0.13	ug/L		09/03/15 06:55	09/04/15 15:19	1
PCB-1254	0.15	U	0.43	0.15	ug/L		09/03/15 06:55	09/04/15 15:19	1
PCB-1260	0.16	U	0.43	0.16	ug/L		09/03/15 06:55	09/04/15 15:19	1
Polychlorinated biphenyls, Total	0.37	U	0.43	0.37	ug/L		09/03/15 06:55	09/04/15 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*101*		*10 - 150*	*09/03/15 06:55*	*09/04/15 15:19*	*1*
Tetrachloro-m-xylene	*86*		*10 - 150*	*09/03/15 06:55*	*09/04/15 15:19*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**520**		5.00	3.50	mg/L			08/31/15 16:43	5
Sulfate	**14.1**		1.00	0.60	mg/L			08/31/15 16:19	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.010**	**J**	0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 21:30	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:30	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:30	1
Barium	**0.045**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:30	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:30	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 21:30	1
Calcium	**45.9**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:30	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:30	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:30	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:30	1
Iron	**0.24**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:30	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:30	1
Magnesium	**12.6**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:30	1
Manganese	**0.39**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:30	1

Client Sample ID: SW-03-082015

Date Collected: 08/20/15 11:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-3

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:30	1
Potassium	**2.0**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:30	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 15:41	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:30	1
Sodium	**284**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:30	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:30	1
Vanadium	**0.0015**	**J B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 21:30	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:30	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 14:11	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:11	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:11	1
Barium	**0.051**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:11	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:11	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 14:11	1
Calcium	**46.8**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:11	1
Chromium	**0.00078**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:11	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:11	1
Copper	**0.0011**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:11	1
Iron	**0.066**		0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:11	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:11	1
Magnesium	**13.4**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:11	1
Manganese	**0.39**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:11	1
Nickel	**0.00086**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:11	1
Potassium	**2.1**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:11	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 14:11	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:11	1
Sodium	**309**		5.0	0.63	mg/L		08/26/15 17:11	09/03/15 14:16	5
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:11	1
Vanadium	**0.00092**	**J B**	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 14:11	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:11	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:08	08/31/15 22:09	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 17:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 13:44	08/27/15 11:27	1
Bicarbonate Alkalinity as CaCO3	**47.0**		10.0	5.0	mg/L			08/25/15 18:30	1
Total Alkalinity as CaCO3	**47.0**		10.0	5.0	mg/L			08/25/15 18:30	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-MRB-03-082015
Date Collected: 08/20/15 11:40
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-4
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/02/15 17:57	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/02/15 17:57	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/02/15 17:57	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/02/15 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*09/02/15 17:57*	*1*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*		*09/02/15 17:57*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/02/15 17:57*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*09/02/15 17:57*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 16:15	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 16:15	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 16:15	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 16:15	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 16:15	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 16:15	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 16:15	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 16:15	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 16:15	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 16:15	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 16:15	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 16:15	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 16:15	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 16:15	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 16:15	1
Acetone	2.7	U	25	2.7	ug/L			09/02/15 16:15	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 16:15	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 16:15	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 16:15	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 16:15	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 16:15	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 16:15	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 16:15	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 16:15	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 16:15	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 16:15	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 16:15	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 16:15	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/02/15 16:15	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 16:15	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 16:15	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 16:15	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 16:15	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 16:15	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 16:15	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 16:15	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 16:15	1

Client Sample ID: SW-MRB-03-082015
Date Collected: 08/20/15 11:40
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 16:15	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 16:15	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 16:15	1
Toluene	0.17	U	1.0	0.17	ug/L			09/02/15 16:15	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 16:15	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 16:15	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 16:15	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 16:15	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 16:15	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 16:15	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 16:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 16:15*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 16:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*09/02/15 16:15*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*09/02/15 16:15*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/02/15 16:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*127*		*70 - 130*		*09/02/15 16:15*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 17:04	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 17:04	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 17:04	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 17:04	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 17:04	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 17:04	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*85*		*10 - 120*	*08/27/15 16:15*	*08/29/15 17:04*	*1*
2-Fluorobiphenyl (Surr)	*74*		*29 - 120*	*08/27/15 16:15*	*08/29/15 17:04*	*1*
Nitrobenzene-d5	*88*		*27 - 120*	*08/27/15 16:15*	*08/29/15 17:04*	*1*
Terphenyl-d14	*95*		*13 - 120*	*08/27/15 16:15*	*08/29/15 17:04*	*1*
2-Fluorophenol	*54*		*10 - 120*	*08/27/15 16:15*	*08/29/15 17:04*	*1*
Phenol-d5	*38*		*10 - 120*	*08/27/15 16:15*	*08/29/15 17:04*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.28	U	1.8	0.28	ug/L		08/26/15 15:47	08/27/15 15:18	1
1,2,4,5-Tetrachlorobenzene	1.8	U	8.8	1.8	ug/L		08/26/15 15:47	08/27/15 15:18	1
2,3,4,6-Tetrachlorophenol	6.1	U	8.8	6.1	ug/L		08/26/15 15:47	08/27/15 15:18	1
2,4,5-Trichlorophenol	6.2	U	8.8	6.2	ug/L		08/26/15 15:47	08/27/15 15:18	1
2,4,6-Trichlorophenol	6.0	U	8.8	6.0	ug/L		08/26/15 15:47	08/27/15 15:18	1
2,4-Dichlorophenol	4.9	U	8.8	4.9	ug/L		08/26/15 15:47	08/27/15 15:18	1
2,4-Dimethylphenol	3.7	U	8.8	3.7	ug/L		08/26/15 15:47	08/27/15 15:18	1
2,4-Dinitrophenol	5.2	U	22	5.2	ug/L		08/26/15 15:47	08/27/15 15:18	1
2,4-Dinitrotoluene	2.8	U	8.8	2.8	ug/L		08/26/15 15:47	08/27/15 15:18	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-MRB-03-082015
Date Collected: 08/20/15 11:40
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.0	U	8.8	2.0	ug/L		08/26/15 15:47	08/27/15 15:18	1
2-Chloronaphthalene	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 15:18	1
2-Chlorophenol	4.2	U	8.8	4.2	ug/L		08/26/15 15:47	08/27/15 15:18	1
2-Methylnaphthalene	0.35	U	1.8	0.35	ug/L		08/26/15 15:47	08/27/15 15:18	1
2-Methylphenol	2.0	U	8.8	2.0	ug/L		08/26/15 15:47	08/27/15 15:18	1
2-Nitroaniline	3.2	U	22	3.2	ug/L		08/26/15 15:47	08/27/15 15:18	1
2-Nitrophenol	4.6	U	8.8	4.6	ug/L		08/26/15 15:47	08/27/15 15:18	1
3,3'-Dichlorobenzidine	2.9	U	8.8	2.9	ug/L		08/26/15 15:47	08/27/15 15:18	1
3 & 4 Methylphenol	1.9	U	8.8	1.9	ug/L		08/26/15 15:47	08/27/15 15:18	1
3-Nitroaniline	2.4	U	22	2.4	ug/L		08/26/15 15:47	08/27/15 15:18	1
4,6-Dinitro-2-methylphenol	8.2	U	22	8.2	ug/L		08/26/15 15:47	08/27/15 15:18	1
4-Bromophenyl phenyl ether	2.4	U	8.8	2.4	ug/L		08/26/15 15:47	08/27/15 15:18	1
4-Chloro-3-methylphenol	3.9	U	8.8	3.9	ug/L		08/26/15 15:47	08/27/15 15:18	1
4-Chloroaniline	3.7	U	8.8	3.7	ug/L		08/26/15 15:47	08/27/15 15:18	1
4-Chlorophenyl phenyl ether	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 15:18	1
4-Nitroaniline	2.7	U	22	2.7	ug/L		08/26/15 15:47	08/27/15 15:18	1
4-Nitrophenol	4.7	U	22	4.7	ug/L		08/26/15 15:47	08/27/15 15:18	1
Acenaphthylene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 15:18	1
Acetophenone	2.0	U	8.8	2.0	ug/L		08/26/15 15:47	08/27/15 15:18	1
Anthracene	0.33	U	1.8	0.33	ug/L		08/26/15 15:47	08/27/15 15:18	1
Benzaldehyde	5.0	U	8.8	5.0	ug/L		08/26/15 15:47	08/27/15 15:18	1
Benzo[g,h,i]perylene	0.54	U	1.8	0.54	ug/L		08/26/15 15:47	08/27/15 15:18	1
Benzo[k]fluoranthene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 15:18	1
Bis(2-chloroethoxy)methane	2.7	U	8.8	2.7	ug/L		08/26/15 15:47	08/27/15 15:18	1
Bis(2-chloroethyl)ether	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 15:18	1
Butyl benzyl phthalate	2.2	U	8.8	2.2	ug/L		08/26/15 15:47	08/27/15 15:18	1
Bis(2-ethylhexyl) phthalate	5.3	U	8.8	5.3	ug/L		08/26/15 15:47	08/27/15 15:18	1
Carbazole	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 15:18	1
Caprolactam	2.1	U	8.8	2.1	ug/L		08/26/15 15:47	08/27/15 15:18	1
Chrysene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 15:18	1
Dibenz(a,h)anthracene	0.39	U	1.8	0.39	ug/L		08/26/15 15:47	08/27/15 15:18	1
Dibenzofuran	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 15:18	1
Diethyl phthalate	2.6	U	8.8	2.6	ug/L		08/26/15 15:47	08/27/15 15:18	1
Dimethyl phthalate	2.7	U	8.8	2.7	ug/L		08/26/15 15:47	08/27/15 15:18	1
Di-n-butyl phthalate	2.2	U	8.8	2.2	ug/L		08/26/15 15:47	08/27/15 15:18	1
Fluoranthene	0.28	U	1.8	0.28	ug/L		08/26/15 15:47	08/27/15 15:18	1
Fluorene	0.28	U	1.8	0.28	ug/L		08/26/15 15:47	08/27/15 15:18	1
Hexachlorocyclopentadiene	1.6	U	8.8	1.6	ug/L		08/26/15 15:47	08/27/15 15:18	1
Hexachloroethane	1.7	U	8.8	1.7	ug/L		08/26/15 15:47	08/27/15 15:18	1
Indeno[1,2,3-cd]pyrene	0.36	U	1.8	0.36	ug/L		08/26/15 15:47	08/27/15 15:18	1
Isophorone	2.7	U	8.8	2.7	ug/L		08/26/15 15:47	08/27/15 15:18	1
Naphthalene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 15:18	1
Nitrobenzene	2.4	U	8.8	2.4	ug/L		08/26/15 15:47	08/27/15 15:18	1
N-Nitrosodi-n-propylamine	3.0	U	8.8	3.0	ug/L		08/26/15 15:47	08/27/15 15:18	1
N-Nitrosodiphenylamine	3.2	U	8.8	3.2	ug/L		08/26/15 15:47	08/27/15 15:18	1
Phenanthrene	0.37	U	1.8	0.37	ug/L		08/26/15 15:47	08/27/15 15:18	1
Phenol	1.3	U	8.8	1.3	ug/L		08/26/15 15:47	08/27/15 15:18	1
Pyrene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 15:18	1
Diphenyl	1.9	U	8.8	1.9	ug/L		08/26/15 15:47	08/27/15 15:18	1

Client Sample ID: SW-MRB-03-082015

Date Collected: 08/20/15 11:40
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-4

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.2	U	8.8	2.2	ug/L		08/26/15 15:47	08/27/15 15:18	1
2,2'-oxybis[1-chloropropane]	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 15:18	1
Atrazine	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 15:18	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Octadecanoic acid	*3.8*	*J N*	*ug/L*		*8.40*	*57-11-4*	*08/26/15 15:47*	*08/27/15 15:18*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*79*		*10 - 120*	*08/26/15 15:47*	*08/27/15 15:18*	*1*
2-Fluorobiphenyl (Surr)	*61*		*29 - 120*	*08/26/15 15:47*	*08/27/15 15:18*	*1*
2-Fluorophenol (Surr)	*30*		*10 - 120*	*08/26/15 15:47*	*08/27/15 15:18*	*1*
Nitrobenzene-d5 (Surr)	*59*		*27 - 120*	*08/26/15 15:47*	*08/27/15 15:18*	*1*
Phenol-d5 (Surr)	*20*		*10 - 120*	*08/26/15 15:47*	*08/27/15 15:18*	*1*
Terphenyl-d14 (Surr)	*66*		*13 - 120*	*08/26/15 15:47*	*08/27/15 15:18*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/03/15 06:55	09/04/15 15:34	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/03/15 06:55	09/04/15 15:34	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/03/15 06:55	09/04/15 15:34	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/03/15 06:55	09/04/15 15:34	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/03/15 06:55	09/04/15 15:34	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/03/15 06:55	09/04/15 15:34	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/03/15 06:55	09/04/15 15:34	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/03/15 06:55	09/04/15 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*98*		*10 - 150*	*09/03/15 06:55*	*09/04/15 15:34*	*1*
Tetrachloro-m-xylene	*76*		*10 - 150*	*09/03/15 06:55*	*09/04/15 15:34*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**126**		1.00	0.70	mg/L			08/31/15 17:07	1
Sulfate	**6.40**		1.00	0.60	mg/L			08/31/15 17:07	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.027**		0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 21:36	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:36	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:36	1
Barium	**0.016**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:36	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:36	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 21:36	1
Calcium	**48.5**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:36	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:36	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:36	1
Copper	**0.00085**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:36	1
Iron	**0.42**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:36	1
Lead	**0.00029**	**J**	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:36	1
Magnesium	**12.8**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:36	1
Manganese	**0.23**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:36	1

Client Sample ID: SW-MRB-03-082015
Date Collected: 08/20/15 11:40
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-4
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:36	1
Potassium	**3.8**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:36	1
Selenium	**0.00097**	**J**	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 15:47	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:36	1
Sodium	**49.7**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:36	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:36	1
Vanadium	**0.0015**	**J B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 21:36	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:36	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 14:21	1
Antimony	**0.00094**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:21	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:21	1
Barium	**0.016**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:21	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:21	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 14:21	1
Calcium	**25.9**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:21	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:21	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:21	1
Copper	**0.00077**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:21	1
Iron	**0.036**		0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:21	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:21	1
Magnesium	**8.8**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:21	1
Manganese	**0.17**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:21	1
Nickel	**0.00062**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:21	1
Potassium	**1.3**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:21	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 14:21	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:21	1
Sodium	**57.6**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:21	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:21	1
Vanadium	**0.0011**	**J B**	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 14:21	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:21	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:08	08/31/15 22:11	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 17:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 13:44	08/27/15 11:28	1
Bicarbonate Alkalinity as CaCO3	**38.7**		10.0	5.0	mg/L			08/25/15 18:35	1
Total Alkalinity as CaCO3	**38.7**		10.0	5.0	mg/L			08/25/15 18:35	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-MRB-02-082015
Date Collected: 08/20/15 12:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-5
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/02/15 18:25	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/02/15 18:25	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/02/15 18:25	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/02/15 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*09/02/15 18:25*	*1*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*		*09/02/15 18:25*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/02/15 18:25*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/02/15 18:25*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 16:42	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 16:42	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 16:42	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 16:42	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 16:42	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 16:42	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 16:42	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 16:42	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 16:42	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 16:42	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 16:42	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 16:42	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 16:42	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 16:42	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 16:42	1
Acetone	2.7	U	25	2.7	ug/L			09/02/15 16:42	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 16:42	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 16:42	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 16:42	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 16:42	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 16:42	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 16:42	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 16:42	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 16:42	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 16:42	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 16:42	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 16:42	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 16:42	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/02/15 16:42	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 16:42	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 16:42	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 16:42	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 16:42	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 16:42	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 16:42	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 16:42	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 16:42	1

Client Sample ID: SW-MRB-02-082015
Date Collected: 08/20/15 12:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 16:42	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 16:42	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 16:42	1
Toluene	**0.33**	**J**	1.0	0.17	ug/L			09/02/15 16:42	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 16:42	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 16:42	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 16:42	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 16:42	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 16:42	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 16:42	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 16:42	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 16:42*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 16:42*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*09/02/15 16:42*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*09/02/15 16:42*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/02/15 16:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*121*		*70 - 130*		*09/02/15 16:42*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 17:31	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 17:31	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 17:31	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 17:31	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 17:31	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 17:31	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*91*		*10 - 120*	*08/27/15 16:15*	*08/29/15 17:31*	*1*
2-Fluorobiphenyl (Surr)	*73*		*29 - 120*	*08/27/15 16:15*	*08/29/15 17:31*	*1*
Nitrobenzene-d5	*64*		*27 - 120*	*08/27/15 16:15*	*08/29/15 17:31*	*1*
Terphenyl-d14	*94*		*13 - 120*	*08/27/15 16:15*	*08/29/15 17:31*	*1*
2-Fluorophenol	*36*		*10 - 120*	*08/27/15 16:15*	*08/29/15 17:31*	*1*
Phenol-d5	*26*		*10 - 120*	*08/27/15 16:15*	*08/29/15 17:31*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.28	U	1.8	0.28	ug/L		08/26/15 15:47	08/27/15 15:41	1
1,2,4,5-Tetrachlorobenzene	1.8	U	8.8	1.8	ug/L		08/26/15 15:47	08/27/15 15:41	1
2,3,4,6-Tetrachlorophenol	6.1	U	8.8	6.1	ug/L		08/26/15 15:47	08/27/15 15:41	1
2,4,5-Trichlorophenol	6.2	U	8.8	6.2	ug/L		08/26/15 15:47	08/27/15 15:41	1
2,4,6-Trichlorophenol	6.0	U	8.8	6.0	ug/L		08/26/15 15:47	08/27/15 15:41	1
2,4-Dichlorophenol	4.9	U	8.8	4.9	ug/L		08/26/15 15:47	08/27/15 15:41	1
2,4-Dimethylphenol	3.7	U	8.8	3.7	ug/L		08/26/15 15:47	08/27/15 15:41	1
2,4-Dinitrophenol	5.2	U	22	5.2	ug/L		08/26/15 15:47	08/27/15 15:41	1
2,4-Dinitrotoluene	2.8	U	8.8	2.8	ug/L		08/26/15 15:47	08/27/15 15:41	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-MRB-02-082015
Date Collected: 08/20/15 12:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.0	U	8.8	2.0	ug/L		08/26/15 15:47	08/27/15 15:41	1
2-Chloronaphthalene	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 15:41	1
2-Chlorophenol	4.2	U	8.8	4.2	ug/L		08/26/15 15:47	08/27/15 15:41	1
2-Methylnaphthalene	0.35	U	1.8	0.35	ug/L		08/26/15 15:47	08/27/15 15:41	1
2-Methylphenol	2.0	U	8.8	2.0	ug/L		08/26/15 15:47	08/27/15 15:41	1
2-Nitroaniline	3.2	U	22	3.2	ug/L		08/26/15 15:47	08/27/15 15:41	1
2-Nitrophenol	4.6	U	8.8	4.6	ug/L		08/26/15 15:47	08/27/15 15:41	1
3,3'-Dichlorobenzidine	2.9	U	8.8	2.9	ug/L		08/26/15 15:47	08/27/15 15:41	1
3 & 4 Methylphenol	1.9	U	8.8	1.9	ug/L		08/26/15 15:47	08/27/15 15:41	1
3-Nitroaniline	2.4	U	22	2.4	ug/L		08/26/15 15:47	08/27/15 15:41	1
4,6-Dinitro-2-methylphenol	8.2	U	22	8.2	ug/L		08/26/15 15:47	08/27/15 15:41	1
4-Bromophenyl phenyl ether	2.4	U	8.8	2.4	ug/L		08/26/15 15:47	08/27/15 15:41	1
4-Chloro-3-methylphenol	3.9	U	8.8	3.9	ug/L		08/26/15 15:47	08/27/15 15:41	1
4-Chloroaniline	3.7	U	8.8	3.7	ug/L		08/26/15 15:47	08/27/15 15:41	1
4-Chlorophenyl phenyl ether	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 15:41	1
4-Nitroaniline	2.7	U	22	2.7	ug/L		08/26/15 15:47	08/27/15 15:41	1
4-Nitrophenol	4.7	U	22	4.7	ug/L		08/26/15 15:47	08/27/15 15:41	1
Acenaphthylene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 15:41	1
Acetophenone	2.0	U	8.8	2.0	ug/L		08/26/15 15:47	08/27/15 15:41	1
Anthracene	0.33	U	1.8	0.33	ug/L		08/26/15 15:47	08/27/15 15:41	1
Benzaldehyde	5.0	U	8.8	5.0	ug/L		08/26/15 15:47	08/27/15 15:41	1
Benzo[g,h,i]perylene	0.54	U	1.8	0.54	ug/L		08/26/15 15:47	08/27/15 15:41	1
Benzo[k]fluoranthene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 15:41	1
Bis(2-chloroethoxy)methane	2.7	U	8.8	2.7	ug/L		08/26/15 15:47	08/27/15 15:41	1
Bis(2-chloroethyl)ether	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 15:41	1
Butyl benzyl phthalate	2.2	U	8.8	2.2	ug/L		08/26/15 15:47	08/27/15 15:41	1
Bis(2-ethylhexyl) phthalate	5.3	U	8.8	5.3	ug/L		08/26/15 15:47	08/27/15 15:41	1
Carbazole	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 15:41	1
Caprolactam	2.1	U	8.8	2.1	ug/L		08/26/15 15:47	08/27/15 15:41	1
Chrysene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 15:41	1
Dibenz(a,h)anthracene	0.39	U	1.8	0.39	ug/L		08/26/15 15:47	08/27/15 15:41	1
Dibenzofuran	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 15:41	1
Diethyl phthalate	2.6	U	8.8	2.6	ug/L		08/26/15 15:47	08/27/15 15:41	1
Dimethyl phthalate	2.7	U	8.8	2.7	ug/L		08/26/15 15:47	08/27/15 15:41	1
Di-n-butyl phthalate	2.2	U	8.8	2.2	ug/L		08/26/15 15:47	08/27/15 15:41	1
Fluoranthene	0.28	U	1.8	0.28	ug/L		08/26/15 15:47	08/27/15 15:41	1
Fluorene	0.28	U	1.8	0.28	ug/L		08/26/15 15:47	08/27/15 15:41	1
Hexachlorocyclopentadiene	1.6	U	8.8	1.6	ug/L		08/26/15 15:47	08/27/15 15:41	1
Hexachloroethane	1.7	U	8.8	1.7	ug/L		08/26/15 15:47	08/27/15 15:41	1
Indeno[1,2,3-cd]pyrene	0.36	U	1.8	0.36	ug/L		08/26/15 15:47	08/27/15 15:41	1
Isophorone	2.7	U	8.8	2.7	ug/L		08/26/15 15:47	08/27/15 15:41	1
Naphthalene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 15:41	1
Nitrobenzene	2.4	U	8.8	2.4	ug/L		08/26/15 15:47	08/27/15 15:41	1
N-Nitrosodi-n-propylamine	3.0	U	8.8	3.0	ug/L		08/26/15 15:47	08/27/15 15:41	1
N-Nitrosodiphenylamine	3.2	U	8.8	3.2	ug/L		08/26/15 15:47	08/27/15 15:41	1
Phenanthrene	0.37	U	1.8	0.37	ug/L		08/26/15 15:47	08/27/15 15:41	1
Phenol	1.3	U	8.8	1.3	ug/L		08/26/15 15:47	08/27/15 15:41	1
Pyrene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 15:41	1
Diphenyl	1.9	U	8.8	1.9	ug/L		08/26/15 15:47	08/27/15 15:41	1

Client Sample ID: SW-MRB-02-082015
Date Collected: 08/20/15 12:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.2	U	8.8	2.2	ug/L		08/26/15 15:47	08/27/15 15:41	1
2,2'-oxybis[1-chloropropane]	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 15:41	1
Atrazine	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 15:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tridecanoic acid	*4.8*	*J N*	*ug/L*		*7.83*	*638-53-9*	*08/26/15 15:47*	*08/27/15 15:41*	*1*
Oleic Acid	*5.8*	*J N*	*ug/L*		*8.40*	*112-80-1*	*08/26/15 15:47*	*08/27/15 15:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*82*		*10 - 120*	*08/26/15 15:47*	*08/27/15 15:41*	*1*
2-Fluorobiphenyl (Surr)	*64*		*29 - 120*	*08/26/15 15:47*	*08/27/15 15:41*	*1*
2-Fluorophenol (Surr)	*25*		*10 - 120*	*08/26/15 15:47*	*08/27/15 15:41*	*1*
Nitrobenzene-d5 (Surr)	*55*		*27 - 120*	*08/26/15 15:47*	*08/27/15 15:41*	*1*
Phenol-d5 (Surr)	*16*		*10 - 120*	*08/26/15 15:47*	*08/27/15 15:41*	*1*
Terphenyl-d14 (Surr)	*73*		*13 - 120*	*08/26/15 15:47*	*08/27/15 15:41*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.40	U	0.46	0.40	ug/L		09/03/15 06:55	09/04/15 15:50	1
PCB-1221	0.31	U	0.46	0.31	ug/L		09/03/15 06:55	09/04/15 15:50	1
PCB-1232	0.37	U	0.46	0.37	ug/L		09/03/15 06:55	09/04/15 15:50	1
PCB-1242	0.20	U	0.46	0.20	ug/L		09/03/15 06:55	09/04/15 15:50	1
PCB-1248	0.14	U	0.46	0.14	ug/L		09/03/15 06:55	09/04/15 15:50	1
PCB-1254	0.16	U	0.46	0.16	ug/L		09/03/15 06:55	09/04/15 15:50	1
PCB-1260	0.17	U	0.46	0.17	ug/L		09/03/15 06:55	09/04/15 15:50	1
Polychlorinated biphenyls, Total	0.40	U	0.46	0.40	ug/L		09/03/15 06:55	09/04/15 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*92*		*10 - 150*	*09/03/15 06:55*	*09/04/15 15:50*	*1*
Tetrachloro-m-xylene	*81*		*10 - 150*	*09/03/15 06:55*	*09/04/15 15:50*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.27**		1.00	0.70	mg/L			08/31/15 17:31	1
Sulfate	**1.38**		1.00	0.60	mg/L			08/31/15 17:31	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.22**		0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 21:42	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:42	1
Arsenic	**0.00080**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:42	1
Barium	**0.018**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:42	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:42	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 21:42	1
Calcium	**8.7**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:42	1
Chromium	**0.0011**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:42	1
Cobalt	**0.0013**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:42	1
Copper	**0.00061**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:42	1
Iron	**8.7**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:42	1
Lead	**0.00091**	**J**	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:42	1
Magnesium	**2.7**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:42	1

Client Sample ID: SW-MRB-02-082015

Date Collected: 08/20/15 12:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-5

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.98**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:42	1
Nickel	**0.00063**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:42	1
Potassium	**0.28**	**J**	1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:42	1
Selenium	**0.00093**	**J**	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 15:53	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:42	1
Sodium	**5.7**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:42	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:42	1
Vanadium	**0.0025**	**B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 21:42	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:42	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.010**	**J**	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 14:37	1
Antimony	**0.0032**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:37	1
Arsenic	**0.00054**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:37	1
Barium	**0.015**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:37	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:37	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 14:37	1
Calcium	**8.4**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:37	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:37	1
Cobalt	**0.00057**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:37	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:37	1
Iron	**0.84**		0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:37	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:37	1
Magnesium	**2.8**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:37	1
Manganese	**0.50**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:37	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:37	1
Potassium	**0.27**	**J**	1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:37	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 14:37	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:37	1
Sodium	**4.3**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:37	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:37	1
Vanadium	**0.0010**	**J B**	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 14:37	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:37	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:08	08/31/15 22:14	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 17:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 13:44	08/27/15 11:29	1
Bicarbonate Alkalinity as CaCO3	**30.0**		10.0	5.0	mg/L			08/25/15 18:40	1
Total Alkalinity as CaCO3	**30.0**		10.0	5.0	mg/L			08/25/15 18:40	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-MRB-01-082015
Date Collected: 08/20/15 14:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-6
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/02/15 18:54	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/02/15 18:54	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/02/15 18:54	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/02/15 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*09/02/15 18:54*	*1*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*		*09/02/15 18:54*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*09/02/15 18:54*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/02/15 18:54*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 17:09	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 17:09	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 17:09	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 17:09	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 17:09	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 17:09	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 17:09	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 17:09	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 17:09	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 17:09	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 17:09	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 17:09	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 17:09	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 17:09	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 17:09	1
Acetone	2.7	U	25	2.7	ug/L			09/02/15 17:09	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 17:09	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 17:09	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 17:09	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 17:09	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 17:09	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 17:09	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 17:09	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 17:09	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 17:09	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 17:09	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 17:09	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 17:09	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/02/15 17:09	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 17:09	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 17:09	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 17:09	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 17:09	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 17:09	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 17:09	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 17:09	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 17:09	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-MRB-01-082015
Date Collected: 08/20/15 14:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 17:09	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 17:09	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 17:09	1
Toluene	0.17	U	1.0	0.17	ug/L			09/02/15 17:09	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 17:09	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 17:09	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 17:09	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 17:09	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 17:09	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 17:09	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 17:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 17:09*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 17:09*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*09/02/15 17:09*	*1*
Dibromofluoromethane (Surr)	*116*		*70 - 130*		*09/02/15 17:09*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/02/15 17:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*129*		*70 - 130*		*09/02/15 17:09*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 17:58	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 17:58	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 17:58	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 17:58	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 17:58	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 17:58	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*86*		*10 - 120*	*08/27/15 16:15*	*08/29/15 17:58*	*1*
2-Fluorobiphenyl (Surr)	*71*		*29 - 120*	*08/27/15 16:15*	*08/29/15 17:58*	*1*
Nitrobenzene-d5	*62*		*27 - 120*	*08/27/15 16:15*	*08/29/15 17:58*	*1*
Terphenyl-d14	*87*		*13 - 120*	*08/27/15 16:15*	*08/29/15 17:58*	*1*
2-Fluorophenol	*45*		*10 - 120*	*08/27/15 16:15*	*08/29/15 17:58*	*1*
Phenol-d5	*30*		*10 - 120*	*08/27/15 16:15*	*08/29/15 17:58*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 16:05	1
1,2,4,5-Tetrachlorobenzene	1.9	U	8.9	1.9	ug/L		08/26/15 15:47	08/27/15 16:05	1
2,3,4,6-Tetrachlorophenol	6.2	U	8.9	6.2	ug/L		08/26/15 15:47	08/27/15 16:05	1
2,4,5-Trichlorophenol	6.3	U	8.9	6.3	ug/L		08/26/15 15:47	08/27/15 16:05	1
2,4,6-Trichlorophenol	6.1	U	8.9	6.1	ug/L		08/26/15 15:47	08/27/15 16:05	1
2,4-Dichlorophenol	5.0	U	8.9	5.0	ug/L		08/26/15 15:47	08/27/15 16:05	1
2,4-Dimethylphenol	3.8	U	8.9	3.8	ug/L		08/26/15 15:47	08/27/15 16:05	1
2,4-Dinitrophenol	5.3	U	22	5.3	ug/L		08/26/15 15:47	08/27/15 16:05	1
2,4-Dinitrotoluene	2.9	U	8.9	2.9	ug/L		08/26/15 15:47	08/27/15 16:05	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-MRB-01-082015
Date Collected: 08/20/15 14:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-6
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 16:05	1
2-Chloronaphthalene	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 16:05	1
2-Chlorophenol	4.3	U	8.9	4.3	ug/L		08/26/15 15:47	08/27/15 16:05	1
2-Methylnaphthalene	0.36	U	1.8	0.36	ug/L		08/26/15 15:47	08/27/15 16:05	1
2-Methylphenol	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 16:05	1
2-Nitroaniline	3.3	U	22	3.3	ug/L		08/26/15 15:47	08/27/15 16:05	1
2-Nitrophenol	4.7	U	8.9	4.7	ug/L		08/26/15 15:47	08/27/15 16:05	1
3,3'-Dichlorobenzidine	2.9	U	8.9	2.9	ug/L		08/26/15 15:47	08/27/15 16:05	1
3 & 4 Methylphenol	2.0	U	8.9	2.0	ug/L		08/26/15 15:47	08/27/15 16:05	1
3-Nitroaniline	2.4	U	22	2.4	ug/L		08/26/15 15:47	08/27/15 16:05	1
4,6-Dinitro-2-methylphenol	8.3	U	22	8.3	ug/L		08/26/15 15:47	08/27/15 16:05	1
4-Bromophenyl phenyl ether	2.4	U	8.9	2.4	ug/L		08/26/15 15:47	08/27/15 16:05	1
4-Chloro-3-methylphenol	4.0	U	8.9	4.0	ug/L		08/26/15 15:47	08/27/15 16:05	1
4-Chloroaniline	3.8	U	8.9	3.8	ug/L		08/26/15 15:47	08/27/15 16:05	1
4-Chlorophenyl phenyl ether	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 16:05	1
4-Nitroaniline	2.8	U	22	2.8	ug/L		08/26/15 15:47	08/27/15 16:05	1
4-Nitrophenol	4.8	U	22	4.8	ug/L		08/26/15 15:47	08/27/15 16:05	1
Acenaphthylene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 16:05	1
Acetophenone	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 16:05	1
Anthracene	0.34	U	1.8	0.34	ug/L		08/26/15 15:47	08/27/15 16:05	1
Benzaldehyde	5.1	U	8.9	5.1	ug/L		08/26/15 15:47	08/27/15 16:05	1
Benzo[g,h,i]perylene	0.55	U	1.8	0.55	ug/L		08/26/15 15:47	08/27/15 16:05	1
Benzo[k]fluoranthene	0.33	U	1.8	0.33	ug/L		08/26/15 15:47	08/27/15 16:05	1
Bis(2-chloroethoxy)methane	2.8	U	8.9	2.8	ug/L		08/26/15 15:47	08/27/15 16:05	1
Bis(2-chloroethyl)ether	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 16:05	1
Butyl benzyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 15:47	08/27/15 16:05	1
Bis(2-ethylhexyl) phthalate	5.4	U	8.9	5.4	ug/L		08/26/15 15:47	08/27/15 16:05	1
Carbazole	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 16:05	1
Caprolactam	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 16:05	1
Chrysene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 16:05	1
Dibenz(a,h)anthracene	0.40	U	1.8	0.40	ug/L		08/26/15 15:47	08/27/15 16:05	1
Dibenzofuran	2.6	U	8.9	2.6	ug/L		08/26/15 15:47	08/27/15 16:05	1
Diethyl phthalate	2.7	U	8.9	2.7	ug/L		08/26/15 15:47	08/27/15 16:05	1
Dimethyl phthalate	2.8	U	8.9	2.8	ug/L		08/26/15 15:47	08/27/15 16:05	1
Di-n-butyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 15:47	08/27/15 16:05	1
Fluoranthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 16:05	1
Fluorene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 16:05	1
Hexachlorocyclopentadiene	1.6	U	8.9	1.6	ug/L		08/26/15 15:47	08/27/15 16:05	1
Hexachloroethane	1.7	U	8.9	1.7	ug/L		08/26/15 15:47	08/27/15 16:05	1
Indeno[1,2,3-cd]pyrene	0.37	U	1.8	0.37	ug/L		08/26/15 15:47	08/27/15 16:05	1
Isophorone	2.8	U	8.9	2.8	ug/L		08/26/15 15:47	08/27/15 16:05	1
Naphthalene	0.33	U	1.8	0.33	ug/L		08/26/15 15:47	08/27/15 16:05	1
Nitrobenzene	2.4	U	8.9	2.4	ug/L		08/26/15 15:47	08/27/15 16:05	1
N-Nitrosodi-n-propylamine	3.0	U	8.9	3.0	ug/L		08/26/15 15:47	08/27/15 16:05	1
N-Nitrosodiphenylamine	3.2	U	8.9	3.2	ug/L		08/26/15 15:47	08/27/15 16:05	1
Phenanthrene	0.38	U	1.8	0.38	ug/L		08/26/15 15:47	08/27/15 16:05	1
Phenol	1.3	U	8.9	1.3	ug/L		08/26/15 15:47	08/27/15 16:05	1
Pyrene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 16:05	1
Diphenyl	2.0	U	8.9	2.0	ug/L		08/26/15 15:47	08/27/15 16:05	1

Client Sample ID: SW-MRB-01-082015
Date Collected: 08/20/15 14:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-6
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 15:47	08/27/15 16:05	1
2,2'-oxybis[1-chloropropane]	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 16:05	1
Atrazine	2.6	U	8.9	2.6	ug/L		08/26/15 15:47	08/27/15 16:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/15 15:47*	*08/27/15 16:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*80*		*10 - 120*	*08/26/15 15:47*	*08/27/15 16:05*	*1*
2-Fluorobiphenyl (Surr)	*67*		*29 - 120*	*08/26/15 15:47*	*08/27/15 16:05*	*1*
2-Fluorophenol (Surr)	*29*		*10 - 120*	*08/26/15 15:47*	*08/27/15 16:05*	*1*
Nitrobenzene-d5 (Surr)	*62*		*27 - 120*	*08/26/15 15:47*	*08/27/15 16:05*	*1*
Phenol-d5 (Surr)	*18*		*10 - 120*	*08/26/15 15:47*	*08/27/15 16:05*	*1*
Terphenyl-d14 (Surr)	*75*		*13 - 120*	*08/26/15 15:47*	*08/27/15 16:05*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.40	U	0.46	0.40	ug/L		09/03/15 06:55	09/04/15 16:06	1
PCB-1221	0.31	U	0.46	0.31	ug/L		09/03/15 06:55	09/04/15 16:06	1
PCB-1232	0.37	U	0.46	0.37	ug/L		09/03/15 06:55	09/04/15 16:06	1
PCB-1242	0.20	U	0.46	0.20	ug/L		09/03/15 06:55	09/04/15 16:06	1
PCB-1248	0.14	U	0.46	0.14	ug/L		09/03/15 06:55	09/04/15 16:06	1
PCB-1254	0.16	U	0.46	0.16	ug/L		09/03/15 06:55	09/04/15 16:06	1
PCB-1260	0.17	U	0.46	0.17	ug/L		09/03/15 06:55	09/04/15 16:06	1
Polychlorinated biphenyls, Total	0.40	U	0.46	0.40	ug/L		09/03/15 06:55	09/04/15 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*110*		*10 - 150*	*09/03/15 06:55*	*09/04/15 16:06*	*1*
Tetrachloro-m-xylene	*102*		*10 - 150*	*09/03/15 06:55*	*09/04/15 16:06*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.16**		1.00	0.70	mg/L			08/31/15 17:55	1
Sulfate	**1.61**		1.00	0.60	mg/L			08/31/15 17:55	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.16**		0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 21:59	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:59	1
Arsenic	**0.00076**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:59	1
Barium	**0.026**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:59	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:59	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 21:59	1
Calcium	**9.7**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:59	1
Chromium	**0.00059**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:59	1
Cobalt	**0.0022**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:59	1
Copper	**0.0016**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:59	1
Iron	**3.1**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:59	1
Lead	**0.0012**	**J**	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:59	1
Magnesium	**3.1**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:59	1
Manganese	**1.3**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:59	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-MRB-01-082015
Date Collected: 08/20/15 14:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-6
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.0017	J	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:59	1
Potassium	0.64	J	1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:59	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 16:10	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:59	1
Sodium	3.8		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:59	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:59	1
Vanadium	0.0027	B	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 21:59	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:59	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.011	J	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 14:42	1
Antimony	0.0019	J	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:42	1
Arsenic	0.00059	J	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:42	1
Barium	0.022		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:42	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:42	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 14:42	1
Calcium	9.4		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:42	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:42	1
Cobalt	0.00060	J	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:42	1
Copper	0.0015	J	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:42	1
Iron	0.32		0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:42	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:42	1
Magnesium	3.2		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:42	1
Manganese	0.64		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:42	1
Nickel	0.0018	J	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:42	1
Potassium	0.64	J	1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:42	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 14:42	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:42	1
Sodium	3.2		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:42	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:42	1
Vanadium	0.0013	J B	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 14:42	1
Zinc	0.018	J	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:42	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:08	08/31/15 22:16	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 17:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 13:44	08/27/15 11:30	1
Bicarbonate Alkalinity as CaCO3	37.1		10.0	5.0	mg/L			08/25/15 18:44	1
Total Alkalinity as CaCO3	37.1		10.0	5.0	mg/L			08/25/15 18:44	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-MRB-00-082015
Date Collected: 08/20/15 15:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-7
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/02/15 19:23	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/02/15 19:23	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/02/15 19:23	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/02/15 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*09/02/15 19:23*	*1*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*		*09/02/15 19:23*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*09/02/15 19:23*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/02/15 19:23*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 17:37	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 17:37	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 17:37	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 17:37	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 17:37	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 17:37	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 17:37	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 17:37	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 17:37	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 17:37	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 17:37	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 17:37	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 17:37	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 17:37	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 17:37	1
Acetone	2.7	U	25	2.7	ug/L			09/02/15 17:37	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 17:37	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 17:37	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 17:37	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 17:37	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 17:37	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 17:37	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 17:37	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 17:37	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 17:37	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 17:37	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 17:37	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 17:37	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/02/15 17:37	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 17:37	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 17:37	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 17:37	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 17:37	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 17:37	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 17:37	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 17:37	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 17:37	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-MRB-00-082015
Date Collected: 08/20/15 15:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 17:37	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 17:37	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 17:37	1
Toluene	0.17	U	1.0	0.17	ug/L			09/02/15 17:37	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 17:37	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 17:37	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 17:37	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 17:37	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 17:37	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 17:37	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 17:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 17:37*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 17:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*09/02/15 17:37*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*09/02/15 17:37*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/02/15 17:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*09/02/15 17:37*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 18:25	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 18:25	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 18:25	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 18:25	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 18:25	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 18:25	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*95*		*10 - 120*	*08/27/15 16:15*	*08/29/15 18:25*	*1*
2-Fluorobiphenyl (Surr)	*77*		*29 - 120*	*08/27/15 16:15*	*08/29/15 18:25*	*1*
Nitrobenzene-d5	*104*		*27 - 120*	*08/27/15 16:15*	*08/29/15 18:25*	*1*
Terphenyl-d14	*94*		*13 - 120*	*08/27/15 16:15*	*08/29/15 18:25*	*1*
2-Fluorophenol	*51*		*10 - 120*	*08/27/15 16:15*	*08/29/15 18:25*	*1*
Phenol-d5	*35*		*10 - 120*	*08/27/15 16:15*	*08/29/15 18:25*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 16:29	1
1,2,4,5-Tetrachlorobenzene	1.9	U	8.9	1.9	ug/L		08/26/15 15:47	08/27/15 16:29	1
2,3,4,6-Tetrachlorophenol	6.2	U	8.9	6.2	ug/L		08/26/15 15:47	08/27/15 16:29	1
2,4,5-Trichlorophenol	6.3	U	8.9	6.3	ug/L		08/26/15 15:47	08/27/15 16:29	1
2,4,6-Trichlorophenol	6.1	U	8.9	6.1	ug/L		08/26/15 15:47	08/27/15 16:29	1
2,4-Dichlorophenol	5.0	U	8.9	5.0	ug/L		08/26/15 15:47	08/27/15 16:29	1
2,4-Dimethylphenol	3.8	U	8.9	3.8	ug/L		08/26/15 15:47	08/27/15 16:29	1
2,4-Dinitrophenol	5.3	U	22	5.3	ug/L		08/26/15 15:47	08/27/15 16:29	1
2,4-Dinitrotoluene	2.9	U	8.9	2.9	ug/L		08/26/15 15:47	08/27/15 16:29	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-MRB-00-082015
Date Collected: 08/20/15 15:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-7
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 16:29	1
2-Chloronaphthalene	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 16:29	1
2-Chlorophenol	4.3	U	8.9	4.3	ug/L		08/26/15 15:47	08/27/15 16:29	1
2-Methylnaphthalene	0.36	U	1.8	0.36	ug/L		08/26/15 15:47	08/27/15 16:29	1
2-Methylphenol	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 16:29	1
2-Nitroaniline	3.3	U	22	3.3	ug/L		08/26/15 15:47	08/27/15 16:29	1
2-Nitrophenol	4.7	U	8.9	4.7	ug/L		08/26/15 15:47	08/27/15 16:29	1
3,3'-Dichlorobenzidine	2.9	U	8.9	2.9	ug/L		08/26/15 15:47	08/27/15 16:29	1
3 & 4 Methylphenol	2.0	U	8.9	2.0	ug/L		08/26/15 15:47	08/27/15 16:29	1
3-Nitroaniline	2.4	U	22	2.4	ug/L		08/26/15 15:47	08/27/15 16:29	1
4,6-Dinitro-2-methylphenol	8.3	U	22	8.3	ug/L		08/26/15 15:47	08/27/15 16:29	1
4-Bromophenyl phenyl ether	2.4	U	8.9	2.4	ug/L		08/26/15 15:47	08/27/15 16:29	1
4-Chloro-3-methylphenol	4.0	U	8.9	4.0	ug/L		08/26/15 15:47	08/27/15 16:29	1
4-Chloroaniline	3.8	U	8.9	3.8	ug/L		08/26/15 15:47	08/27/15 16:29	1
4-Chlorophenyl phenyl ether	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 16:29	1
4-Nitroaniline	2.8	U	22	2.8	ug/L		08/26/15 15:47	08/27/15 16:29	1
4-Nitrophenol	4.8	U	22	4.8	ug/L		08/26/15 15:47	08/27/15 16:29	1
Acenaphthylene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 16:29	1
Acetophenone	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 16:29	1
Anthracene	0.34	U	1.8	0.34	ug/L		08/26/15 15:47	08/27/15 16:29	1
Benzaldehyde	5.1	U	8.9	5.1	ug/L		08/26/15 15:47	08/27/15 16:29	1
Benzo[g,h,i]perylene	0.55	U	1.8	0.55	ug/L		08/26/15 15:47	08/27/15 16:29	1
Benzo[k]fluoranthene	0.33	U	1.8	0.33	ug/L		08/26/15 15:47	08/27/15 16:29	1
Bis(2-chloroethoxy)methane	2.8	U	8.9	2.8	ug/L		08/26/15 15:47	08/27/15 16:29	1
Bis(2-chloroethyl)ether	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 16:29	1
Butyl benzyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 15:47	08/27/15 16:29	1
Bis(2-ethylhexyl) phthalate	5.4	U	8.9	5.4	ug/L		08/26/15 15:47	08/27/15 16:29	1
Carbazole	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 16:29	1
Caprolactam	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 16:29	1
Chrysene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 16:29	1
Dibenz(a,h)anthracene	0.40	U	1.8	0.40	ug/L		08/26/15 15:47	08/27/15 16:29	1
Dibenzofuran	2.6	U	8.9	2.6	ug/L		08/26/15 15:47	08/27/15 16:29	1
Diethyl phthalate	2.7	U	8.9	2.7	ug/L		08/26/15 15:47	08/27/15 16:29	1
Dimethyl phthalate	2.8	U	8.9	2.8	ug/L		08/26/15 15:47	08/27/15 16:29	1
Di-n-butyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 15:47	08/27/15 16:29	1
Fluoranthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 16:29	1
Fluorene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 16:29	1
Hexachlorocyclopentadiene	1.6	U	8.9	1.6	ug/L		08/26/15 15:47	08/27/15 16:29	1
Hexachloroethane	1.7	U	8.9	1.7	ug/L		08/26/15 15:47	08/27/15 16:29	1
Indeno[1,2,3-cd]pyrene	0.37	U	1.8	0.37	ug/L		08/26/15 15:47	08/27/15 16:29	1
Isophorone	2.8	U	8.9	2.8	ug/L		08/26/15 15:47	08/27/15 16:29	1
Naphthalene	0.33	U	1.8	0.33	ug/L		08/26/15 15:47	08/27/15 16:29	1
Nitrobenzene	2.4	U	8.9	2.4	ug/L		08/26/15 15:47	08/27/15 16:29	1
N-Nitrosodi-n-propylamine	3.0	U	8.9	3.0	ug/L		08/26/15 15:47	08/27/15 16:29	1
N-Nitrosodiphenylamine	3.2	U	8.9	3.2	ug/L		08/26/15 15:47	08/27/15 16:29	1
Phenanthrene	0.38	U	1.8	0.38	ug/L		08/26/15 15:47	08/27/15 16:29	1
Phenol	1.3	U	8.9	1.3	ug/L		08/26/15 15:47	08/27/15 16:29	1
Pyrene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 16:29	1
Diphenyl	2.0	U	8.9	2.0	ug/L		08/26/15 15:47	08/27/15 16:29	1

Client Sample ID: SW-MRB-00-082015
Date Collected: 08/20/15 15:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-7
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 15:47	08/27/15 16:29	1
2,2'-oxybis[1-chloropropane]	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 16:29	1
Atrazine	2.6	U	8.9	2.6	ug/L		08/26/15 15:47	08/27/15 16:29	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Diethyltoluamide	*17*	*J N*	*ug/L*		*6.52*	*134-62-3*	*08/26/15 15:47*	*08/27/15 16:29*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*94*		*10 - 120*	*08/26/15 15:47*	*08/27/15 16:29*	*1*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*	*08/26/15 15:47*	*08/27/15 16:29*	*1*
2-Fluorophenol (Surr)	*32*		*10 - 120*	*08/26/15 15:47*	*08/27/15 16:29*	*1*
Nitrobenzene-d5 (Surr)	*67*		*27 - 120*	*08/26/15 15:47*	*08/27/15 16:29*	*1*
Phenol-d5 (Surr)	*20*		*10 - 120*	*08/26/15 15:47*	*08/27/15 16:29*	*1*
Terphenyl-d14 (Surr)	*86*		*13 - 120*	*08/26/15 15:47*	*08/27/15 16:29*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.40	U	0.46	0.40	ug/L		09/03/15 06:55	09/04/15 16:22	1
PCB-1221	0.31	U	0.46	0.31	ug/L		09/03/15 06:55	09/04/15 16:22	1
PCB-1232	0.37	U	0.46	0.37	ug/L		09/03/15 06:55	09/04/15 16:22	1
PCB-1242	0.20	U	0.46	0.20	ug/L		09/03/15 06:55	09/04/15 16:22	1
PCB-1248	0.14	U	0.46	0.14	ug/L		09/03/15 06:55	09/04/15 16:22	1
PCB-1254	0.16	U	0.46	0.16	ug/L		09/03/15 06:55	09/04/15 16:22	1
PCB-1260	0.17	U	0.46	0.17	ug/L		09/03/15 06:55	09/04/15 16:22	1
Polychlorinated biphenyls, Total	0.40	U	0.46	0.40	ug/L		09/03/15 06:55	09/04/15 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*81*		*10 - 150*	*09/03/15 06:55*	*09/04/15 16:22*	*1*
Tetrachloro-m-xylene	*70*		*10 - 150*	*09/03/15 06:55*	*09/04/15 16:22*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.62**		1.00	0.70	mg/L			08/31/15 18:19	1
Sulfate	**5.05**		1.00	0.60	mg/L			08/31/15 18:19	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.47**		0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 22:05	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:05	1
Arsenic	**0.00065**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:05	1
Barium	**0.014**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:05	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:05	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 22:05	1
Calcium	**7.3**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 22:05	1
Chromium	**0.00096**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:05	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:05	1
Copper	**0.0033**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:05	1
Iron	**1.3**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 22:05	1
Lead	**0.00087**	**J**	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 22:05	1
Magnesium	**2.5**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 22:05	1
Manganese	**0.11**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:05	1

Client Sample ID: SW-MRB-00-082015
Date Collected: 08/20/15 15:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-7
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.00073	J	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:05	1
Potassium	1.1		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 22:05	1
Selenium	0.00062	J	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 16:16	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:05	1
Sodium	2.5		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 22:05	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 22:05	1
Vanadium	0.0032	B	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 22:05	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 22:05	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.078		0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 14:47	1
Antimony	0.0015	J	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:47	1
Arsenic	0.00060	J	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:47	1
Barium	0.012		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:47	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:47	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 14:47	1
Calcium	6.9		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:47	1
Chromium	0.00070	J	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:47	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:47	1
Copper	0.0027		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:47	1
Iron	0.33		0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:47	1
Lead	0.00023	J	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:47	1
Magnesium	2.5		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:47	1
Manganese	0.045		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:47	1
Nickel	0.00079	J	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:47	1
Potassium	1.1		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:47	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 14:47	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:47	1
Sodium	2.5		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:47	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:47	1
Vanadium	0.0019	J B	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 14:47	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:47	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:08	08/31/15 22:23	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 17:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.011		0.010	0.0070	mg/L		08/25/15 13:44	08/27/15 11:31	1
Bicarbonate Alkalinity as CaCO3	22.4		10.0	5.0	mg/L			08/25/15 18:49	1
Total Alkalinity as CaCO3	22.4		10.0	5.0	mg/L			08/25/15 18:49	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: PMP-Pond-082015
Date Collected: 08/20/15 16:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-8
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/02/15 19:51	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/02/15 19:51	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/02/15 19:51	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/02/15 19:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*09/02/15 19:51*	*1*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*		*09/02/15 19:51*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*09/02/15 19:51*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/02/15 19:51*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 19:54	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/01/15 19:54	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 19:54	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 19:54	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/01/15 19:54	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/01/15 19:54	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/01/15 19:54	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/01/15 19:54	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/01/15 19:54	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/01/15 19:54	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 19:54	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/01/15 19:54	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/01/15 19:54	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/01/15 19:54	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/01/15 19:54	1
Acetone	**9.0**	**J**	25	2.7	ug/L			09/01/15 19:54	1
Benzene	0.20	U	1.0	0.20	ug/L			09/01/15 19:54	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/01/15 19:54	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/01/15 19:54	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/01/15 19:54	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/01/15 19:54	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 19:54	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/01/15 19:54	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/01/15 19:54	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/01/15 19:54	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/01/15 19:54	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/01/15 19:54	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 19:54	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/01/15 19:54	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/01/15 19:54	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/01/15 19:54	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/01/15 19:54	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/01/15 19:54	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/01/15 19:54	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/01/15 19:54	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/01/15 19:54	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/01/15 19:54	1

Client Sample ID: PMP-Pond-082015

Date Collected: 08/20/15 16:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/01/15 19:54	1
Styrene	0.28	U	1.0	0.28	ug/L			09/01/15 19:54	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/01/15 19:54	1
Toluene	0.17	U	1.0	0.17	ug/L			09/01/15 19:54	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/01/15 19:54	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 19:54	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/01/15 19:54	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/01/15 19:54	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/01/15 19:54	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/01/15 19:54	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/01/15 19:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/15 19:54*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/01/15 19:54*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*09/01/15 19:54*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*09/01/15 19:54*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/01/15 19:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*09/01/15 19:54*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 18:52	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 18:52	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 18:52	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 18:52	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 18:52	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 18:52	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*52*		*10 - 120*	*08/27/15 16:15*	*08/29/15 18:52*	*1*
2-Fluorobiphenyl (Surr)	*53*		*29 - 120*	*08/27/15 16:15*	*08/29/15 18:52*	*1*
Nitrobenzene-d5	*48*		*27 - 120*	*08/27/15 16:15*	*08/29/15 18:52*	*1*
Terphenyl-d14	*66*		*13 - 120*	*08/27/15 16:15*	*08/29/15 18:52*	*1*
2-Fluorophenol	*26*		*10 - 120*	*08/27/15 16:15*	*08/29/15 18:52*	*1*
Phenol-d5	*17*		*10 - 120*	*08/27/15 16:15*	*08/29/15 18:52*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.28	U	1.7	0.28	ug/L		08/26/15 15:47	08/27/15 16:52	1
1,2,4,5-Tetrachlorobenzene	1.8	U	8.6	1.8	ug/L		08/26/15 15:47	08/27/15 16:52	1
2,3,4,6-Tetrachlorophenol	5.9	U	8.6	5.9	ug/L		08/26/15 15:47	08/27/15 16:52	1
2,4,5-Trichlorophenol	6.1	U	8.6	6.1	ug/L		08/26/15 15:47	08/27/15 16:52	1
2,4,6-Trichlorophenol	5.9	U	8.6	5.9	ug/L		08/26/15 15:47	08/27/15 16:52	1
2,4-Dichlorophenol	4.8	U	8.6	4.8	ug/L		08/26/15 15:47	08/27/15 16:52	1
2,4-Dimethylphenol	3.6	U	8.6	3.6	ug/L		08/26/15 15:47	08/27/15 16:52	1
2,4-Dinitrophenol	5.1	U	22	5.1	ug/L		08/26/15 15:47	08/27/15 16:52	1
2,4-Dinitrotoluene	2.8	U	8.6	2.8	ug/L		08/26/15 15:47	08/27/15 16:52	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: PMP-Pond-082015
Date Collected: 08/20/15 16:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-8
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.0	U	8.6	2.0	ug/L		08/26/15 15:47	08/27/15 16:52	1
2-Chloronaphthalene	2.4	U	8.6	2.4	ug/L		08/26/15 15:47	08/27/15 16:52	1
2-Chlorophenol	4.1	U	8.6	4.1	ug/L		08/26/15 15:47	08/27/15 16:52	1
2-Methylnaphthalene	0.34	U	1.7	0.34	ug/L		08/26/15 15:47	08/27/15 16:52	1
2-Methylphenol	2.0	U	8.6	2.0	ug/L		08/26/15 15:47	08/27/15 16:52	1
2-Nitroaniline	3.2	U	22	3.2	ug/L		08/26/15 15:47	08/27/15 16:52	1
2-Nitrophenol	4.6	U	8.6	4.6	ug/L		08/26/15 15:47	08/27/15 16:52	1
3,3'-Dichlorobenzidine	2.8	U	8.6	2.8	ug/L		08/26/15 15:47	08/27/15 16:52	1
3 & 4 Methylphenol	1.9	U	8.6	1.9	ug/L		08/26/15 15:47	08/27/15 16:52	1
3-Nitroaniline	2.3	U	22	2.3	ug/L		08/26/15 15:47	08/27/15 16:52	1
4,6-Dinitro-2-methylphenol	8.0	U	22	8.0	ug/L		08/26/15 15:47	08/27/15 16:52	1
4-Bromophenyl phenyl ether	2.3	U	8.6	2.3	ug/L		08/26/15 15:47	08/27/15 16:52	1
4-Chloro-3-methylphenol	3.9	U	8.6	3.9	ug/L		08/26/15 15:47	08/27/15 16:52	1
4-Chloroaniline	3.6	U	8.6	3.6	ug/L		08/26/15 15:47	08/27/15 16:52	1
4-Chlorophenyl phenyl ether	2.4	U	8.6	2.4	ug/L		08/26/15 15:47	08/27/15 16:52	1
4-Nitroaniline	2.7	U	22	2.7	ug/L		08/26/15 15:47	08/27/15 16:52	1
4-Nitrophenol	4.7	U	22	4.7	ug/L		08/26/15 15:47	08/27/15 16:52	1
Acenaphthylene	0.30	U	1.7	0.30	ug/L		08/26/15 15:47	08/27/15 16:52	1
Acetophenone	2.0	U	8.6	2.0	ug/L		08/26/15 15:47	08/27/15 16:52	1
Anthracene	0.33	U	1.7	0.33	ug/L		08/26/15 15:47	08/27/15 16:52	1
Benzaldehyde	4.9	U	8.6	4.9	ug/L		08/26/15 15:47	08/27/15 16:52	1
Benzo[g,h,i]perylene	0.53	U	1.7	0.53	ug/L		08/26/15 15:47	08/27/15 16:52	1
Benzo[k]fluoranthene	0.32	U	1.7	0.32	ug/L		08/26/15 15:47	08/27/15 16:52	1
Bis(2-chloroethoxy)methane	2.7	U	8.6	2.7	ug/L		08/26/15 15:47	08/27/15 16:52	1
Bis(2-chloroethyl)ether	2.4	U	8.6	2.4	ug/L		08/26/15 15:47	08/27/15 16:52	1
Butyl benzyl phthalate	2.2	U	8.6	2.2	ug/L		08/26/15 15:47	08/27/15 16:52	1
Bis(2-ethylhexyl) phthalate	5.2	U	8.6	5.2	ug/L		08/26/15 15:47	08/27/15 16:52	1
Carbazole	2.4	U	8.6	2.4	ug/L		08/26/15 15:47	08/27/15 16:52	1
Caprolactam	2.1	U	8.6	2.1	ug/L		08/26/15 15:47	08/27/15 16:52	1
Chrysene	0.28	U	1.7	0.28	ug/L		08/26/15 15:47	08/27/15 16:52	1
Dibenz(a,h)anthracene	0.39	U	1.7	0.39	ug/L		08/26/15 15:47	08/27/15 16:52	1
Dibenzofuran	2.5	U	8.6	2.5	ug/L		08/26/15 15:47	08/27/15 16:52	1
Diethyl phthalate	2.6	U	8.6	2.6	ug/L		08/26/15 15:47	08/27/15 16:52	1
Dimethyl phthalate	2.7	U	8.6	2.7	ug/L		08/26/15 15:47	08/27/15 16:52	1
Di-n-butyl phthalate	2.2	U	8.6	2.2	ug/L		08/26/15 15:47	08/27/15 16:52	1
Fluoranthene	0.28	U	1.7	0.28	ug/L		08/26/15 15:47	08/27/15 16:52	1
Fluorene	0.28	U	1.7	0.28	ug/L		08/26/15 15:47	08/27/15 16:52	1
Hexachlorocyclopentadiene	1.6	U	8.6	1.6	ug/L		08/26/15 15:47	08/27/15 16:52	1
Hexachloroethane	1.6	U	8.6	1.6	ug/L		08/26/15 15:47	08/27/15 16:52	1
Indeno[1,2,3-cd]pyrene	0.35	U	1.7	0.35	ug/L		08/26/15 15:47	08/27/15 16:52	1
Isophorone	2.7	U	8.6	2.7	ug/L		08/26/15 15:47	08/27/15 16:52	1
Naphthalene	0.32	U	1.7	0.32	ug/L		08/26/15 15:47	08/27/15 16:52	1
Nitrobenzene	2.3	U	8.6	2.3	ug/L		08/26/15 15:47	08/27/15 16:52	1
N-Nitrosodi-n-propylamine	2.9	U	8.6	2.9	ug/L		08/26/15 15:47	08/27/15 16:52	1
N-Nitrosodiphenylamine	3.1	U	8.6	3.1	ug/L		08/26/15 15:47	08/27/15 16:52	1
Phenanthrene	0.36	U	1.7	0.36	ug/L		08/26/15 15:47	08/27/15 16:52	1
Phenol	1.3	U	8.6	1.3	ug/L		08/26/15 15:47	08/27/15 16:52	1
Pyrene	0.30	U	1.7	0.30	ug/L		08/26/15 15:47	08/27/15 16:52	1
Diphenyl	1.9	U	8.6	1.9	ug/L		08/26/15 15:47	08/27/15 16:52	1

Client Sample ID: PMP-Pond-082015

Date Collected: 08/20/15 16:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-8

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.2	U	8.6	2.2	ug/L		08/26/15 15:47	08/27/15 16:52	1
2,2'-oxybis[1-chloropropane]	2.4	U	8.6	2.4	ug/L		08/26/15 15:47	08/27/15 16:52	1
Atrazine	2.5	U	8.6	2.5	ug/L		08/26/15 15:47	08/27/15 16:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tetradecanoic acid	*4.2*	*J N*	*ug/L*		*7.82*	*544-63-8*	*08/26/15 15:47*	*08/27/15 16:52*	*1*
Oleic Acid	*5.0*	*J N*	*ug/L*		*8.40*	*112-80-1*	*08/26/15 15:47*	*08/27/15 16:52*	*1*
Cholestan-3-ol, 4-methyl-, (3.beta.,4.al	*3.7*	*J N*	*ug/L*		*12.17*	*3903-57-9*	*08/26/15 15:47*	*08/27/15 16:52*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*93*		*10 - 120*	*08/26/15 15:47*	*08/27/15 16:52*	*1*
2-Fluorobiphenyl (Surr)	*71*		*29 - 120*	*08/26/15 15:47*	*08/27/15 16:52*	*1*
2-Fluorophenol (Surr)	*33*		*10 - 120*	*08/26/15 15:47*	*08/27/15 16:52*	*1*
Nitrobenzene-d5 (Surr)	*66*		*27 - 120*	*08/26/15 15:47*	*08/27/15 16:52*	*1*
Phenol-d5 (Surr)	*21*		*10 - 120*	*08/26/15 15:47*	*08/27/15 16:52*	*1*
Terphenyl-d14 (Surr)	*78*		*13 - 120*	*08/26/15 15:47*	*08/27/15 16:52*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.40	U	0.46	0.40	ug/L		09/03/15 06:55	09/04/15 16:38	1
PCB-1221	0.31	U	0.46	0.31	ug/L		09/03/15 06:55	09/04/15 16:38	1
PCB-1232	0.37	U	0.46	0.37	ug/L		09/03/15 06:55	09/04/15 16:38	1
PCB-1242	0.20	U	0.46	0.20	ug/L		09/03/15 06:55	09/04/15 16:38	1
PCB-1248	0.14	U	0.46	0.14	ug/L		09/03/15 06:55	09/04/15 16:38	1
PCB-1254	0.16	U	0.46	0.16	ug/L		09/03/15 06:55	09/04/15 16:38	1
PCB-1260	0.17	U	0.46	0.17	ug/L		09/03/15 06:55	09/04/15 16:38	1
Polychlorinated biphenyls, Total	0.40	U	0.46	0.40	ug/L		09/03/15 06:55	09/04/15 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*95*		*10 - 150*	*09/03/15 06:55*	*09/04/15 16:38*	*1*
Tetrachloro-m-xylene	*85*		*10 - 150*	*09/03/15 06:55*	*09/04/15 16:38*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.61**		1.00	0.70	mg/L			08/31/15 18:43	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/31/15 18:43	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.028**		0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 22:11	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:11	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:11	1
Barium	**0.086**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:11	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:11	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 22:11	1
Calcium	**20.5**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 22:11	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:11	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:11	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:11	1
Iron	**3.8**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 22:11	1

Client Sample ID: PMP-Pond-082015

Date Collected: 08/20/15 16:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-8
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.00058**	**J**	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 22:11	1
Magnesium	**3.5**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 22:11	1
Manganese	**0.097**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:11	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:11	1
Potassium	**5.7**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 22:11	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 16:22	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:11	1
Sodium	**2.4**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 22:11	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 22:11	1
Vanadium	**0.0015**	**J B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 22:11	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 22:11	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 14:52	1
Antimony	**0.0016**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:52	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:52	1
Barium	**0.086**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:52	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:52	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 14:52	1
Calcium	**19.0**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:52	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:52	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:52	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:52	1
Iron	**0.70**		0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:52	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:52	1
Magnesium	**3.3**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:52	1
Manganese	**0.056**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:52	1
Nickel	**0.00089**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:52	1
Potassium	**5.2**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:52	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 14:52	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:52	1
Sodium	**2.3**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:52	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:52	1
Vanadium	**0.0011**	**J B**	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 14:52	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:52	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:08	08/31/15 22:26	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 17:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 13:44	08/27/15 11:31	1
Bicarbonate Alkalinity as CaCO3	**74.9**		10.0	5.0	mg/L			08/25/15 19:07	1
Total Alkalinity as CaCO3	**74.9**		10.0	5.0	mg/L			08/25/15 19:07	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: RW-10A (51-61)-082015
Date Collected: 08/20/15 09:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-9
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/02/15 20:20	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/02/15 20:20	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/02/15 20:20	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/02/15 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*09/02/15 20:20*	*1*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*		*09/02/15 20:20*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/02/15 20:20*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/02/15 20:20*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 20:21	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/01/15 20:21	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 20:21	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 20:21	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/01/15 20:21	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/01/15 20:21	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/01/15 20:21	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/01/15 20:21	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/01/15 20:21	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/01/15 20:21	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 20:21	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/01/15 20:21	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/01/15 20:21	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/01/15 20:21	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/01/15 20:21	1
Acetone	2.7	U	25	2.7	ug/L			09/01/15 20:21	1
Benzene	0.20	U	1.0	0.20	ug/L			09/01/15 20:21	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/01/15 20:21	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/01/15 20:21	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/01/15 20:21	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/01/15 20:21	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 20:21	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/01/15 20:21	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/01/15 20:21	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/01/15 20:21	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/01/15 20:21	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/01/15 20:21	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 20:21	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/01/15 20:21	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/01/15 20:21	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/01/15 20:21	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/01/15 20:21	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/01/15 20:21	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/01/15 20:21	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/01/15 20:21	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/01/15 20:21	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/01/15 20:21	1

Client Sample ID: RW-10A (51-61)-082015

Date Collected: 08/20/15 09:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/01/15 20:21	1
Styrene	0.28	U	1.0	0.28	ug/L			09/01/15 20:21	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/01/15 20:21	1
Toluene	0.17	U	1.0	0.17	ug/L			09/01/15 20:21	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/01/15 20:21	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 20:21	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/01/15 20:21	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/01/15 20:21	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/01/15 20:21	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/01/15 20:21	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/01/15 20:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/15 20:21*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/01/15 20:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/01/15 20:21*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*09/01/15 20:21*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*09/01/15 20:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*09/01/15 20:21*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 19:18	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 19:18	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 19:18	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 19:18	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 19:18	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 19:18	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*87*		*10 - 120*	*08/27/15 16:15*	*08/29/15 19:18*	*1*
2-Fluorobiphenyl (Surr)	*64*		*29 - 120*	*08/27/15 16:15*	*08/29/15 19:18*	*1*
Nitrobenzene-d5	*61*		*27 - 120*	*08/27/15 16:15*	*08/29/15 19:18*	*1*
Terphenyl-d14	*90*		*13 - 120*	*08/27/15 16:15*	*08/29/15 19:18*	*1*
2-Fluorophenol	*44*		*10 - 120*	*08/27/15 16:15*	*08/29/15 19:18*	*1*
Phenol-d5	*35*		*10 - 120*	*08/27/15 16:15*	*08/29/15 19:18*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.40	U	2.5	0.40	ug/L		08/26/15 15:47	08/27/15 17:16	1
1,2,4,5-Tetrachlorobenzene	2.6	U	13	2.6	ug/L		08/26/15 15:47	08/27/15 17:16	1
2,3,4,6-Tetrachlorophenol	8.6	U	13	8.6	ug/L		08/26/15 15:47	08/27/15 17:16	1
2,4,5-Trichlorophenol	8.9	U	13	8.9	ug/L		08/26/15 15:47	08/27/15 17:16	1
2,4,6-Trichlorophenol	8.5	U	13	8.5	ug/L		08/26/15 15:47	08/27/15 17:16	1
2,4-Dichlorophenol	7.0	U	13	7.0	ug/L		08/26/15 15:47	08/27/15 17:16	1
2,4-Dimethylphenol	5.3	U	13	5.3	ug/L		08/26/15 15:47	08/27/15 17:16	1
2,4-Dinitrophenol	7.4	U	31	7.4	ug/L		08/26/15 15:47	08/27/15 17:16	1
2,4-Dinitrotoluene	4.0	U	13	4.0	ug/L		08/26/15 15:47	08/27/15 17:16	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: RW-10A (51-61)-082015
Date Collected: 08/20/15 09:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-9
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.9	U	13	2.9	ug/L		08/26/15 15:47	08/27/15 17:16	1
2-Chloronaphthalene	3.5	U	13	3.5	ug/L		08/26/15 15:47	08/27/15 17:16	1
2-Chlorophenol	6.0	U	13	6.0	ug/L		08/26/15 15:47	08/27/15 17:16	1
2-Methylnaphthalene	0.50	U	2.5	0.50	ug/L		08/26/15 15:47	08/27/15 17:16	1
2-Methylphenol	2.9	U	13	2.9	ug/L		08/26/15 15:47	08/27/15 17:16	1
2-Nitroaniline	4.6	U	31	4.6	ug/L		08/26/15 15:47	08/27/15 17:16	1
2-Nitrophenol	6.6	U	13	6.6	ug/L		08/26/15 15:47	08/27/15 17:16	1
3,3'-Dichlorobenzidine	4.1	U	13	4.1	ug/L		08/26/15 15:47	08/27/15 17:16	1
3 & 4 Methylphenol	2.8	U	13	2.8	ug/L		08/26/15 15:47	08/27/15 17:16	1
3-Nitroaniline	3.4	U	31	3.4	ug/L		08/26/15 15:47	08/27/15 17:16	1
4,6-Dinitro-2-methylphenol	12	U	31	12	ug/L		08/26/15 15:47	08/27/15 17:16	1
4-Bromophenyl phenyl ether	3.4	U	13	3.4	ug/L		08/26/15 15:47	08/27/15 17:16	1
4-Chloro-3-methylphenol	5.6	U	13	5.6	ug/L		08/26/15 15:47	08/27/15 17:16	1
4-Chloroaniline	5.3	U	13	5.3	ug/L		08/26/15 15:47	08/27/15 17:16	1
4-Chlorophenyl phenyl ether	3.5	U	13	3.5	ug/L		08/26/15 15:47	08/27/15 17:16	1
4-Nitroaniline	3.9	U	31	3.9	ug/L		08/26/15 15:47	08/27/15 17:16	1
4-Nitrophenol	6.8	U	31	6.8	ug/L		08/26/15 15:47	08/27/15 17:16	1
Acenaphthylene	0.44	U	2.5	0.44	ug/L		08/26/15 15:47	08/27/15 17:16	1
Acetophenone	2.9	U	13	2.9	ug/L		08/26/15 15:47	08/27/15 17:16	1
Anthracene	0.48	U	2.5	0.48	ug/L		08/26/15 15:47	08/27/15 17:16	1
Benzaldehyde	7.1	U	13	7.1	ug/L		08/26/15 15:47	08/27/15 17:16	1
Benzo[g,h,i]perylene	0.78	U	2.5	0.78	ug/L		08/26/15 15:47	08/27/15 17:16	1
Benzo[k]fluoranthene	0.46	U	2.5	0.46	ug/L		08/26/15 15:47	08/27/15 17:16	1
Bis(2-chloroethoxy)methane	3.9	U	13	3.9	ug/L		08/26/15 15:47	08/27/15 17:16	1
Bis(2-chloroethyl)ether	3.5	U	13	3.5	ug/L		08/26/15 15:47	08/27/15 17:16	1
Butyl benzyl phthalate	3.1	U	13	3.1	ug/L		08/26/15 15:47	08/27/15 17:16	1
Bis(2-ethylhexyl) phthalate	7.5	U	13	7.5	ug/L		08/26/15 15:47	08/27/15 17:16	1
Carbazole	3.5	U	13	3.5	ug/L		08/26/15 15:47	08/27/15 17:16	1
Caprolactam	3.0	U	13	3.0	ug/L		08/26/15 15:47	08/27/15 17:16	1
Chrysene	0.41	U	2.5	0.41	ug/L		08/26/15 15:47	08/27/15 17:16	1
Dibenz(a,h)anthracene	0.56	U	2.5	0.56	ug/L		08/26/15 15:47	08/27/15 17:16	1
Dibenzofuran	3.6	U	13	3.6	ug/L		08/26/15 15:47	08/27/15 17:16	1
Diethyl phthalate	3.8	U	13	3.8	ug/L		08/26/15 15:47	08/27/15 17:16	1
Dimethyl phthalate	3.9	U	13	3.9	ug/L		08/26/15 15:47	08/27/15 17:16	1
Di-n-butyl phthalate	3.1	U	13	3.1	ug/L		08/26/15 15:47	08/27/15 17:16	1
Fluoranthene	0.40	U	2.5	0.40	ug/L		08/26/15 15:47	08/27/15 17:16	1
Fluorene	0.40	U	2.5	0.40	ug/L		08/26/15 15:47	08/27/15 17:16	1
Hexachlorocyclopentadiene	2.3	U	13	2.3	ug/L		08/26/15 15:47	08/27/15 17:16	1
Hexachloroethane	2.4	U	13	2.4	ug/L		08/26/15 15:47	08/27/15 17:16	1
Indeno[1,2,3-cd]pyrene	0.51	U	2.5	0.51	ug/L		08/26/15 15:47	08/27/15 17:16	1
Isophorone	3.9	U	13	3.9	ug/L		08/26/15 15:47	08/27/15 17:16	1
Naphthalene	0.46	U	2.5	0.46	ug/L		08/26/15 15:47	08/27/15 17:16	1
Nitrobenzene	3.4	U	13	3.4	ug/L		08/26/15 15:47	08/27/15 17:16	1
N-Nitrosodi-n-propylamine	4.3	U	13	4.3	ug/L		08/26/15 15:47	08/27/15 17:16	1
N-Nitrosodiphenylamine	4.5	U	13	4.5	ug/L		08/26/15 15:47	08/27/15 17:16	1
Phenanthrene	0.53	U	2.5	0.53	ug/L		08/26/15 15:47	08/27/15 17:16	1
Phenol	1.9	U	13	1.9	ug/L		08/26/15 15:47	08/27/15 17:16	1
Pyrene	0.44	U	2.5	0.44	ug/L		08/26/15 15:47	08/27/15 17:16	1
Diphenyl	2.8	U	13	2.8	ug/L		08/26/15 15:47	08/27/15 17:16	1

Client Sample ID: RW-10A (51-61)-082015

Date Collected: 08/20/15 09:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-9

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	3.1	U	13	3.1	ug/L		08/26/15 15:47	08/27/15 17:16	1
2,2'-oxybis[1-chloropropane]	3.5	U	13	3.5	ug/L		08/26/15 15:47	08/27/15 17:16	1
Atrazine	3.6	U	13	3.6	ug/L		08/26/15 15:47	08/27/15 17:16	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Oleic Acid	*24*	*J N*	*ug/L*		*8.41*	*112-80-1*	*08/26/15 15:47*	*08/27/15 17:16*	*1*
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'-	*4.9*	*J N*	*ug/L*		*9.19*	*366-29-0*	*08/26/15 15:47*	*08/27/15 17:16*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*95*		*10 - 120*	*08/26/15 15:47*	*08/27/15 17:16*	*1*
2-Fluorobiphenyl (Surr)	*70*		*29 - 120*	*08/26/15 15:47*	*08/27/15 17:16*	*1*
2-Fluorophenol (Surr)	*36*		*10 - 120*	*08/26/15 15:47*	*08/27/15 17:16*	*1*
Nitrobenzene-d5 (Surr)	*65*		*27 - 120*	*08/26/15 15:47*	*08/27/15 17:16*	*1*
Phenol-d5 (Surr)	*24*		*10 - 120*	*08/26/15 15:47*	*08/27/15 17:16*	*1*
Terphenyl-d14 (Surr)	*87*		*13 - 120*	*08/26/15 15:47*	*08/27/15 17:16*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.40	U	0.46	0.40	ug/L		09/03/15 06:55	09/04/15 16:53	1
PCB-1221	0.31	U	0.46	0.31	ug/L		09/03/15 06:55	09/04/15 16:53	1
PCB-1232	0.37	U	0.46	0.37	ug/L		09/03/15 06:55	09/04/15 16:53	1
PCB-1242	0.20	U	0.46	0.20	ug/L		09/03/15 06:55	09/04/15 16:53	1
PCB-1248	0.14	U	0.46	0.14	ug/L		09/03/15 06:55	09/04/15 16:53	1
PCB-1254	0.16	U	0.46	0.16	ug/L		09/03/15 06:55	09/04/15 16:53	1
PCB-1260	0.17	U	0.46	0.17	ug/L		09/03/15 06:55	09/04/15 16:53	1
Polychlorinated biphenyls, Total	0.40	U	0.46	0.40	ug/L		09/03/15 06:55	09/04/15 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*100*		*10 - 150*	*09/03/15 06:55*	*09/04/15 16:53*	*1*
Tetrachloro-m-xylene	*82*		*10 - 150*	*09/03/15 06:55*	*09/04/15 16:53*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.61**		1.00	0.70	mg/L			08/31/15 19:07	1
Sulfate	**36.2**		1.00	0.60	mg/L			08/31/15 19:07	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 22:17	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:17	1
Arsenic	**0.0021**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:17	1
Barium	**0.016**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:17	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:17	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 22:17	1
Calcium	**61.4**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 22:17	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:17	1
Cobalt	**0.0038**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:17	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:17	1
Iron	**0.70**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 22:17	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 22:17	1

Client Sample ID: RW-10A (51-61)-082015
Date Collected: 08/20/15 09:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-9
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	**14.6**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 22:17	1
Manganese	**2.1**		0.020	0.0050	mg/L		08/25/15 08:27	08/27/15 17:03	10
Nickel	**0.029**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:17	1
Potassium	**3.0**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 22:17	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 16:28	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:17	1
Sodium	**27.6**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 22:17	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 22:17	1
Vanadium	**0.0017**	**J B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 22:17	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 22:17	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 14:58	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:58	1
Arsenic	**0.0015**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:58	1
Barium	**0.014**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:58	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:58	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 14:58	1
Calcium	**66.3**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:58	1
Chromium	**0.00081**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:58	1
Cobalt	**0.0048**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:58	1
Copper	**0.0015**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:58	1
Iron	**0.33**		0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:58	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:58	1
Magnesium	**16.2**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:58	1
Manganese	**3.0**		0.010	0.0025	mg/L		08/26/15 17:11	09/03/15 15:03	5
Nickel	**0.015**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:58	1
Potassium	**3.0**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:58	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 14:58	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 14:58	1
Sodium	**16.7**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 14:58	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 14:58	1
Vanadium	**0.00090**	**J B**	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 14:58	1
Zinc	**0.049**		0.025	0.010	mg/L		08/26/15 17:11	09/03/15 14:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:08	08/31/15 22:28	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 17:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 13:44	08/27/15 11:32	1
Bicarbonate Alkalinity as CaCO3	**207**		10.0	5.0	mg/L			08/25/15 19:12	1
Total Alkalinity as CaCO3	**207**		10.0	5.0	mg/L			08/25/15 19:12	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: RW-8 (204-214)-082015
Date Collected: 08/20/15 14:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-10
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/02/15 20:49	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/02/15 20:49	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/02/15 20:49	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/02/15 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*09/02/15 20:49*	*1*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*		*09/02/15 20:49*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/02/15 20:49*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/02/15 20:49*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 20:48	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/01/15 20:48	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 20:48	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 20:48	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/01/15 20:48	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/01/15 20:48	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/01/15 20:48	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/01/15 20:48	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/01/15 20:48	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/01/15 20:48	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 20:48	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/01/15 20:48	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/01/15 20:48	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/01/15 20:48	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/01/15 20:48	1
Acetone	**4.1**	**J**	25	2.7	ug/L			09/01/15 20:48	1
Benzene	**0.57**	**J**	1.0	0.20	ug/L			09/01/15 20:48	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/01/15 20:48	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/01/15 20:48	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/01/15 20:48	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/01/15 20:48	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 20:48	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/01/15 20:48	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/01/15 20:48	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/01/15 20:48	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/01/15 20:48	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/01/15 20:48	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 20:48	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/01/15 20:48	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/01/15 20:48	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/01/15 20:48	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/01/15 20:48	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/01/15 20:48	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/01/15 20:48	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/01/15 20:48	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/01/15 20:48	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/01/15 20:48	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: RW-8 (204-214)-082015
Date Collected: 08/20/15 14:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/01/15 20:48	1
Styrene	0.28	U	1.0	0.28	ug/L			09/01/15 20:48	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/01/15 20:48	1
Toluene	0.17	U	1.0	0.17	ug/L			09/01/15 20:48	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/01/15 20:48	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 20:48	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/01/15 20:48	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/01/15 20:48	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/01/15 20:48	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/01/15 20:48	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/01/15 20:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/15 20:48*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/01/15 20:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*09/01/15 20:48*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*09/01/15 20:48*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*09/01/15 20:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/01/15 20:48*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 19:45	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 19:45	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 19:45	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 19:45	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 19:45	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 19:45	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*92*		*10 - 120*	*08/27/15 16:15*	*08/29/15 19:45*	*1*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*	*08/27/15 16:15*	*08/29/15 19:45*	*1*
Nitrobenzene-d5	*84*		*27 - 120*	*08/27/15 16:15*	*08/29/15 19:45*	*1*
Terphenyl-d14	*100*		*13 - 120*	*08/27/15 16:15*	*08/29/15 19:45*	*1*
2-Fluorophenol	*53*		*10 - 120*	*08/27/15 16:15*	*08/29/15 19:45*	*1*
Phenol-d5	*39*		*10 - 120*	*08/27/15 16:15*	*08/29/15 19:45*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 17:40	1
1,2,4,5-Tetrachlorobenzene	1.9	U	9.1	1.9	ug/L		08/26/15 15:47	08/27/15 17:40	1
2,3,4,6-Tetrachlorophenol	6.3	U	9.1	6.3	ug/L		08/26/15 15:47	08/27/15 17:40	1
2,4,5-Trichlorophenol	6.5	U	9.1	6.5	ug/L		08/26/15 15:47	08/27/15 17:40	1
2,4,6-Trichlorophenol	6.2	U	9.1	6.2	ug/L		08/26/15 15:47	08/27/15 17:40	1
2,4-Dichlorophenol	5.1	U	9.1	5.1	ug/L		08/26/15 15:47	08/27/15 17:40	1
2,4-Dimethylphenol	3.8	U	9.1	3.8	ug/L		08/26/15 15:47	08/27/15 17:40	1
2,4-Dinitrophenol	5.4	U	23	5.4	ug/L		08/26/15 15:47	08/27/15 17:40	1
2,4-Dinitrotoluene	2.9	U	9.1	2.9	ug/L		08/26/15 15:47	08/27/15 17:40	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

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Date Collected: 08/20/15 14:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-10
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.1	U	9.1	2.1	ug/L		08/26/15 15:47	08/27/15 17:40	1
2-Chloronaphthalene	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 17:40	1
2-Chlorophenol	4.4	U	9.1	4.4	ug/L		08/26/15 15:47	08/27/15 17:40	1
2-Methylnaphthalene	0.36	U	1.8	0.36	ug/L		08/26/15 15:47	08/27/15 17:40	1
2-Methylphenol	2.1	U	9.1	2.1	ug/L		08/26/15 15:47	08/27/15 17:40	1
2-Nitroaniline	3.4	U	23	3.4	ug/L		08/26/15 15:47	08/27/15 17:40	1
2-Nitrophenol	4.8	U	9.1	4.8	ug/L		08/26/15 15:47	08/27/15 17:40	1
3,3'-Dichlorobenzidine	3.0	U	9.1	3.0	ug/L		08/26/15 15:47	08/27/15 17:40	1
3 & 4 Methylphenol	2.0	U	9.1	2.0	ug/L		08/26/15 15:47	08/27/15 17:40	1
3-Nitroaniline	2.5	U	23	2.5	ug/L		08/26/15 15:47	08/27/15 17:40	1
4,6-Dinitro-2-methylphenol	8.5	U	23	8.5	ug/L		08/26/15 15:47	08/27/15 17:40	1
4-Bromophenyl phenyl ether	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 17:40	1
4-Chloro-3-methylphenol	4.1	U	9.1	4.1	ug/L		08/26/15 15:47	08/27/15 17:40	1
4-Chloroaniline	3.8	U	9.1	3.8	ug/L		08/26/15 15:47	08/27/15 17:40	1
4-Chlorophenyl phenyl ether	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 17:40	1
4-Nitroaniline	2.8	U	23	2.8	ug/L		08/26/15 15:47	08/27/15 17:40	1
4-Nitrophenol	4.9	U	23	4.9	ug/L		08/26/15 15:47	08/27/15 17:40	1
Acenaphthylene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 17:40	1
Acetophenone	2.1	U	9.1	2.1	ug/L		08/26/15 15:47	08/27/15 17:40	1
Anthracene	0.35	U	1.8	0.35	ug/L		08/26/15 15:47	08/27/15 17:40	1
Benzaldehyde	5.2	U	9.1	5.2	ug/L		08/26/15 15:47	08/27/15 17:40	1
Benzo[g,h,i]perylene	0.56	U	1.8	0.56	ug/L		08/26/15 15:47	08/27/15 17:40	1
Benzo[k]fluoranthene	0.34	U	1.8	0.34	ug/L		08/26/15 15:47	08/27/15 17:40	1
Bis(2-chloroethoxy)methane	2.8	U	9.1	2.8	ug/L		08/26/15 15:47	08/27/15 17:40	1
Bis(2-chloroethyl)ether	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 17:40	1
Butyl benzyl phthalate	2.3	U	9.1	2.3	ug/L		08/26/15 15:47	08/27/15 17:40	1
Bis(2-ethylhexyl) phthalate	5.5	U	9.1	5.5	ug/L		08/26/15 15:47	08/27/15 17:40	1
Carbazole	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 17:40	1
Caprolactam	2.2	U	9.1	2.2	ug/L		08/26/15 15:47	08/27/15 17:40	1
Chrysene	0.30	U	1.8	0.30	ug/L		08/26/15 15:47	08/27/15 17:40	1
Dibenz(a,h)anthracene	0.41	U	1.8	0.41	ug/L		08/26/15 15:47	08/27/15 17:40	1
Dibenzofuran	2.6	U	9.1	2.6	ug/L		08/26/15 15:47	08/27/15 17:40	1
Diethyl phthalate	2.7	U	9.1	2.7	ug/L		08/26/15 15:47	08/27/15 17:40	1
Dimethyl phthalate	2.8	U	9.1	2.8	ug/L		08/26/15 15:47	08/27/15 17:40	1
Di-n-butyl phthalate	2.3	U	9.1	2.3	ug/L		08/26/15 15:47	08/27/15 17:40	1
Fluoranthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 17:40	1
Fluorene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 17:40	1
Hexachlorocyclopentadiene	1.6	U	9.1	1.6	ug/L		08/26/15 15:47	08/27/15 17:40	1
Hexachloroethane	1.7	U	9.1	1.7	ug/L		08/26/15 15:47	08/27/15 17:40	1
Indeno[1,2,3-cd]pyrene	0.37	U	1.8	0.37	ug/L		08/26/15 15:47	08/27/15 17:40	1
Isophorone	2.8	U	9.1	2.8	ug/L		08/26/15 15:47	08/27/15 17:40	1
Naphthalene	0.34	U	1.8	0.34	ug/L		08/26/15 15:47	08/27/15 17:40	1
Nitrobenzene	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 17:40	1
N-Nitrosodi-n-propylamine	3.1	U	9.1	3.1	ug/L		08/26/15 15:47	08/27/15 17:40	1
N-Nitrosodiphenylamine	3.3	U	9.1	3.3	ug/L		08/26/15 15:47	08/27/15 17:40	1
Phenanthrene	0.38	U	1.8	0.38	ug/L		08/26/15 15:47	08/27/15 17:40	1
Phenol	1.4	U	9.1	1.4	ug/L		08/26/15 15:47	08/27/15 17:40	1
Pyrene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 17:40	1
Diphenyl	2.0	U	9.1	2.0	ug/L		08/26/15 15:47	08/27/15 17:40	1

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Lab Sample ID: 490-85779-10

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.3	U	9.1	2.3	ug/L		08/26/15 15:47	08/27/15 17:40	1
2,2'-oxybis[1-chloropropane]	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 17:40	1
Atrazine	2.6	U	9.1	2.6	ug/L		08/26/15 15:47	08/27/15 17:40	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Nonanoic acid	*69*	*J N*	*ug/L*		*5.31*	*112-05-0*	*08/26/15 15:47*	*08/27/15 17:40*	*1*
Benzenesulfonamide, N-butyl-	*37*	*J N*	*ug/L*		*7.31*	*3622-84-2*	*08/26/15 15:47*	*08/27/15 17:40*	*1*
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca -6,	*5.8*	*J N*	*ug/L*		*7.71*	*82304-66-3*	*08/26/15 15:47*	*08/27/15 17:40*	*1*
Tetradecanoic acid	*6.9*	*J N*	*ug/L*		*7.83*	*544-63-8*	*08/26/15 15:47*	*08/27/15 17:40*	*1*
3,5-di-tert-Butyl-4-hydroxyphenylprop ion	*22*	*J N*	*ug/L*		*7.93*	*20170-32-5*	*08/26/15 15:47*	*08/27/15 17:40*	*1*
14-Pentadecenoic acid	*23*	*J N*	*ug/L*		*8.41*	*17351-34-7*	*08/26/15 15:47*	*08/27/15 17:40*	*1*
9-Octadecenamide, (Z)-	*4.3*	*J N*	*ug/L*		*10.17*	*301-02-0*	*08/26/15 15:47*	*08/27/15 17:40*	*1*
Hexadeca-2,6,10,14-tetraen-1-ol, 3,7,11,	*3.1*	*J N*	*ug/L*		*10.28*	*7614-21-3*	*08/26/15 15:47*	*08/27/15 17:40*	*1*
Eicosane	*3.1*	*J N*	*ug/L*		*10.91*	*112-95-8*	*08/26/15 15:47*	*08/27/15 17:40*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*95*		*10 - 120*	*08/26/15 15:47*	*08/27/15 17:40*	*1*
2-Fluorobiphenyl (Surr)	*67*		*29 - 120*	*08/26/15 15:47*	*08/27/15 17:40*	*1*
2-Fluorophenol (Surr)	*36*		*10 - 120*	*08/26/15 15:47*	*08/27/15 17:40*	*1*
Nitrobenzene-d5 (Surr)	*61*		*27 - 120*	*08/26/15 15:47*	*08/27/15 17:40*	*1*
Phenol-d5 (Surr)	*25*		*10 - 120*	*08/26/15 15:47*	*08/27/15 17:40*	*1*
Terphenyl-d14 (Surr)	*81*		*13 - 120*	*08/26/15 15:47*	*08/27/15 17:40*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/03/15 06:55	09/04/15 17:09	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/03/15 06:55	09/04/15 17:09	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/03/15 06:55	09/04/15 17:09	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/03/15 06:55	09/04/15 17:09	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/03/15 06:55	09/04/15 17:09	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/03/15 06:55	09/04/15 17:09	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/03/15 06:55	09/04/15 17:09	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/03/15 06:55	09/04/15 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*105*		*10 - 150*	*09/03/15 06:55*	*09/04/15 17:09*	*1*
Tetrachloro-m-xylene	*88*		*10 - 150*	*09/03/15 06:55*	*09/04/15 17:09*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**55.2**		1.00	0.70	mg/L			09/01/15 16:26	1
Sulfate	**149**		1.00	0.60	mg/L			09/01/15 16:26	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 22:22	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:22	1
Arsenic	**0.0020**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:22	1
Barium	**0.037**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:22	1

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Lab Sample ID: 490-85779-10

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:22	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 22:22	1
Calcium	**67.5**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 22:22	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:22	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:22	1
Copper	**0.0011**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:22	1
Iron	**1.5**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 22:22	1
Lead	**0.00097**	**J**	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 22:22	1
Magnesium	**20.0**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 22:22	1
Manganese	**0.31**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:22	1
Nickel	**0.035**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:22	1
Potassium	**10.3**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 22:22	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 16:33	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 22:22	1
Sodium	**87.5**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 22:22	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 22:22	1
Vanadium	**0.0014**	**J B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 22:22	1
Zinc	**0.022**	**J**	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 22:22	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/27/15 09:52	09/03/15 15:08	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:52	09/03/15 15:08	1
Arsenic	**0.0019**	**J**	0.0020	0.00050	mg/L		08/27/15 09:52	09/03/15 15:08	1
Barium	**0.041**		0.0020	0.00050	mg/L		08/27/15 09:52	09/03/15 15:08	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:52	09/03/15 15:08	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/27/15 09:52	09/03/15 15:08	1
Calcium	**63.5**		1.0	0.13	mg/L		08/27/15 09:52	09/03/15 15:08	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:52	09/03/15 15:08	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:52	09/03/15 15:08	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:52	09/03/15 15:08	1
Iron	**0.24**		0.025	0.010	mg/L		08/27/15 09:52	09/03/15 15:08	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/27/15 09:52	09/03/15 15:08	1
Magnesium	**20.9**		1.0	0.13	mg/L		08/27/15 09:52	09/03/15 15:08	1
Manganese	**0.27**		0.0020	0.00050	mg/L		08/27/15 09:52	09/03/15 15:08	1
Nickel	**0.024**		0.0020	0.00050	mg/L		08/27/15 09:52	09/03/15 15:08	1
Potassium	**16.3**		1.0	0.13	mg/L		08/27/15 09:52	09/03/15 15:08	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/27/15 09:52	09/03/15 15:08	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:52	09/03/15 15:08	1
Sodium	**92.5**		1.0	0.13	mg/L		08/27/15 09:52	09/03/15 15:08	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/27/15 09:52	09/03/15 15:08	1
Vanadium	**0.0011**	**J B**	0.0020	0.00010	mg/L		08/27/15 09:52	09/03/15 15:08	1
Zinc	0.010	U	0.025	0.010	mg/L		08/27/15 09:52	09/03/15 15:08	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:08	08/31/15 22:31	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: RW-8 (204-214)-082015
Date Collected: 08/20/15 14:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-10
Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 19:53	09/02/15 14:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U F1	0.010	0.0070	mg/L		08/25/15 13:44	08/27/15 11:34	1
Bicarbonate Alkalinity as CaCO3	**216**		10.0	5.0	mg/L			08/25/15 19:18	1
Total Alkalinity as CaCO3	**216**		10.0	5.0	mg/L			08/25/15 19:18	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: TB-11-082115
Date Collected: 08/21/15 00:01
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-11
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/02/15 15:05	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/02/15 15:05	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/02/15 15:05	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/02/15 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*09/02/15 15:05*	*1*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*		*09/02/15 15:05*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*09/02/15 15:05*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/02/15 15:05*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 16:15	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/01/15 16:15	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 16:15	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 16:15	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/01/15 16:15	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/01/15 16:15	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/01/15 16:15	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/01/15 16:15	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/01/15 16:15	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/01/15 16:15	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 16:15	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/01/15 16:15	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/01/15 16:15	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/01/15 16:15	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/01/15 16:15	1
Acetone	**2.7**	**J**	25	2.7	ug/L			09/01/15 16:15	1
Benzene	0.20	U	1.0	0.20	ug/L			09/01/15 16:15	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/01/15 16:15	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/01/15 16:15	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/01/15 16:15	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/01/15 16:15	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 16:15	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/01/15 16:15	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/01/15 16:15	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/01/15 16:15	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/01/15 16:15	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/01/15 16:15	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 16:15	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/01/15 16:15	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/01/15 16:15	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/01/15 16:15	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/01/15 16:15	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/01/15 16:15	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/01/15 16:15	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/01/15 16:15	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/01/15 16:15	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/01/15 16:15	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: TB-11-082115
Date Collected: 08/21/15 00:01
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-11
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/01/15 16:15	1
Styrene	0.28	U	1.0	0.28	ug/L			09/01/15 16:15	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/01/15 16:15	1
Toluene	0.17	U	1.0	0.17	ug/L			09/01/15 16:15	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/01/15 16:15	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 16:15	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/01/15 16:15	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/01/15 16:15	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/01/15 16:15	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/01/15 16:15	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/01/15 16:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/15 16:15*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/01/15 16:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*09/01/15 16:15*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*09/01/15 16:15*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/01/15 16:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*125*		*70 - 130*		*09/01/15 16:15*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-278001/7
Matrix: Water
Analysis Batch: 278001

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 12:10	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/01/15 12:10	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 12:10	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/01/15 12:10	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/01/15 12:10	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/01/15 12:10	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/01/15 12:10	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/01/15 12:10	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/01/15 12:10	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/01/15 12:10	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 12:10	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/01/15 12:10	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/01/15 12:10	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/01/15 12:10	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/01/15 12:10	1
Acetone	2.7	U	25	2.7	ug/L			09/01/15 12:10	1
Benzene	0.20	U	1.0	0.20	ug/L			09/01/15 12:10	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/01/15 12:10	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/01/15 12:10	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/01/15 12:10	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/01/15 12:10	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/01/15 12:10	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/01/15 12:10	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/01/15 12:10	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/01/15 12:10	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/01/15 12:10	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/01/15 12:10	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 12:10	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			09/01/15 12:10	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/01/15 12:10	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/01/15 12:10	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/01/15 12:10	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/01/15 12:10	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/01/15 12:10	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/01/15 12:10	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/01/15 12:10	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/01/15 12:10	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/01/15 12:10	1
Styrene	0.28	U	1.0	0.28	ug/L			09/01/15 12:10	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/01/15 12:10	1
Toluene	0.17	U	1.0	0.17	ug/L			09/01/15 12:10	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/01/15 12:10	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/01/15 12:10	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/01/15 12:10	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/01/15 12:10	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/01/15 12:10	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/01/15 12:10	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/01/15 12:10	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					09/01/15 12:10	1
Total Alkanes TIC	None		ug/L					09/01/15 12:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130		09/01/15 12:10	1
Dibromofluoromethane (Surr)	107		70 - 130		09/01/15 12:10	1
Toluene-d8 (Surr)	97		70 - 130		09/01/15 12:10	1
1,2-Dichloroethane-d4 (Surr)	117		70 - 130		09/01/15 12:10	1

Lab Sample ID: LCS 490-278001/4
Matrix: Water
Analysis Batch: 278001

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	23.2		ug/L		116	78 - 135
Freon-113	20.0	18.4		ug/L		92	77 - 129
1,1,2,2-Tetrachloroethane	20.0	19.4		ug/L		97	69 - 131
1,1,2-Trichloroethane	20.0	18.9		ug/L		95	80 - 124
1,1-Dichloroethane	20.0	22.2		ug/L		111	78 - 125
1,1-Dichloroethene	20.0	18.2		ug/L		91	79 - 124
1,2,4-Trichlorobenzene	20.0	20.9		ug/L		105	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	17.1		ug/L		86	54 - 125
1,2-Dichlorobenzene	20.0	18.7		ug/L		93	80 - 121
1,2-Dichloropropane	20.0	19.2		ug/L		96	75 - 120
1,3-Dichlorobenzene	20.0	19.5		ug/L		98	80 - 122
1,4-Dichlorobenzene	20.0	19.0		ug/L		95	80 - 120
2-Butanone (MEK)	100	106		ug/L		106	62 - 133
2-Hexanone	100	111		ug/L		111	60 - 142
4-Methyl-2-pentanone (MIBK)	100	98.3		ug/L		98	60 - 137
Acetone	100	79.5		ug/L		80	54 - 145
Benzene	20.0	21.7		ug/L		108	80 - 121
Bromoform	20.0	18.2		ug/L		91	46 - 145
Bromomethane	20.0	18.9		ug/L		94	41 - 150
Carbon disulfide	20.0	18.3		ug/L		91	77 - 126
Carbon tetrachloride	20.0	23.1		ug/L		115	64 - 147
Chlorobenzene	20.0	19.1		ug/L		96	80 - 120
Chlorodibromomethane	20.0	18.3		ug/L		92	69 - 133
Chloroethane	20.0	17.7		ug/L		88	72 - 120
Chloroform	20.0	22.4		ug/L		112	73 - 129
Chloromethane	20.0	11.8		ug/L		59	12 - 150
cis-1,2-Dichloroethene	20.0	23.5		ug/L		117	76 - 125
cis-1,3-Dichloropropene	20.0	20.0		ug/L		100	74 - 140
Cyclohexane	20.0	26.8	*	ug/L		134	73 - 122
Dichlorobromomethane	20.0	18.9		ug/L		95	75 - 129
Dichlorodifluoromethane	20.0	19.9		ug/L		100	37 - 127
Ethylbenzene	20.0	20.4		ug/L		102	80 - 130
1,2-Dibromoethane	20.0	19.5		ug/L		97	80 - 129
Isopropylbenzene	20.0	21.3		ug/L		107	80 - 141
Methyl acetate	100	71.3		ug/L		71	64 - 150
Methyl tert-butyl ether	20.0	17.4		ug/L		87	72 - 133
Methylcyclohexane	20.0	20.6		ug/L		103	71 - 129
Methylene Chloride	20.0	18.2		ug/L		91	79 - 123
Styrene	20.0	21.0		ug/L		105	80 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 490-278001/4
Matrix: Water
Analysis Batch: 278001

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	20.0	20.2		ug/L		101	80 - 126
Toluene	20.0	19.5		ug/L		98	80 - 126
trans-1,2-Dichloroethene	20.0	17.3		ug/L		86	79 - 126
trans-1,3-Dichloropropene	20.0	19.6		ug/L		98	63 - 134
Trichloroethene	20.0	19.2		ug/L		96	80 - 123
Trichlorofluoromethane	20.0	16.6		ug/L		83	65 - 124
Vinyl chloride	20.0	18.6		ug/L		93	68 - 120
1,2-Dichloroethane	20.0	23.9		ug/L		120	77 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*

Lab Sample ID: 230-603-I-5 MS
Matrix: Water
Analysis Batch: 278001

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.19	U	50.0	62.8		ug/L		126	76 - 149
Freon-113	0.15	U	50.0	54.2		ug/L		108	72 - 148
1,1,2,2-Tetrachloroethane	0.19	U	50.0	49.7		ug/L		99	56 - 143
1,1,2-Trichloroethane	0.19	U	50.0	48.2		ug/L		96	74 - 134
1,1-Dichloroethane	0.24	U	50.0	66.5		ug/L		133	71 - 139
1,1-Dichloroethene	0.25	U	50.0	53.7		ug/L		107	70 - 142
1,2,4-Trichlorobenzene	0.20	U	50.0	51.5		ug/L		103	60 - 136
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	45.4		ug/L		91	52 - 126
1,2-Dichlorobenzene	0.19	U	50.0	48.9		ug/L		98	79 - 128
1,2-Dichloropropane	0.25	U	50.0	54.9		ug/L		110	67 - 131
1,3-Dichlorobenzene	0.18	U	50.0	50.7		ug/L		101	77 - 131
1,4-Dichlorobenzene	0.17	U	50.0	48.1		ug/L		96	78 - 126
2-Butanone (MEK)	2.6	U	250	283		ug/L		113	50 - 138
2-Hexanone	1.3	U	250	279		ug/L		111	50 - 150
4-Methyl-2-pentanone (MIBK)	0.81	U	250	265		ug/L		106	50 - 147
Acetone	2.7	U	250	217		ug/L		87	45 - 141
Benzene	0.20	U	50.0	57.5		ug/L		115	75 - 133
Bromoform	0.29	U	50.0	51.3		ug/L		103	42 - 147
Bromomethane	0.35	U	50.0	55.7		ug/L		111	16 - 163
Carbon disulfide	0.22	U	50.0	53.0		ug/L		106	48 - 152
Carbon tetrachloride	0.18	U	50.0	62.9		ug/L		126	62 - 164
Chlorobenzene	0.18	U	50.0	52.2		ug/L		104	80 - 129
Chlorodibromomethane	0.25	U	50.0	48.5		ug/L		97	66 - 140
Chloroethane	0.36	U	50.0	57.0		ug/L		114	58 - 137
Chloroform	0.23	U	50.0	66.5		ug/L		133	66 - 138
Chloromethane	0.36	U	50.0	36.8		ug/L		74	10 - 169
cis-1,2-Dichloroethene	0.21	U F1	50.0	68.7		ug/L		137	68 - 138
cis-1,3-Dichloropropene	0.17	U	50.0	52.0		ug/L		104	71 - 141

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 230-603-I-5 MS
Matrix: Water
Analysis Batch: 278001

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	0.13	U F1 *	50.0	71.3		ug/L		143	58 - 144
Dichlorobromomethane	0.17	U	50.0	55.6		ug/L		111	70 - 140
Dichlorodifluoromethane	0.17	U	50.0	53.2		ug/L		106	40 - 127
Ethylbenzene	0.19	U	50.0	57.3		ug/L		115	79 - 139
1,2-Dibromoethane	0.21	U	50.0	50.7		ug/L		101	75 - 137
Isopropylbenzene	0.33	U	50.0	61.9		ug/L		124	80 - 153
Methyl acetate	0.58	U	250	187		ug/L		75	30 - 165
Methyl tert-butyl ether	0.17	U	50.0	47.4		ug/L		95	66 - 141
Methylcyclohexane	0.090	U	50.0	64.1		ug/L		128	59 - 151
Methylene Chloride	0.22	U	50.0	48.5		ug/L		97	64 - 139
Styrene	0.28	U	50.0	58.8		ug/L		118	61 - 148
Tetrachloroethene	0.14	U	50.0	51.2		ug/L		102	72 - 145
Toluene	0.17	U	50.0	52.6		ug/L		105	75 - 136
trans-1,2-Dichloroethene	0.23	U	50.0	52.1		ug/L		104	66 - 143
trans-1,3-Dichloropropene	0.17	U	50.0	52.2		ug/L		104	59 - 135
Trichloroethene	0.20	U	50.0	56.6		ug/L		113	73 - 144
Trichlorofluoromethane	0.21	U	50.0	54.3		ug/L		109	58 - 139
Vinyl chloride	0.18	U	50.0	55.4		ug/L		111	56 - 129
1,2-Dichloroethane	0.20	U	50.0	57.4		ug/L		115	64 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*

Lab Sample ID: 230-603-K-5 MSD
Matrix: Water
Analysis Batch: 278001

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.19	U	50.0	73.0		ug/L		146	76 - 149	15	17
Freon-113	0.15	U	50.0	53.7		ug/L		107	72 - 148	1	18
1,1,2,2-Tetrachloroethane	0.19	U	50.0	48.5		ug/L		97	56 - 143	2	20
1,1,2-Trichloroethane	0.19	U	50.0	48.3		ug/L		97	74 - 134	0	15
1,1-Dichloroethane	0.24	U	50.0	66.6		ug/L		133	71 - 139	0	17
1,1-Dichloroethene	0.25	U	50.0	55.1		ug/L		110	70 - 142	3	17
1,2,4-Trichlorobenzene	0.20	U	50.0	55.3		ug/L		111	60 - 136	7	19
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	46.7		ug/L		93	52 - 126	3	24
1,2-Dichlorobenzene	0.19	U	50.0	50.7		ug/L		101	79 - 128	4	15
1,2-Dichloropropane	0.25	U	50.0	54.5		ug/L		109	67 - 131	1	17
1,3-Dichlorobenzene	0.18	U	50.0	50.6		ug/L		101	77 - 131	0	15
1,4-Dichlorobenzene	0.17	U	50.0	48.4		ug/L		97	78 - 126	1	15
2-Butanone (MEK)	2.6	U	250	298		ug/L		119	50 - 138	5	19
2-Hexanone	1.3	U	250	281		ug/L		112	50 - 150	1	15
4-Methyl-2-pentanone (MIBK)	0.81	U	250	274		ug/L		109	50 - 147	3	17
Acetone	2.7	U	250	224		ug/L		89	45 - 141	3	21
Benzene	0.20	U	50.0	57.1		ug/L		114	75 - 133	1	17

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 230-603-K-5 MSD
Matrix: Water
Analysis Batch: 278001

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	0.29	U	50.0	49.0		ug/L		98	42 - 147	5	16
Bromomethane	0.35	U	50.0	63.5		ug/L		127	16 - 163	13	50
Carbon disulfide	0.22	U	50.0	53.6		ug/L		107	48 - 152	1	21
Carbon tetrachloride	0.18	U	50.0	69.0		ug/L		138	62 - 164	9	19
Chlorobenzene	0.18	U	50.0	51.3		ug/L		103	80 - 129	2	14
Chlorodibromomethane	0.25	U	50.0	48.4		ug/L		97	66 - 140	0	15
Chloroethane	0.36	U	50.0	56.3		ug/L		113	58 - 137	1	20
Chloroform	0.23	U	50.0	66.6		ug/L		133	66 - 138	0	18
Chloromethane	0.36	U	50.0	38.9		ug/L		78	10 - 169	5	31
cis-1,2-Dichloroethene	0.21	U F1	50.0	69.3	F1	ug/L		139	68 - 138	1	17
cis-1,3-Dichloropropene	0.17	U	50.0	51.4		ug/L		103	71 - 141	1	15
Cyclohexane	0.13	U F1 *	50.0	83.6	F1	ug/L		167	58 - 144	16	16
Dichlorobromomethane	0.17	U	50.0	53.8		ug/L		108	70 - 140	3	18
Dichlorodifluoromethane	0.17	U	50.0	52.2		ug/L		104	40 - 127	2	18
Ethylbenzene	0.19	U	50.0	57.2		ug/L		114	79 - 139	0	15
1,2-Dibromoethane	0.21	U	50.0	49.6		ug/L		99	75 - 137	2	15
Isopropylbenzene	0.33	U	50.0	59.7		ug/L		119	80 - 153	4	16
Methyl acetate	0.58	U	250	195		ug/L		78	30 - 165	4	31
Methyl tert-butyl ether	0.17	U	50.0	49.1		ug/L		98	66 - 141	3	16
Methylcyclohexane	0.090	U	50.0	63.7		ug/L		127	59 - 151	1	19
Methylene Chloride	0.22	U	50.0	50.3		ug/L		101	64 - 139	4	17
Styrene	0.28	U	50.0	57.9		ug/L		116	61 - 148	2	24
Tetrachloroethene	0.14	U	50.0	52.8		ug/L		106	72 - 145	3	16
Toluene	0.17	U	50.0	52.2		ug/L		104	75 - 136	1	15
trans-1,2-Dichloroethene	0.23	U	50.0	52.7		ug/L		105	66 - 143	1	16
trans-1,3-Dichloropropene	0.17	U	50.0	52.0		ug/L		104	59 - 135	0	14
Trichloroethene	0.20	U	50.0	56.3		ug/L		113	73 - 144	1	17
Trichlorofluoromethane	0.21	U	50.0	54.5		ug/L		109	58 - 139	0	18
Vinyl chloride	0.18	U	50.0	57.4		ug/L		115	56 - 129	4	17
1,2-Dichloroethane	0.20	U	50.0	57.1		ug/L		114	64 - 136	1	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*118*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*

Lab Sample ID: MB 490-278444/6
Matrix: Water
Analysis Batch: 278444

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 13:58	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 13:58	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 13:58	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 13:58	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 13:58	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 13:58	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 490-278444/6
Matrix: Water
Analysis Batch: 278444

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 13:58	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 13:58	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 13:58	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 13:58	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 13:58	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 13:58	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 13:58	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 13:58	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 13:58	1
Acetone	2.7	U	25	2.7	ug/L			09/02/15 13:58	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 13:58	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 13:58	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 13:58	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 13:58	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 13:58	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 13:58	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 13:58	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 13:58	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 13:58	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 13:58	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 13:58	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 13:58	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			09/02/15 13:58	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 13:58	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 13:58	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 13:58	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 13:58	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 13:58	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 13:58	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 13:58	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 13:58	1
Methylene Chloride	0.328	J	5.0	0.22	ug/L			09/02/15 13:58	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 13:58	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 13:58	1
Toluene	0.17	U	1.0	0.17	ug/L			09/02/15 13:58	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 13:58	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 13:58	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 13:58	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 13:58	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 13:58	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 13:58	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 13:58	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 13:58*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 13:58*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 490-278444/6
Matrix: Water
Analysis Batch: 278444

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130		09/02/15 13:58	1
Dibromofluoromethane (Surr)	110		70 - 130		09/02/15 13:58	1
Toluene-d8 (Surr)	101		70 - 130		09/02/15 13:58	1
1,2-Dichloroethane-d4 (Surr)	123		70 - 130		09/02/15 13:58	1

Lab Sample ID: LCS 490-278444/3
Matrix: Water
Analysis Batch: 278444

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	23.0		ug/L		115	78 - 135
Freon-113	20.0	17.1		ug/L		85	77 - 129
1,1,2,2-Tetrachloroethane	20.0	19.5		ug/L		97	69 - 131
1,1,2-Trichloroethane	20.0	19.2		ug/L		96	80 - 124
1,1-Dichloroethane	20.0	21.7		ug/L		108	78 - 125
1,1-Dichloroethene	20.0	17.4		ug/L		87	79 - 124
1,2,4-Trichlorobenzene	20.0	20.7		ug/L		104	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	17.2		ug/L		86	54 - 125
1,2-Dichlorobenzene	20.0	19.5		ug/L		97	80 - 121
1,2-Dichloropropane	20.0	20.6		ug/L		103	75 - 120
1,3-Dichlorobenzene	20.0	20.4		ug/L		102	80 - 122
1,4-Dichlorobenzene	20.0	19.6		ug/L		98	80 - 120
2-Butanone (MEK)	100	98.3		ug/L		98	62 - 133
2-Hexanone	100	114		ug/L		114	60 - 142
4-Methyl-2-pentanone (MIBK)	100	103		ug/L		103	60 - 137
Acetone	100	72.8		ug/L		73	54 - 145
Benzene	20.0	21.1		ug/L		105	80 - 121
Bromoform	20.0	18.8		ug/L		94	46 - 145
Bromomethane	20.0	17.3		ug/L		87	41 - 150
Carbon disulfide	20.0	18.0		ug/L		90	77 - 126
Carbon tetrachloride	20.0	22.0		ug/L		110	64 - 147
Chlorobenzene	20.0	19.7		ug/L		99	80 - 120
Chlorodibromomethane	20.0	18.6		ug/L		93	69 - 133
Chloroethane	20.0	16.5		ug/L		82	72 - 120
Chloroform	20.0	21.4		ug/L		107	73 - 129
Chloromethane	20.0	11.8		ug/L		59	12 - 150
cis-1,2-Dichloroethene	20.0	23.2		ug/L		116	76 - 125
cis-1,3-Dichloropropene	20.0	20.1		ug/L		101	74 - 140
Cyclohexane	20.0	26.1	*	ug/L		130	73 - 122
Dichlorobromomethane	20.0	20.2		ug/L		101	75 - 129
Dichlorodifluoromethane	20.0	19.3		ug/L		96	37 - 127
Ethylbenzene	20.0	21.1		ug/L		106	80 - 130
1,2-Dibromoethane	20.0	19.5		ug/L		97	80 - 129
Isopropylbenzene	20.0	22.4		ug/L		112	80 - 141
Methyl acetate	100	66.5		ug/L		67	64 - 150
Methyl tert-butyl ether	20.0	16.8		ug/L		84	72 - 133
Methylcyclohexane	20.0	22.5		ug/L		112	71 - 129
Methylene Chloride	20.0	17.4		ug/L		87	79 - 123

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 490-278444/3
Matrix: Water
Analysis Batch: 278444

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	20.0	22.1		ug/L		111	80 - 127
Tetrachloroethene	20.0	20.2		ug/L		101	80 - 126
Toluene	20.0	20.1		ug/L		100	80 - 126
trans-1,2-Dichloroethene	20.0	16.9		ug/L		85	79 - 126
trans-1,3-Dichloropropene	20.0	20.1		ug/L		100	63 - 134
Trichloroethene	20.0	19.2		ug/L		96	80 - 123
Trichlorofluoromethane	20.0	16.9		ug/L		85	65 - 124
Vinyl chloride	20.0	20.1		ug/L		100	68 - 120
1,2-Dichloroethane	20.0	22.8		ug/L		114	77 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*

Lab Sample ID: 490-85780-B-5 MS
Matrix: Water
Analysis Batch: 278444

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.19	U	50.0	58.6		ug/L		117	76 - 149
Freon-113	0.15	U	50.0	45.7		ug/L		91	72 - 148
1,1,2,2-Tetrachloroethane	0.19	U	50.0	46.2		ug/L		92	56 - 143
1,1,2-Trichloroethane	0.19	U	50.0	45.0		ug/L		90	74 - 134
1,1-Dichloroethane	0.24	U	50.0	54.6		ug/L		109	71 - 139
1,1-Dichloroethene	0.25	U	50.0	48.2		ug/L		96	70 - 142
1,2,4-Trichlorobenzene	0.20	U	50.0	51.7		ug/L		103	60 - 136
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	44.4		ug/L		89	52 - 126
1,2-Dichlorobenzene	0.19	U	50.0	47.6		ug/L		95	79 - 128
1,2-Dichloropropane	0.25	U	50.0	44.1		ug/L		88	67 - 131
1,3-Dichlorobenzene	0.18	U	50.0	49.6		ug/L		99	77 - 131
1,4-Dichlorobenzene	0.17	U	50.0	48.0		ug/L		96	78 - 126
2-Butanone (MEK)	2.6	U	250	233		ug/L		93	50 - 138
2-Hexanone	1.3	U	250	266		ug/L		106	50 - 150
4-Methyl-2-pentanone (MIBK)	0.81	U	250	253		ug/L		101	50 - 147
Acetone	2.7	U	250	169		ug/L		68	45 - 141
Benzene	0.20	U	50.0	53.8		ug/L		108	75 - 133
Bromoform	0.29	U	50.0	45.9		ug/L		92	42 - 147
Bromomethane	0.35	U	50.0	40.4		ug/L		81	16 - 163
Carbon disulfide	0.22	U	50.0	45.1		ug/L		90	48 - 152
Carbon tetrachloride	0.18	U	50.0	58.7		ug/L		117	62 - 164
Chlorobenzene	0.18	U	50.0	47.9		ug/L		96	80 - 129
Chlorodibromomethane	0.25	U	50.0	45.1		ug/L		90	66 - 140
Chloroethane	0.36	U	50.0	42.6		ug/L		85	58 - 137
Chloroform	0.23	U	50.0	53.9		ug/L		108	66 - 138
Chloromethane	0.36	U	50.0	31.1		ug/L		62	10 - 169
cis-1,2-Dichloroethene	0.21	U	50.0	56.4		ug/L		113	68 - 138

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-85780-B-5 MS
Matrix: Water
Analysis Batch: 278444

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	0.17	U	50.0	47.2		ug/L		94	71 - 141
Cyclohexane	0.13	U F1 *	50.0	68.2		ug/L		136	58 - 144
Dichlorobromomethane	0.17	U	50.0	44.8		ug/L		90	70 - 140
Dichlorodifluoromethane	0.17	U	50.0	42.3		ug/L		85	40 - 127
Ethylbenzene	0.19	U	50.0	53.4		ug/L		107	79 - 139
1,2-Dibromoethane	0.21	U	50.0	48.4		ug/L		97	75 - 137
Isopropylbenzene	0.33	U	50.0	56.7		ug/L		113	80 - 153
Methyl acetate	0.58	U	250	155		ug/L		62	30 - 165
Methyl tert-butyl ether	0.17	U	50.0	40.6		ug/L		81	66 - 141
Methylcyclohexane	0.090	U	50.0	51.5		ug/L		103	59 - 151
Methylene Chloride	0.22	U	50.0	41.0		ug/L		82	64 - 139
Styrene	0.28	U	50.0	54.5		ug/L		109	61 - 148
Tetrachloroethene	0.14	U	50.0	50.6		ug/L		101	72 - 145
Toluene	0.17	U	50.0	49.5		ug/L		99	75 - 136
trans-1,2-Dichloroethene	0.23	U	50.0	43.0		ug/L		86	66 - 143
trans-1,3-Dichloropropene	0.17	U	50.0	48.4		ug/L		97	59 - 135
Trichloroethene	0.20	U	50.0	46.9		ug/L		94	73 - 144
Trichlorofluoromethane	0.21	U	50.0	45.8		ug/L		92	58 - 139
Vinyl chloride	0.18	U	50.0	47.1		ug/L		94	56 - 129
1,2-Dichloroethane	0.20	U	50.0	56.1		ug/L		112	64 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*

Lab Sample ID: 490-85780-B-5 MSD
Matrix: Water
Analysis Batch: 278444

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.19	U	50.0	65.0		ug/L		130	76 - 149	10	17
Freon-113	0.15	U	50.0	50.2		ug/L		100	72 - 148	9	18
1,1,2,2-Tetrachloroethane	0.19	U	50.0	49.4		ug/L		99	56 - 143	7	20
1,1,2-Trichloroethane	0.19	U	50.0	45.8		ug/L		92	74 - 134	2	15
1,1-Dichloroethane	0.24	U	50.0	60.6		ug/L		121	71 - 139	10	17
1,1-Dichloroethene	0.25	U	50.0	48.2		ug/L		96	70 - 142	0	17
1,2,4-Trichlorobenzene	0.20	U	50.0	55.1		ug/L		110	60 - 136	6	19
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	45.1		ug/L		90	52 - 126	1	24
1,2-Dichlorobenzene	0.19	U	50.0	51.0		ug/L		102	79 - 128	7	15
1,2-Dichloropropane	0.25	U	50.0	49.5		ug/L		99	67 - 131	12	17
1,3-Dichlorobenzene	0.18	U	50.0	50.5		ug/L		101	77 - 131	2	15
1,4-Dichlorobenzene	0.17	U	50.0	48.5		ug/L		97	78 - 126	1	15
2-Butanone (MEK)	2.6	U	250	272		ug/L		109	50 - 138	15	19
2-Hexanone	1.3	U	250	269		ug/L		108	50 - 150	1	15
4-Methyl-2-pentanone (MIBK)	0.81	U	250	260		ug/L		104	50 - 147	3	17
Acetone	2.7	U	250	193		ug/L		77	45 - 141	13	21

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-85780-B-5 MSD
Matrix: Water
Analysis Batch: 278444

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.20	U	50.0	59.5		ug/L		119	75 - 133	10	17
Bromoform	0.29	U	50.0	45.5		ug/L		91	42 - 147	1	16
Bromomethane	0.35	U	50.0	53.6		ug/L		107	16 - 163	28	50
Carbon disulfide	0.22	U	50.0	49.5		ug/L		99	48 - 152	9	21
Carbon tetrachloride	0.18	U	50.0	64.5		ug/L		129	62 - 164	9	19
Chlorobenzene	0.18	U	50.0	49.6		ug/L		99	80 - 129	4	14
Chlorodibromomethane	0.25	U	50.0	47.0		ug/L		94	66 - 140	4	15
Chloroethane	0.36	U	50.0	47.4		ug/L		95	58 - 137	11	20
Chloroform	0.23	U	50.0	59.3		ug/L		119	66 - 138	10	18
Chloromethane	0.36	U	50.0	33.0		ug/L		66	10 - 169	6	31
cis-1,2-Dichloroethene	0.21	U	50.0	63.2		ug/L		126	68 - 138	11	17
cis-1,3-Dichloropropene	0.17	U	50.0	50.5		ug/L		101	71 - 141	7	15
Cyclohexane	0.13	U F1 *	50.0	76.0	F1	ug/L		152	58 - 144	11	16
Dichlorobromomethane	0.17	U	50.0	49.2		ug/L		98	70 - 140	9	18
Dichlorodifluoromethane	0.17	U	50.0	46.1		ug/L		92	40 - 127	8	18
Ethylbenzene	0.19	U	50.0	55.2		ug/L		110	79 - 139	3	15
1,2-Dibromoethane	0.21	U	50.0	49.5		ug/L		99	75 - 137	2	15
Isopropylbenzene	0.33	U	50.0	57.3		ug/L		115	80 - 153	1	16
Methyl acetate	0.58	U	250	171		ug/L		68	30 - 165	9	31
Methyl tert-butyl ether	0.17	U	50.0	45.2		ug/L		90	66 - 141	11	16
Methylcyclohexane	0.090	U	50.0	57.2		ug/L		114	59 - 151	11	19
Methylene Chloride	0.22	U	50.0	46.6		ug/L		93	64 - 139	13	17
Styrene	0.28	U	50.0	56.7		ug/L		113	61 - 148	4	24
Tetrachloroethene	0.14	U	50.0	50.7		ug/L		101	72 - 145	0	16
Toluene	0.17	U	50.0	50.7		ug/L		101	75 - 136	2	15
trans-1,2-Dichloroethene	0.23	U	50.0	47.8		ug/L		96	66 - 143	10	16
trans-1,3-Dichloropropene	0.17	U	50.0	49.9		ug/L		100	59 - 135	3	14
Trichloroethene	0.20	U	50.0	51.6		ug/L		103	73 - 144	10	17
Trichlorofluoromethane	0.21	U	50.0	47.7		ug/L		95	58 - 139	4	18
Vinyl chloride	0.18	U	50.0	52.0		ug/L		104	56 - 129	10	17
1,2-Dichloroethane	0.20	U	50.0	61.3		ug/L		123	64 - 136	9	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*113*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*126*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-278441/7
Matrix: Water
Analysis Batch: 278441

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/02/15 14:36	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/02/15 14:36	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/02/15 14:36	1

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-278441/7
Matrix: Water
Analysis Batch: 278441

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/02/15 14:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*09/02/15 14:36*	*1*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*		*09/02/15 14:36*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*09/02/15 14:36*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/02/15 14:36*	*1*

Lab Sample ID: LCS 490-278441/3
Matrix: Water
Analysis Batch: 278441

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.500	0.511		ug/L		102	70 - 131		
1,2-Dibromo-3-Chloropropane			0.500	0.585		ug/L		117	40 - 160		
1,4-Dioxane			10.0	13.4		ug/L		134	40 - 160		
Ethylene Dibromide			0.500	0.503		ug/L		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 490-278441/4
Matrix: Water
Analysis Batch: 278441

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.500	0.500		ug/L		100	70 - 131	2	19
1,2-Dibromo-3-Chloropropane			0.500	0.571		ug/L		114	40 - 160	2	20
1,4-Dioxane			10.0	13.5		ug/L		135	40 - 160	1	20
Ethylene Dibromide			0.500	0.499		ug/L		100	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

Lab Sample ID: 490-85780-A-5 MS
Matrix: Water
Analysis Batch: 278441

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane	0.010	U	0.500	0.536		ug/L		107	53 - 144		
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.533		ug/L		107	40 - 160		

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-85780-A-5 MS
Matrix: Water
Analysis Batch: 278441

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.27	U	10.0	15.4		ug/L		154	40 - 160
Ethylene Dibromide	0.010	U	0.500	0.502		ug/L		100	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Lab Sample ID: 490-85780-A-5 MSD
Matrix: Water
Analysis Batch: 278441

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.010	U	0.500	0.472		ug/L		94	53 - 144	13	19
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.454		ug/L		91	40 - 160	16	20
1,4-Dioxane	0.27	U	10.0	12.9		ug/L		129	40 - 160	17	20
Ethylene Dibromide	0.010	U	0.500	0.441		ug/L		88	70 - 130	13	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-276471/1-A
Matrix: Water
Analysis Batch: 276721

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276471

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/26/15 15:47	08/27/15 13:20	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/26/15 15:47	08/27/15 13:20	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/26/15 15:47	08/27/15 13:20	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/26/15 15:47	08/27/15 13:20	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/26/15 15:47	08/27/15 13:20	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/26/15 15:47	08/27/15 13:20	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/26/15 15:47	08/27/15 13:20	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-276471/1-A
Matrix: Water
Analysis Batch: 276721

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276471

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/26/15 15:47	08/27/15 13:20	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/26/15 15:47	08/27/15 13:20	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/26/15 15:47	08/27/15 13:20	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/26/15 15:47	08/27/15 13:20	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/26/15 15:47	08/27/15 13:20	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/26/15 15:47	08/27/15 13:20	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/26/15 15:47	08/27/15 13:20	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/26/15 15:47	08/27/15 13:20	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/26/15 15:47	08/27/15 13:20	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/26/15 15:47	08/27/15 13:20	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/26/15 15:47	08/27/15 13:20	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/26/15 15:47	08/27/15 13:20	1
Acetophenone	2.3	U	10	2.3	ug/L		08/26/15 15:47	08/27/15 13:20	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/26/15 15:47	08/27/15 13:20	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/26/15 15:47	08/27/15 13:20	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/26/15 15:47	08/27/15 13:20	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/26/15 15:47	08/27/15 13:20	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/26/15 15:47	08/27/15 13:20	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/26/15 15:47	08/27/15 13:20	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 15:47	08/27/15 13:20	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/26/15 15:47	08/27/15 13:20	1
Carbazole	2.8	U	10	2.8	ug/L		08/26/15 15:47	08/27/15 13:20	1
Caprolactam	2.4	U	10	2.4	ug/L		08/26/15 15:47	08/27/15 13:20	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/26/15 15:47	08/27/15 13:20	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/26/15 15:47	08/27/15 13:20	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/26/15 15:47	08/27/15 13:20	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/26/15 15:47	08/27/15 13:20	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/26/15 15:47	08/27/15 13:20	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 15:47	08/27/15 13:20	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/26/15 15:47	08/27/15 13:20	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/26/15 15:47	08/27/15 13:20	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/26/15 15:47	08/27/15 13:20	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/26/15 15:47	08/27/15 13:20	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/26/15 15:47	08/27/15 13:20	1
Isophorone	3.1	U	10	3.1	ug/L		08/26/15 15:47	08/27/15 13:20	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/26/15 15:47	08/27/15 13:20	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/26/15 15:47	08/27/15 13:20	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/26/15 15:47	08/27/15 13:20	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/26/15 15:47	08/27/15 13:20	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/26/15 15:47	08/27/15 13:20	1
Phenol	1.5	U	10	1.5	ug/L		08/26/15 15:47	08/27/15 13:20	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/26/15 15:47	08/27/15 13:20	1
Diphenyl	2.2	U	10	2.2	ug/L		08/26/15 15:47	08/27/15 13:20	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/26/15 15:47	08/27/15 13:20	1
Atrazine	2.9	U	10	2.9	ug/L		08/26/15 15:47	08/27/15 13:20	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-276471/1-A
Matrix: Water
Analysis Batch: 276721

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276471

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L				08/26/15 15:47	08/27/15 13:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	78		10 - 120	08/26/15 15:47	08/27/15 13:20	1
2-Fluorobiphenyl (Surr)	63		29 - 120	08/26/15 15:47	08/27/15 13:20	1
2-Fluorophenol (Surr)	33		10 - 120	08/26/15 15:47	08/27/15 13:20	1
Nitrobenzene-d5 (Surr)	60		27 - 120	08/26/15 15:47	08/27/15 13:20	1
Phenol-d5 (Surr)	21		10 - 120	08/26/15 15:47	08/27/15 13:20	1
Terphenyl-d14 (Surr)	71		13 - 120	08/26/15 15:47	08/27/15 13:20	1

Lab Sample ID: LCS 490-276471/2-A
Matrix: Water
Analysis Batch: 276721

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	40.0	32.1		ug/L		80	46 - 120
1,2,4,5-Tetrachlorobenzene	40.0	34.5		ug/L		86	25 - 120
2,3,4,6-Tetrachlorophenol	40.0	37.4		ug/L		93	31 - 148
2,4,5-Trichlorophenol	40.0	34.6		ug/L		87	40 - 129
2,4,6-Trichlorophenol	40.0	34.3		ug/L		86	39 - 135
2,4-Dichlorophenol	40.0	30.6		ug/L		76	38 - 120
2,4-Dimethylphenol	40.0	29.8		ug/L		75	21 - 126
2,4-Dinitrophenol	80.0	37.4		ug/L		47	20 - 150
2,4-Dinitrotoluene	40.0	35.6		ug/L		89	46 - 132
2,6-Dinitrotoluene	40.0	34.0		ug/L		85	54 - 128
2-Chloronaphthalene	40.0	31.7		ug/L		79	39 - 120
2-Chlorophenol	40.0	26.3		ug/L		66	40 - 120
2-Methylnaphthalene	40.0	30.0		ug/L		75	31 - 120
2-Methylphenol	40.0	25.7		ug/L		64	38 - 120
2-Nitroaniline	40.0	34.0		ug/L		85	46 - 131
2-Nitrophenol	40.0	30.9		ug/L		77	32 - 120
3,3'-Dichlorobenzidine	40.0	32.6		ug/L		81	46 - 129
3 & 4 Methylphenol	40.0	20.8		ug/L		52	33 - 120
3-Nitroaniline	40.0	29.5		ug/L		74	54 - 121
4,6-Dinitro-2-methylphenol	80.0	65.4		ug/L		82	19 - 150
4-Bromophenyl phenyl ether	40.0	34.3		ug/L		86	47 - 127
4-Chloro-3-methylphenol	40.0	31.4		ug/L		79	44 - 120
4-Chloroaniline	40.0	26.7		ug/L		67	44 - 120
4-Chlorophenyl phenyl ether	40.0	34.6		ug/L		87	50 - 120
4-Nitroaniline	40.0	32.8		ug/L		82	55 - 123
4-Nitrophenol	80.0	24.8	J	ug/L		31	10 - 120
Acenaphthylene	40.0	31.8		ug/L		80	48 - 120
Acetophenone	40.0	30.2		ug/L		75	52 - 133
Anthracene	40.0	33.3		ug/L		83	58 - 130
Benzaldehyde	40.0	46.8		ug/L		117	34 - 120
Benzo[g,h,i]perylene	40.0	35.6		ug/L		89	51 - 123
Benzo[k]fluoranthene	40.0	30.4		ug/L		76	51 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-276471/2-A
Matrix: Water
Analysis Batch: 276721

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethoxy)methane	40.0	28.2		ug/L		71	44 - 120
Bis(2-chloroethyl)ether	40.0	25.9		ug/L		65	47 - 120
Butyl benzyl phthalate	40.0	30.0		ug/L		75	51 - 146
Bis(2-ethylhexyl) phthalate	40.0	36.5		ug/L		91	47 - 138
Carbazole	40.0	32.8		ug/L		82	54 - 123
Caprolactam	40.0	7.19	J	ug/L		18	10 - 120
Chrysene	40.0	28.7		ug/L		72	55 - 120
Dibenz(a,h)anthracene	40.0	38.4		ug/L		96	50 - 125
Dibenzofuran	40.0	32.4		ug/L		81	50 - 120
Diethyl phthalate	40.0	36.4		ug/L		91	54 - 128
Dimethyl phthalate	40.0	34.5		ug/L		86	53 - 127
Di-n-butyl phthalate	40.0	36.8		ug/L		92	54 - 140
Fluoranthene	40.0	36.0		ug/L		90	56 - 120
Fluorene	40.0	34.2		ug/L		85	52 - 120
Hexachlorocyclopentadiene	40.0	34.7		ug/L		87	17 - 120
Hexachloroethane	40.0	28.5		ug/L		71	30 - 120
Indeno[1,2,3-cd]pyrene	40.0	37.0		ug/L		92	54 - 125
Isophorone	40.0	30.6		ug/L		76	47 - 120
Naphthalene	40.0	29.1		ug/L		73	37 - 120
Nitrobenzene	40.0	29.6		ug/L		74	36 - 120
N-Nitrosodi-n-propylamine	40.0	30.3		ug/L		76	51 - 120
N-Nitrosodiphenylamine	80.0	65.9		ug/L		82	58 - 149
Phenanthrene	40.0	31.6		ug/L		79	56 - 120
Phenol	40.0	11.4		ug/L		29	14 - 120
Pyrene	40.0	28.4		ug/L		71	53 - 129
Diphenyl	40.0	31.9		ug/L		80	10 - 146
Di-n-octyl phthalate	40.0	35.4		ug/L		88	50 - 142
2,2'-oxybis[1-chloropropane]	40.0	25.4		ug/L		63	44 - 120
Atrazine	40.0	35.8		ug/L		90	24 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*93*		*10 - 120*
2-Fluorobiphenyl (Surr)	*76*		*29 - 120*
2-Fluorophenol (Surr)	*38*		*10 - 120*
Nitrobenzene-d5 (Surr)	*70*		*27 - 120*
Phenol-d5 (Surr)	*26*		*10 - 120*
Terphenyl-d14 (Surr)	*69*		*13 - 120*

Lab Sample ID: 490-85780-K-5-A MSD
Matrix: Water
Analysis Batch: 276721

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 276471

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*89*		*10 - 120*
2-Fluorobiphenyl (Surr)	*64*		*29 - 120*
2-Fluorophenol (Surr)	*31*		*10 - 120*
Nitrobenzene-d5 (Surr)	*63*		*27 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-85780-K-5-A MSD
Matrix: Water
Analysis Batch: 276721

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 276471

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Phenol-d5 (Surr)	20		10 - 120
Terphenyl-d14 (Surr)	76		13 - 120

Lab Sample ID: 490-85780-N-5-A MS
Matrix: Water
Analysis Batch: 276721

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 276471

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	85		10 - 120
2-Fluorobiphenyl (Surr)	63		29 - 120
2-Fluorophenol (Surr)	32		10 - 120
Nitrobenzene-d5 (Surr)	60		27 - 120
Phenol-d5 (Surr)	21		10 - 120
Terphenyl-d14 (Surr)	80		13 - 120

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 490-276884/1-A
Matrix: Water
Analysis Batch: 277406

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276884

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 14:48	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 14:48	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 14:48	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 14:48	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 14:48	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 14:48	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 14:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	95		10 - 120	08/27/15 16:15	08/29/15 14:48	1
2-Fluorobiphenyl (Surr)	85		29 - 120	08/27/15 16:15	08/29/15 14:48	1
Nitrobenzene-d5	99		27 - 120	08/27/15 16:15	08/29/15 14:48	1
Terphenyl-d14	100		13 - 120	08/27/15 16:15	08/29/15 14:48	1
2-Fluorophenol	63		10 - 120	08/27/15 16:15	08/29/15 14:48	1
Phenol-d5	44		10 - 120	08/27/15 16:15	08/29/15 14:48	1

Lab Sample ID: LCS 490-276884/2-A
Matrix: Water
Analysis Batch: 277406

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276884

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.816		ug/L		102	57 - 120
Benzo[a]pyrene	0.800	0.720		ug/L		90	57 - 124
Benzo[b]fluoranthene	0.800	0.758		ug/L		95	51 - 125
Hexachlorobenzene	0.800	0.618		ug/L		77	48 - 131

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 490-276884/2-A
Matrix: Water
Analysis Batch: 277406

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276884

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hexachlorobutadiene			0.800	0.557		ug/L		70	28 - 120		
N-Nitrosodimethylamine			0.800	0.390	J	ug/L		49	20 - 120		
Pentachlorophenol			1.60	1.11		ug/L		69	21 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*97*		*10 - 120*
2-Fluorobiphenyl (Surr)	*81*		*29 - 120*
Nitrobenzene-d5	*94*		*27 - 120*
Terphenyl-d14	*101*		*13 - 120*
2-Fluorophenol	*59*		*10 - 120*
Phenol-d5	*40*		*10 - 120*

Lab Sample ID: 490-85780-J-5-A MSD
Matrix: Water
Analysis Batch: 277406

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 276884

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*90*		*10 - 120*
2-Fluorobiphenyl (Surr)	*77*		*29 - 120*
Nitrobenzene-d5	*82*		*27 - 120*
Terphenyl-d14	*90*		*13 - 120*
2-Fluorophenol	*49*		*10 - 120*
Phenol-d5	*34*		*10 - 120*

Lab Sample ID: 490-85780-M-5-A MS
Matrix: Water
Analysis Batch: 277406

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 276884

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol	*85*		*10 - 120*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*
Nitrobenzene-d5	*76*		*27 - 120*
Terphenyl-d14	*84*		*13 - 120*
2-Fluorophenol	*46*		*10 - 120*
Phenol-d5	*32*		*10 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-278718/1-A
Matrix: Water
Analysis Batch: 279109

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 278718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/03/15 06:55	09/04/15 14:15	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/03/15 06:55	09/04/15 14:15	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/03/15 06:55	09/04/15 14:15	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/03/15 06:55	09/04/15 14:15	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 490-278718/1-A
Matrix: Water
Analysis Batch: 279109

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 278718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	0.15	U	0.50	0.15	ug/L		09/03/15 06:55	09/04/15 14:15	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/03/15 06:55	09/04/15 14:15	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/03/15 06:55	09/04/15 14:15	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/03/15 06:55	09/04/15 14:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*75*		*10 - 150*	*09/03/15 06:55*	*09/04/15 14:15*	*1*
Tetrachloro-m-xylene	*81*		*10 - 150*	*09/03/15 06:55*	*09/04/15 14:15*	*1*

Lab Sample ID: LCS 490-278718/2-A
Matrix: Water
Analysis Batch: 279109

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 278718

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	3.65		ug/L		91	23 - 139		
PCB-1260			4.00	3.36		ug/L		84	36 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*96*		*10 - 150*
Tetrachloro-m-xylene	*94*		*10 - 150*

Lab Sample ID: 490-85780-J-5-C MS
Matrix: Water
Analysis Batch: 279109

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 278718

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	0.37	U	3.45	2.75		ug/L		80	23 - 139		
PCB-1260	0.16	U	3.45	2.54		ug/L		74	36 - 144		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*90*		*10 - 150*
Tetrachloro-m-xylene	*83*		*10 - 150*

Lab Sample ID: 490-85780-L-5-C MSD
Matrix: Water
Analysis Batch: 279109

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 278718

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.37	U	3.70	2.90		ug/L		78	23 - 139	5	50
PCB-1260	0.16	U	3.70	2.90		ug/L		78	36 - 144	14	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*97*		*10 - 150*
Tetrachloro-m-xylene	*80*		*10 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 490-278029/6
Matrix: Water
Analysis Batch: 278029

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			08/31/15 14:19	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/31/15 14:19	1

Lab Sample ID: LCS 490-278029/7
Matrix: Water
Analysis Batch: 278029

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	97.02		mg/L		97	80 - 120
Sulfate	100	97.89		mg/L		98	80 - 120

Lab Sample ID: LCSD 490-278029/8
Matrix: Water
Analysis Batch: 278029

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	96.71		mg/L		97	80 - 120	0	20
Sulfate	100	97.70		mg/L		98	80 - 120	0	20

Lab Sample ID: 490-85780-G-5 MS
Matrix: Water
Analysis Batch: 278029

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.08		100	97.38		mg/L		96	80 - 120
Sulfate	7.00		100	104.0		mg/L		97	80 - 120

Lab Sample ID: 490-85780-G-5 MSD
Matrix: Water
Analysis Batch: 278029

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.08		100	96.40		mg/L		95	80 - 120	1	20
Sulfate	7.00		100	102.8		mg/L		96	80 - 120	1	20

Lab Sample ID: MB 490-278255/6
Matrix: Water
Analysis Batch: 278255

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			09/01/15 15:12	1
Sulfate	0.60	U	1.00	0.60	mg/L			09/01/15 15:12	1

Lab Sample ID: LCS 490-278255/7
Matrix: Water
Analysis Batch: 278255

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	97.47		mg/L		97	80 - 120

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 490-278255/7
Matrix: Water
Analysis Batch: 278255

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			100	98.46		mg/L		98	80 - 120		

Lab Sample ID: LCSD 490-278255/8
Matrix: Water
Analysis Batch: 278255

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	97.26		mg/L		97	80 - 120	0	20
Sulfate			100	98.21		mg/L		98	80 - 120	0	20

Lab Sample ID: 490-86046-C-2 MS
Matrix: Water
Analysis Batch: 278255

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	601	F1	500	923.2	F1	mg/L		65	80 - 120		
Sulfate	167	F1	500	560.8	F1	mg/L		79	80 - 120		

Lab Sample ID: 490-86046-C-2 MSD
Matrix: Water
Analysis Batch: 278255

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	601	F1	500	912.6	F1	mg/L		62	80 - 120	1	20
Sulfate	167	F1	500	554.2	F1	mg/L		77	80 - 120	1	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 490-275892/1-A
Matrix: Water
Analysis Batch: 276615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275892

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 19:41	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 19:41	1
Calcium	0.13	U	1.0	0.13	mg/L		08/25/15 08:27	08/26/15 19:41	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Iron	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 19:41	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 19:41	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/25/15 08:27	08/26/15 19:41	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Potassium	0.13	U	1.0	0.13	mg/L		08/25/15 08:27	08/26/15 19:41	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 490-275892/1-A
Matrix: Water
Analysis Batch: 276615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275892

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Sodium	0.13	U	1.0	0.13	mg/L		08/25/15 08:27	08/26/15 19:41	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 19:41	1
Vanadium	0.00145	J	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 19:41	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 19:41	1

Lab Sample ID: MB 490-275892/1-A
Matrix: Water
Analysis Batch: 277043

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275892

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 13:51	1

Lab Sample ID: LCS 490-275892/2-A
Matrix: Water
Analysis Batch: 276615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275892

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	0.931		mg/L		93	80 - 120
Antimony	0.100	0.101		mg/L		101	80 - 120
Arsenic	0.100	0.0895		mg/L		89	80 - 120
Barium	0.100	0.0982		mg/L		98	80 - 120
Beryllium	0.100	0.0978		mg/L		98	80 - 120
Cadmium	0.100	0.0972		mg/L		97	80 - 120
Calcium	10.0	9.84		mg/L		98	80 - 120
Chromium	0.100	0.0984		mg/L		98	80 - 120
Cobalt	0.100	0.0999		mg/L		100	80 - 120
Copper	0.100	0.0936		mg/L		94	80 - 120
Iron	1.00	1.08		mg/L		108	80 - 120
Lead	0.100	0.0998		mg/L		100	80 - 120
Magnesium	10.0	9.61		mg/L		96	80 - 120
Manganese	0.100	0.102		mg/L		102	80 - 120
Nickel	0.100	0.0980		mg/L		98	80 - 120
Potassium	10.0	10.12		mg/L		101	80 - 120
Silver	0.100	0.100		mg/L		100	80 - 120
Sodium	10.0	9.77		mg/L		98	80 - 120
Thallium	0.100	0.0960		mg/L		96	80 - 120
Vanadium	0.100	0.101		mg/L		101	80 - 120
Zinc	0.100	0.0836		mg/L		84	80 - 120

Lab Sample ID: LCS 490-275892/2-A
Matrix: Water
Analysis Batch: 277043

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275892

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	0.100	0.101		mg/L		101	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85780-E-5-E MS
Matrix: Water
Analysis Batch: 276615

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275892

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.065		1.00	1.03		mg/L		97	75 - 125
Antimony	0.00050	U	0.100	0.101		mg/L		101	75 - 125
Arsenic	0.00050	U	0.100	0.0917		mg/L		92	75 - 125
Barium	0.0081		0.100	0.106		mg/L		98	75 - 125
Beryllium	0.00050	U	0.100	0.0968		mg/L		97	75 - 125
Cadmium	0.00040	U	0.100	0.0975		mg/L		98	75 - 125
Calcium	10.2		10.0	21.54		mg/L		113	75 - 125
Chromium	0.00050	U	0.100	0.102		mg/L		102	75 - 125
Cobalt	0.00050	U	0.100	0.102		mg/L		102	75 - 125
Copper	0.00050	U	0.100	0.0966		mg/L		97	75 - 125
Iron	0.17		1.00	1.30		mg/L		113	75 - 125
Lead	0.00020	U	0.100	0.0991		mg/L		99	75 - 125
Magnesium	2.8		10.0	12.83		mg/L		100	75 - 125
Manganese	0.022		0.100	0.128		mg/L		106	75 - 125
Nickel	0.00050	U	0.100	0.0999		mg/L		100	75 - 125
Potassium	0.58	J	10.0	11.19		mg/L		106	75 - 125
Silver	0.00050	U	0.100	0.0998		mg/L		100	75 - 125
Sodium	3.6		10.0	13.84		mg/L		102	75 - 125
Thallium	0.00079	J	0.100	0.0968		mg/L		96	75 - 125
Vanadium	0.0018	J B	0.100	0.105		mg/L		103	75 - 125
Zinc	0.010	U	0.100	0.0866		mg/L		87	75 - 125

Lab Sample ID: 490-85780-E-5-E MS
Matrix: Water
Analysis Batch: 277043

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275892

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	0.00060	U	0.100	0.104		mg/L		104	75 - 125

Lab Sample ID: 490-85780-E-5-F MSD
Matrix: Water
Analysis Batch: 276615

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275892

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.065		1.00	1.02		mg/L		95	75 - 125	1	20
Antimony	0.00050	U	0.100	0.103		mg/L		103	75 - 125	2	20
Arsenic	0.00050	U	0.100	0.0921		mg/L		92	75 - 125	0	20
Barium	0.0081		0.100	0.108		mg/L		100	75 - 125	2	20
Beryllium	0.00050	U	0.100	0.0975		mg/L		97	75 - 125	1	20
Cadmium	0.00040	U	0.100	0.101		mg/L		101	75 - 125	3	20
Calcium	10.2		10.0	21.25		mg/L		111	75 - 125	1	20
Chromium	0.00050	U	0.100	0.101		mg/L		101	75 - 125	0	20
Cobalt	0.00050	U	0.100	0.104		mg/L		104	75 - 125	2	20
Copper	0.00050	U	0.100	0.0954		mg/L		95	75 - 125	1	20
Iron	0.17		1.00	1.30		mg/L		113	75 - 125	0	20
Lead	0.00020	U	0.100	0.102		mg/L		102	75 - 125	3	20
Magnesium	2.8		10.0	12.77		mg/L		99	75 - 125	0	20
Manganese	0.022		0.100	0.132		mg/L		110	75 - 125	3	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85780-E-5-F MSD
Matrix: Water
Analysis Batch: 276615

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275892

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nickel	0.00050	U	0.100	0.102		mg/L		102	75 - 125	2	20
Potassium	0.58	J	10.0	11.13		mg/L		105	75 - 125	1	20
Silver	0.00050	U	0.100	0.102		mg/L		102	75 - 125	2	20
Sodium	3.6		10.0	13.70		mg/L		101	75 - 125	1	20
Thallium	0.00079	J	0.100	0.0996		mg/L		99	75 - 125	3	20
Vanadium	0.0018	J B	0.100	0.104		mg/L		102	75 - 125	1	20
Zinc	0.010	U	0.100	0.0889		mg/L		89	75 - 125	3	20

Lab Sample ID: 490-85780-E-5-F MSD
Matrix: Water
Analysis Batch: 277043

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275892

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium	0.00060	U	0.100	0.0991		mg/L		99	75 - 125	5	20

Lab Sample ID: MB 490-276511/1-B
Matrix: Water
Analysis Batch: 279070

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 276622

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 12:33	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 12:33	1
Calcium	0.13	U	1.0	0.13	mg/L		08/26/15 17:11	09/03/15 12:33	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Iron	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 12:33	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 12:33	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/26/15 17:11	09/03/15 12:33	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Potassium	0.13	U	1.0	0.13	mg/L		08/26/15 17:11	09/03/15 12:33	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 12:33	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Sodium	0.13	U	1.0	0.13	mg/L		08/26/15 17:11	09/03/15 12:33	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 12:33	1
Vanadium	0.000637	J	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 12:33	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 12:33	1

Lab Sample ID: LCS 490-276511/2-B
Matrix: Water
Analysis Batch: 279070

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 276622

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aluminum			1.00	0.973		mg/L		97	80 - 120		

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-276511/2-B
Matrix: Water
Analysis Batch: 279070

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 276622

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.100	0.103		mg/L		103	80 - 120
Arsenic	0.100	0.102		mg/L		102	80 - 120
Barium	0.100	0.101		mg/L		101	80 - 120
Beryllium	0.100	0.101		mg/L		101	80 - 120
Cadmium	0.100	0.100		mg/L		100	80 - 120
Calcium	10.0	10.18		mg/L		102	80 - 120
Chromium	0.100	0.107		mg/L		107	80 - 120
Cobalt	0.100	0.107		mg/L		107	80 - 120
Copper	0.100	0.0977		mg/L		98	80 - 120
Iron	1.00	1.06		mg/L		106	80 - 120
Lead	0.100	0.0979		mg/L		98	80 - 120
Magnesium	10.0	9.72		mg/L		97	80 - 120
Manganese	0.100	0.109		mg/L		109	80 - 120
Nickel	0.100	0.102		mg/L		102	80 - 120
Potassium	10.0	9.69		mg/L		97	80 - 120
Selenium	0.100	0.0988		mg/L		99	80 - 120
Silver	0.100	0.104		mg/L		104	80 - 120
Sodium	10.0	9.75		mg/L		98	80 - 120
Thallium	0.100	0.0993		mg/L		99	80 - 120
Vanadium	0.100	0.0990		mg/L		99	80 - 120
Zinc	0.100	0.0994		mg/L		99	80 - 120

Lab Sample ID: 490-85780-G-5-E MS
Matrix: Water
Analysis Batch: 279070

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 276622

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.016	J	1.00	0.972		mg/L		96	75 - 125
Antimony	0.0011	J	0.100	0.105		mg/L		103	75 - 125
Arsenic	0.00050	U	0.100	0.0965		mg/L		97	75 - 125
Barium	0.0079		0.100	0.113		mg/L		105	75 - 125
Beryllium	0.00050	U	0.100	0.103		mg/L		103	75 - 125
Cadmium	0.00040	U	0.100	0.100		mg/L		100	75 - 125
Calcium	9.8		10.0	19.22		mg/L		94	75 - 125
Chromium	0.00050	U	0.100	0.0998		mg/L		100	75 - 125
Cobalt	0.00050	U	0.100	0.0996		mg/L		100	75 - 125
Copper	0.00077	J	0.100	0.0976		mg/L		97	75 - 125
Iron	0.063		1.00	1.06		mg/L		99	75 - 125
Lead	0.00020	U	0.100	0.0986		mg/L		99	75 - 125
Magnesium	2.9		10.0	12.24		mg/L		94	75 - 125
Manganese	0.015		0.100	0.115		mg/L		100	75 - 125
Nickel	0.00052	J	0.100	0.0991		mg/L		99	75 - 125
Potassium	0.58	J	10.0	10.06		mg/L		95	75 - 125
Selenium	0.00060	U	0.100	0.0917		mg/L		92	75 - 125
Silver	0.00050	U	0.100	0.103		mg/L		103	75 - 125
Sodium	3.6		10.0	13.07		mg/L		95	75 - 125
Thallium	0.00068	J	0.100	0.102		mg/L		102	75 - 125
Vanadium	0.0011	J B	0.100	0.0980		mg/L		97	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85780-G-5-E MS
Matrix: Water
Analysis Batch: 279070

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 276622

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	0.010	U	0.100	0.0942		mg/L		94	75 - 125

Lab Sample ID: 490-85780-G-5-F MSD
Matrix: Water
Analysis Batch: 279070

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 276622

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.016	J	1.00	1.00		mg/L		99	75 - 125	3	20
Antimony	0.0011	J	0.100	0.0976		mg/L		96	75 - 125	7	20
Arsenic	0.00050	U	0.100	0.0996		mg/L		100	75 - 125	3	20
Barium	0.0079		0.100	0.105		mg/L		97	75 - 125	7	20
Beryllium	0.00050	U	0.100	0.0986		mg/L		99	75 - 125	4	20
Cadmium	0.00040	U	0.100	0.104		mg/L		104	75 - 125	3	20
Calcium	9.8		10.0	19.66		mg/L		98	75 - 125	2	20
Chromium	0.00050	U	0.100	0.102		mg/L		102	75 - 125	2	20
Cobalt	0.00050	U	0.100	0.102		mg/L		102	75 - 125	3	20
Copper	0.00077	J	0.100	0.100		mg/L		99	75 - 125	2	20
Iron	0.063		1.00	1.08		mg/L		101	75 - 125	2	20
Lead	0.00020	U	0.100	0.0918		mg/L		92	75 - 125	7	20
Magnesium	2.9		10.0	12.66		mg/L		98	75 - 125	3	20
Manganese	0.015		0.100	0.118		mg/L		103	75 - 125	2	20
Nickel	0.00052	J	0.100	0.102		mg/L		102	75 - 125	3	20
Potassium	0.58	J	10.0	10.31		mg/L		97	75 - 125	2	20
Selenium	0.00060	U	0.100	0.0941		mg/L		94	75 - 125	3	20
Silver	0.00050	U	0.100	0.108		mg/L		108	75 - 125	4	20
Sodium	3.6		10.0	13.59		mg/L		100	75 - 125	4	20
Thallium	0.00068	J	0.100	0.0970		mg/L		96	75 - 125	5	20
Vanadium	0.0011	J B	0.100	0.102		mg/L		101	75 - 125	4	20
Zinc	0.010	U	0.100	0.0964		mg/L		96	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 490-277871/1-A
Matrix: Water
Analysis Batch: 278012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277871

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:08	08/31/15 21:37	1

Lab Sample ID: LCS 490-277871/2-A
Matrix: Water
Analysis Batch: 278012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277871

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.00100		mg/L		100	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 490-85780-E-1-D MS
Matrix: Water
Analysis Batch: 278012

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 277871

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000996		mg/L		100	75 - 125

Lab Sample ID: 490-85780-E-1-E MSD
Matrix: Water
Analysis Batch: 278012

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 277871

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.00101		mg/L		101	75 - 125	1	20

Lab Sample ID: MB 490-276970/1-B
Matrix: Water
Analysis Batch: 277919

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 277396

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 16:29	1

Lab Sample ID: LCS 490-276970/2-B
Matrix: Water
Analysis Batch: 277919

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 277396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000952		mg/L		95	80 - 120

Lab Sample ID: 490-85780-G-5-K MS
Matrix: Water
Analysis Batch: 277919

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 277396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000923		mg/L		92	75 - 125

Lab Sample ID: 490-85780-G-5-L MSD
Matrix: Water
Analysis Batch: 277919

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 277396

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000913		mg/L		91	75 - 125	1	20

Lab Sample ID: MB 490-277940/1-B
Matrix: Water
Analysis Batch: 278590

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 278310

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 19:53	09/02/15 14:34	1

Lab Sample ID: LCS 490-277940/2-B
Matrix: Water
Analysis Batch: 278590

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 278310

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.00101		mg/L		101	80 - 120

Lab Sample ID: 490-86046-C-2-K MS
Matrix: Water
Analysis Batch: 278590

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 278310

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.00107		mg/L		107	75 - 125

Lab Sample ID: 490-86046-C-2-L MSD
Matrix: Water
Analysis Batch: 278590

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 278310

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.00101		mg/L		101	75 - 125	5	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 490-276133/1-A
Matrix: Water
Analysis Batch: 276914

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276133

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 13:44	08/27/15 11:23	1

Lab Sample ID: LCS 490-276133/2-A
Matrix: Water
Analysis Batch: 276914

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276133

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0964		mg/L		96	90 - 110

Lab Sample ID: 490-85779-10 MS
Matrix: Water
Analysis Batch: 276914

Client Sample ID: RW-8 (204-214)-082015
Prep Type: Total/NA
Prep Batch: 276133

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1	0.100	0.0685	F1	mg/L		69	70 - 130

Lab Sample ID: 490-85779-10 MSD
Matrix: Water
Analysis Batch: 276914

Client Sample ID: RW-8 (204-214)-082015
Prep Type: Total/NA
Prep Batch: 276133

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1	0.100	0.0713		mg/L		71	70 - 130	4	46

Lab Sample ID: 490-85780-F-5-E MS
Matrix: Water
Analysis Batch: 276914

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 276133

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1	0.100	0.0686	F1	mg/L		69	70 - 130

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: 490-85780-F-5-F MSD
Matrix: Water
Analysis Batch: 276914

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 276133

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1	0.100	0.0745		mg/L		75	70 - 130	8	46

Lab Sample ID: 490-85779-9 DU
Matrix: Water
Analysis Batch: 276914

Client Sample ID: RW-10A (51-61)-082015
Prep Type: Total/NA
Prep Batch: 276133

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.0070	U	0.0070	U	mg/L		NC	20

Lab Sample ID: 490-85780-F-6-D DU
Matrix: Water
Analysis Batch: 276914

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 276133

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.0070	U	0.0070	U	mg/L		NC	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 490-276595/16
Matrix: Water
Analysis Batch: 276595

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/25/15 17:40	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/25/15 17:40	1

Lab Sample ID: LCS 490-276595/17
Matrix: Water
Analysis Batch: 276595

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	100	91.30		mg/L		91	90 - 110

Lab Sample ID: LCSD 490-276595/46
Matrix: Water
Analysis Batch: 276595

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Alkalinity as CaCO3	100	93.19		mg/L		93	90 - 110	1	20

Lab Sample ID: 490-85673-C-1 DU
Matrix: Water
Analysis Batch: 276595

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	U	mg/L		NC	20
Total Alkalinity as CaCO3	462		465.7		mg/L		0.8	20

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 490-85780-G-5 DU
Matrix: Water
Analysis Batch: 276595

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	30.6			32.78		mg/L				7	20
Total Alkalinity as CaCO3	30.6			32.78		mg/L				7	20

GC/MS VOA

Analysis Batch: 278001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
230-603-I-5 MS	Matrix Spike	Total/NA	Water	8260C	
230-603-K-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	
490-85779-8	PMP-Pond-082015	Total/NA	Water	8260C	
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	8260C	
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	8260C	
490-85779-11	TB-11-082115	Total/NA	Water	8260C	
LCS 490-278001/4	Lab Control Sample	Total/NA	Water	8260C	
MB 490-278001/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 278441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Total/NA	Water	8260C SIM	
490-85779-2	SW-PMB-01-082015	Total/NA	Water	8260C SIM	
490-85779-3	SW-03-082015	Total/NA	Water	8260C SIM	
490-85779-4	SW-MRB-03-082015	Total/NA	Water	8260C SIM	
490-85779-5	SW-MRB-02-082015	Total/NA	Water	8260C SIM	
490-85779-6	SW-MRB-01-082015	Total/NA	Water	8260C SIM	
490-85779-7	SW-MRB-00-082015	Total/NA	Water	8260C SIM	
490-85779-8	PMP-Pond-082015	Total/NA	Water	8260C SIM	
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	8260C SIM	
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	8260C SIM	
490-85779-11	TB-11-082115	Total/NA	Water	8260C SIM	
490-85780-A-5 MS	Matrix Spike	Total/NA	Water	8260C SIM	
490-85780-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C SIM	
LCS 490-278441/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-278441/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-278441/7	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 278444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Total/NA	Water	8260C	
490-85779-2	SW-PMB-01-082015	Total/NA	Water	8260C	
490-85779-3	SW-03-082015	Total/NA	Water	8260C	
490-85779-4	SW-MRB-03-082015	Total/NA	Water	8260C	
490-85779-5	SW-MRB-02-082015	Total/NA	Water	8260C	
490-85779-6	SW-MRB-01-082015	Total/NA	Water	8260C	
490-85779-7	SW-MRB-00-082015	Total/NA	Water	8260C	
490-85780-B-5 MS	Matrix Spike	Total/NA	Water	8260C	
490-85780-B-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	
LCS 490-278444/3	Lab Control Sample	Total/NA	Water	8260C	
MB 490-278444/6	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 276471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Total/NA	Water	3510C	
490-85779-2	SW-PMB-01-082015	Total/NA	Water	3510C	
490-85779-3	SW-03-082015	Total/NA	Water	3510C	
490-85779-4	SW-MRB-03-082015	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 276471 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-5	SW-MRB-02-082015	Total/NA	Water	3510C	
490-85779-6	SW-MRB-01-082015	Total/NA	Water	3510C	
490-85779-7	SW-MRB-00-082015	Total/NA	Water	3510C	
490-85779-8	PMP-Pond-082015	Total/NA	Water	3510C	
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	3510C	
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	3510C	
490-85780-K-5-A MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	
490-85780-N-5-A MS	Matrix Spike	Total/NA	Water	3510C	
LCS 490-276471/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-276471/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 276721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Total/NA	Water	8270D	276471
490-85779-2	SW-PMB-01-082015	Total/NA	Water	8270D	276471
490-85779-3	SW-03-082015	Total/NA	Water	8270D	276471
490-85779-4	SW-MRB-03-082015	Total/NA	Water	8270D	276471
490-85779-5	SW-MRB-02-082015	Total/NA	Water	8270D	276471
490-85779-6	SW-MRB-01-082015	Total/NA	Water	8270D	276471
490-85779-7	SW-MRB-00-082015	Total/NA	Water	8270D	276471
490-85779-8	PMP-Pond-082015	Total/NA	Water	8270D	276471
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	8270D	276471
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	8270D	276471
490-85780-K-5-A MSD	Matrix Spike Duplicate	Total/NA	Water	8270D	276471
490-85780-N-5-A MS	Matrix Spike	Total/NA	Water	8270D	276471
LCS 490-276471/2-A	Lab Control Sample	Total/NA	Water	8270D	276471
MB 490-276471/1-A	Method Blank	Total/NA	Water	8270D	276471

Prep Batch: 276884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Total/NA	Water	3510C	
490-85779-2	SW-PMB-01-082015	Total/NA	Water	3510C	
490-85779-3	SW-03-082015	Total/NA	Water	3510C	
490-85779-4	SW-MRB-03-082015	Total/NA	Water	3510C	
490-85779-5	SW-MRB-02-082015	Total/NA	Water	3510C	
490-85779-6	SW-MRB-01-082015	Total/NA	Water	3510C	
490-85779-7	SW-MRB-00-082015	Total/NA	Water	3510C	
490-85779-8	PMP-Pond-082015	Total/NA	Water	3510C	
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	3510C	
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	3510C	
490-85780-J-5-A MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	
490-85780-M-5-A MS	Matrix Spike	Total/NA	Water	3510C	
LCS 490-276884/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-276884/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 277406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Total/NA	Water	8270D SIM	276884
490-85779-2	SW-PMB-01-082015	Total/NA	Water	8270D SIM	276884
490-85779-3	SW-03-082015	Total/NA	Water	8270D SIM	276884
490-85779-4	SW-MRB-03-082015	Total/NA	Water	8270D SIM	276884

GC/MS Semi VOA (Continued)

Analysis Batch: 277406 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-5	SW-MRB-02-082015	Total/NA	Water	8270D SIM	276884
490-85779-6	SW-MRB-01-082015	Total/NA	Water	8270D SIM	276884
490-85779-7	SW-MRB-00-082015	Total/NA	Water	8270D SIM	276884
490-85779-8	PMP-Pond-082015	Total/NA	Water	8270D SIM	276884
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	8270D SIM	276884
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	8270D SIM	276884
490-85780-J-5-A MSD	Matrix Spike Duplicate	Total/NA	Water	8270D SIM	276884
490-85780-M-5-A MS	Matrix Spike	Total/NA	Water	8270D SIM	276884
LCS 490-276884/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	276884
MB 490-276884/1-A	Method Blank	Total/NA	Water	8270D SIM	276884

GC Semi VOA

Prep Batch: 278718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Total/NA	Water	3510C	
490-85779-2	SW-PMB-01-082015	Total/NA	Water	3510C	
490-85779-3	SW-03-082015	Total/NA	Water	3510C	
490-85779-4	SW-MRB-03-082015	Total/NA	Water	3510C	
490-85779-5	SW-MRB-02-082015	Total/NA	Water	3510C	
490-85779-6	SW-MRB-01-082015	Total/NA	Water	3510C	
490-85779-7	SW-MRB-00-082015	Total/NA	Water	3510C	
490-85779-8	PMP-Pond-082015	Total/NA	Water	3510C	
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	3510C	
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	3510C	
490-85780-J-5-C MS	Matrix Spike	Total/NA	Water	3510C	
490-85780-L-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	
LCS 490-278718/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-278718/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 279109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Total/NA	Water	8082A	278718
490-85779-2	SW-PMB-01-082015	Total/NA	Water	8082A	278718
490-85779-3	SW-03-082015	Total/NA	Water	8082A	278718
490-85779-4	SW-MRB-03-082015	Total/NA	Water	8082A	278718
490-85779-5	SW-MRB-02-082015	Total/NA	Water	8082A	278718
490-85779-6	SW-MRB-01-082015	Total/NA	Water	8082A	278718
490-85779-7	SW-MRB-00-082015	Total/NA	Water	8082A	278718
490-85779-8	PMP-Pond-082015	Total/NA	Water	8082A	278718
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	8082A	278718
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	8082A	278718
490-85780-J-5-C MS	Matrix Spike	Total/NA	Water	8082A	278718
490-85780-L-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	8082A	278718
LCS 490-278718/2-A	Lab Control Sample	Total/NA	Water	8082A	278718
MB 490-278718/1-A	Method Blank	Total/NA	Water	8082A	278718

HPLC/IC

Analysis Batch: 278029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Total/NA	Water	9056A	
490-85779-2	SW-PMB-01-082015	Total/NA	Water	9056A	
490-85779-3	SW-03-082015	Total/NA	Water	9056A	
490-85779-3	SW-03-082015	Total/NA	Water	9056A	
490-85779-4	SW-MRB-03-082015	Total/NA	Water	9056A	
490-85779-5	SW-MRB-02-082015	Total/NA	Water	9056A	
490-85779-6	SW-MRB-01-082015	Total/NA	Water	9056A	
490-85779-7	SW-MRB-00-082015	Total/NA	Water	9056A	
490-85779-8	PMP-Pond-082015	Total/NA	Water	9056A	
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	9056A	
490-85780-G-5 MS	Matrix Spike	Total/NA	Water	9056A	
490-85780-G-5 MSD	Matrix Spike Duplicate	Total/NA	Water	9056A	
LCS 490-278029/7	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-278029/8	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-278029/6	Method Blank	Total/NA	Water	9056A	

Analysis Batch: 278255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	9056A	
490-86046-C-2 MS	Matrix Spike	Total/NA	Water	9056A	
490-86046-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	9056A	
LCS 490-278255/7	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-278255/8	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-278255/6	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 275892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Total/NA	Water	3010A	
490-85779-2	SW-PMB-01-082015	Total/NA	Water	3010A	
490-85779-3	SW-03-082015	Total/NA	Water	3010A	
490-85779-4	SW-MRB-03-082015	Total/NA	Water	3010A	
490-85779-5	SW-MRB-02-082015	Total/NA	Water	3010A	
490-85779-6	SW-MRB-01-082015	Total/NA	Water	3010A	
490-85779-7	SW-MRB-00-082015	Total/NA	Water	3010A	
490-85779-8	PMP-Pond-082015	Total/NA	Water	3010A	
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	3010A	
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	3010A	
490-85780-E-5-E MS	Matrix Spike	Total/NA	Water	3010A	
490-85780-E-5-F MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
LCS 490-275892/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-275892/1-A	Method Blank	Total/NA	Water	3010A	

Filtration Batch: 276511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Dissolved	Water	Filtration	
490-85779-2	SW-PMB-01-082015	Dissolved	Water	Filtration	
490-85779-3	SW-03-082015	Dissolved	Water	Filtration	
490-85779-4	SW-MRB-03-082015	Dissolved	Water	Filtration	

Metals (Continued)

Filtration Batch: 276511 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-5	SW-MRB-02-082015	Dissolved	Water	Filtration	
490-85779-6	SW-MRB-01-082015	Dissolved	Water	Filtration	
490-85779-7	SW-MRB-00-082015	Dissolved	Water	Filtration	
490-85779-8	PMP-Pond-082015	Dissolved	Water	Filtration	
490-85779-9	RW-10A (51-61)-082015	Dissolved	Water	Filtration	
490-85779-10	RW-8 (204-214)-082015	Dissolved	Water	Filtration	
490-85780-G-5-E MS	Matrix Spike	Dissolved	Water	Filtration	
490-85780-G-5-F MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	
LCS 490-276511/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-276511/1-B	Method Blank	Dissolved	Water	Filtration	

Analysis Batch: 276615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Total/NA	Water	6020A	275892
490-85779-2	SW-PMB-01-082015	Total/NA	Water	6020A	275892
490-85779-3	SW-03-082015	Total/NA	Water	6020A	275892
490-85779-4	SW-MRB-03-082015	Total/NA	Water	6020A	275892
490-85779-5	SW-MRB-02-082015	Total/NA	Water	6020A	275892
490-85779-6	SW-MRB-01-082015	Total/NA	Water	6020A	275892
490-85779-7	SW-MRB-00-082015	Total/NA	Water	6020A	275892
490-85779-8	PMP-Pond-082015	Total/NA	Water	6020A	275892
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	6020A	275892
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	6020A	275892
490-85780-E-5-E MS	Matrix Spike	Total/NA	Water	6020A	275892
490-85780-E-5-F MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	275892
LCS 490-275892/2-A	Lab Control Sample	Total/NA	Water	6020A	275892
MB 490-275892/1-A	Method Blank	Total/NA	Water	6020A	275892

Prep Batch: 276622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Dissolved	Water	3005A	276511
490-85779-2	SW-PMB-01-082015	Dissolved	Water	3005A	276511
490-85779-3	SW-03-082015	Dissolved	Water	3005A	276511
490-85779-4	SW-MRB-03-082015	Dissolved	Water	3005A	276511
490-85779-5	SW-MRB-02-082015	Dissolved	Water	3005A	276511
490-85779-6	SW-MRB-01-082015	Dissolved	Water	3005A	276511
490-85779-7	SW-MRB-00-082015	Dissolved	Water	3005A	276511
490-85779-8	PMP-Pond-082015	Dissolved	Water	3005A	276511
490-85779-9	RW-10A (51-61)-082015	Dissolved	Water	3005A	276511
490-85779-10	RW-8 (204-214)-082015	Dissolved	Water	3005A	276511
490-85780-G-5-E MS	Matrix Spike	Dissolved	Water	3005A	276511
490-85780-G-5-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	276511
LCS 490-276511/2-B	Lab Control Sample	Dissolved	Water	3005A	276511
MB 490-276511/1-B	Method Blank	Dissolved	Water	3005A	276511

Filtration Batch: 276970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Dissolved	Water	Filtration	
490-85779-2	SW-PMB-01-082015	Dissolved	Water	Filtration	
490-85779-3	SW-03-082015	Dissolved	Water	Filtration	
490-85779-4	SW-MRB-03-082015	Dissolved	Water	Filtration	

Metals (Continued)

Filtration Batch: 276970 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-5	SW-MRB-02-082015	Dissolved	Water	Filtration	
490-85779-6	SW-MRB-01-082015	Dissolved	Water	Filtration	
490-85779-7	SW-MRB-00-082015	Dissolved	Water	Filtration	
490-85779-8	PMP-Pond-082015	Dissolved	Water	Filtration	
490-85779-9	RW-10A (51-61)-082015	Dissolved	Water	Filtration	
490-85780-G-5-K MS	Matrix Spike	Dissolved	Water	Filtration	
490-85780-G-5-L MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	
LCS 490-276970/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-276970/1-B	Method Blank	Dissolved	Water	Filtration	

Analysis Batch: 277043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Total/NA	Water	6020A	275892
490-85779-2	SW-PMB-01-082015	Total/NA	Water	6020A	275892
490-85779-3	SW-03-082015	Total/NA	Water	6020A	275892
490-85779-4	SW-MRB-03-082015	Total/NA	Water	6020A	275892
490-85779-5	SW-MRB-02-082015	Total/NA	Water	6020A	275892
490-85779-6	SW-MRB-01-082015	Total/NA	Water	6020A	275892
490-85779-7	SW-MRB-00-082015	Total/NA	Water	6020A	275892
490-85779-8	PMP-Pond-082015	Total/NA	Water	6020A	275892
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	6020A	275892
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	6020A	275892
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	6020A	275892
490-85780-E-5-E MS	Matrix Spike	Total/NA	Water	6020A	275892
490-85780-E-5-F MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	275892
LCS 490-275892/2-A	Lab Control Sample	Total/NA	Water	6020A	275892
MB 490-275892/1-A	Method Blank	Total/NA	Water	6020A	275892

Prep Batch: 277396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Dissolved	Water	7470A	276970
490-85779-2	SW-PMB-01-082015	Dissolved	Water	7470A	276970
490-85779-3	SW-03-082015	Dissolved	Water	7470A	276970
490-85779-4	SW-MRB-03-082015	Dissolved	Water	7470A	276970
490-85779-5	SW-MRB-02-082015	Dissolved	Water	7470A	276970
490-85779-6	SW-MRB-01-082015	Dissolved	Water	7470A	276970
490-85779-7	SW-MRB-00-082015	Dissolved	Water	7470A	276970
490-85779-8	PMP-Pond-082015	Dissolved	Water	7470A	276970
490-85779-9	RW-10A (51-61)-082015	Dissolved	Water	7470A	276970
490-85780-G-5-K MS	Matrix Spike	Dissolved	Water	7470A	276970
490-85780-G-5-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	276970
LCS 490-276970/2-B	Lab Control Sample	Dissolved	Water	7470A	276970
MB 490-276970/1-B	Method Blank	Dissolved	Water	7470A	276970

Prep Batch: 277871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Total/NA	Water	7470A	
490-85779-2	SW-PMB-01-082015	Total/NA	Water	7470A	
490-85779-3	SW-03-082015	Total/NA	Water	7470A	
490-85779-4	SW-MRB-03-082015	Total/NA	Water	7470A	
490-85779-5	SW-MRB-02-082015	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 277871 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-6	SW-MRB-01-082015	Total/NA	Water	7470A	
490-85779-7	SW-MRB-00-082015	Total/NA	Water	7470A	
490-85779-8	PMP-Pond-082015	Total/NA	Water	7470A	
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	7470A	
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	7470A	
490-85780-E-1-D MS	Matrix Spike	Total/NA	Water	7470A	
490-85780-E-1-E MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
LCS 490-277871/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 490-277871/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 277919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Dissolved	Water	7470A	277396
490-85779-2	SW-PMB-01-082015	Dissolved	Water	7470A	277396
490-85779-3	SW-03-082015	Dissolved	Water	7470A	277396
490-85779-4	SW-MRB-03-082015	Dissolved	Water	7470A	277396
490-85779-5	SW-MRB-02-082015	Dissolved	Water	7470A	277396
490-85779-6	SW-MRB-01-082015	Dissolved	Water	7470A	277396
490-85779-7	SW-MRB-00-082015	Dissolved	Water	7470A	277396
490-85779-8	PMP-Pond-082015	Dissolved	Water	7470A	277396
490-85779-9	RW-10A (51-61)-082015	Dissolved	Water	7470A	277396
490-85780-G-5-K MS	Matrix Spike	Dissolved	Water	7470A	277396
490-85780-G-5-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	277396
LCS 490-276970/2-B	Lab Control Sample	Dissolved	Water	7470A	277396
MB 490-276970/1-B	Method Blank	Dissolved	Water	7470A	277396

Filtration Batch: 277940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-10	RW-8 (204-214)-082015	Dissolved	Water	Filtration	
490-86046-C-2-K MS	Matrix Spike	Dissolved	Water	Filtration	
490-86046-C-2-L MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	
LCS 490-277940/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-277940/1-B	Method Blank	Dissolved	Water	Filtration	

Analysis Batch: 278012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Total/NA	Water	7470A	277871
490-85779-2	SW-PMB-01-082015	Total/NA	Water	7470A	277871
490-85779-3	SW-03-082015	Total/NA	Water	7470A	277871
490-85779-4	SW-MRB-03-082015	Total/NA	Water	7470A	277871
490-85779-5	SW-MRB-02-082015	Total/NA	Water	7470A	277871
490-85779-6	SW-MRB-01-082015	Total/NA	Water	7470A	277871
490-85779-7	SW-MRB-00-082015	Total/NA	Water	7470A	277871
490-85779-8	PMP-Pond-082015	Total/NA	Water	7470A	277871
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	7470A	277871
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	7470A	277871
490-85780-E-1-D MS	Matrix Spike	Total/NA	Water	7470A	277871
490-85780-E-1-E MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	277871
LCS 490-277871/2-A	Lab Control Sample	Total/NA	Water	7470A	277871
MB 490-277871/1-A	Method Blank	Total/NA	Water	7470A	277871

Metals (Continued)

Prep Batch: 278310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-10	RW-8 (204-214)-082015	Dissolved	Water	7470A	277940
490-86046-C-2-K MS	Matrix Spike	Dissolved	Water	7470A	277940
490-86046-C-2-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	277940
LCS 490-277940/2-B	Lab Control Sample	Dissolved	Water	7470A	277940
MB 490-277940/1-B	Method Blank	Dissolved	Water	7470A	277940

Analysis Batch: 278590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-10	RW-8 (204-214)-082015	Dissolved	Water	7470A	278310
490-86046-C-2-K MS	Matrix Spike	Dissolved	Water	7470A	278310
490-86046-C-2-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	278310
LCS 490-277940/2-B	Lab Control Sample	Dissolved	Water	7470A	278310
MB 490-277940/1-B	Method Blank	Dissolved	Water	7470A	278310

Analysis Batch: 279070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Dissolved	Water	6020A	276622
490-85779-2	SW-PMB-01-082015	Dissolved	Water	6020A	276622
490-85779-3	SW-03-082015	Dissolved	Water	6020A	276622
490-85779-3	SW-03-082015	Dissolved	Water	6020A	276622
490-85779-4	SW-MRB-03-082015	Dissolved	Water	6020A	276622
490-85779-5	SW-MRB-02-082015	Dissolved	Water	6020A	276622
490-85779-6	SW-MRB-01-082015	Dissolved	Water	6020A	276622
490-85779-7	SW-MRB-00-082015	Dissolved	Water	6020A	276622
490-85779-8	PMP-Pond-082015	Dissolved	Water	6020A	276622
490-85779-9	RW-10A (51-61)-082015	Dissolved	Water	6020A	276622
490-85779-9	RW-10A (51-61)-082015	Dissolved	Water	6020A	276622
490-85779-10	RW-8 (204-214)-082015	Dissolved	Water	6020A	276622
490-85780-G-5-E MS	Matrix Spike	Dissolved	Water	6020A	276622
490-85780-G-5-F MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	276622
LCS 490-276511/2-B	Lab Control Sample	Dissolved	Water	6020A	276622
MB 490-276511/1-B	Method Blank	Dissolved	Water	6020A	276622

General Chemistry

Prep Batch: 276133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Total/NA	Water	9012B	
490-85779-2	SW-PMB-01-082015	Total/NA	Water	9012B	
490-85779-3	SW-03-082015	Total/NA	Water	9012B	
490-85779-4	SW-MRB-03-082015	Total/NA	Water	9012B	
490-85779-5	SW-MRB-02-082015	Total/NA	Water	9012B	
490-85779-6	SW-MRB-01-082015	Total/NA	Water	9012B	
490-85779-7	SW-MRB-00-082015	Total/NA	Water	9012B	
490-85779-8	PMP-Pond-082015	Total/NA	Water	9012B	
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	9012B	
490-85779-9 DU	RW-10A (51-61)-082015	Total/NA	Water	9012B	
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	9012B	
490-85779-10 MS	RW-8 (204-214)-082015	Total/NA	Water	9012B	
490-85779-10 MSD	RW-8 (204-214)-082015	Total/NA	Water	9012B	

General Chemistry (Continued)

Prep Batch: 276133 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-F-5-E MS	Matrix Spike	Total/NA	Water	9012B	
490-85780-F-5-F MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	
490-85780-F-6-D DU	Duplicate	Total/NA	Water	9012B	
LCS 490-276133/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 490-276133/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 276595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85673-C-1 DU	Duplicate	Total/NA	Water	SM 2320B	
490-85779-1	SW-PMB-02-082015	Total/NA	Water	SM 2320B	
490-85779-2	SW-PMB-01-082015	Total/NA	Water	SM 2320B	
490-85779-3	SW-03-082015	Total/NA	Water	SM 2320B	
490-85779-4	SW-MRB-03-082015	Total/NA	Water	SM 2320B	
490-85779-5	SW-MRB-02-082015	Total/NA	Water	SM 2320B	
490-85779-6	SW-MRB-01-082015	Total/NA	Water	SM 2320B	
490-85779-7	SW-MRB-00-082015	Total/NA	Water	SM 2320B	
490-85779-8	PMP-Pond-082015	Total/NA	Water	SM 2320B	
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	SM 2320B	
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	SM 2320B	
490-85780-G-5 DU	Duplicate	Total/NA	Water	SM 2320B	
LCS 490-276595/17	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 490-276595/46	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 490-276595/16	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 276914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-1	SW-PMB-02-082015	Total/NA	Water	9012B	276133
490-85779-2	SW-PMB-01-082015	Total/NA	Water	9012B	276133
490-85779-3	SW-03-082015	Total/NA	Water	9012B	276133
490-85779-4	SW-MRB-03-082015	Total/NA	Water	9012B	276133
490-85779-5	SW-MRB-02-082015	Total/NA	Water	9012B	276133
490-85779-6	SW-MRB-01-082015	Total/NA	Water	9012B	276133
490-85779-7	SW-MRB-00-082015	Total/NA	Water	9012B	276133
490-85779-8	PMP-Pond-082015	Total/NA	Water	9012B	276133
490-85779-9	RW-10A (51-61)-082015	Total/NA	Water	9012B	276133
490-85779-9 DU	RW-10A (51-61)-082015	Total/NA	Water	9012B	276133
490-85779-10	RW-8 (204-214)-082015	Total/NA	Water	9012B	276133
490-85779-10 MS	RW-8 (204-214)-082015	Total/NA	Water	9012B	276133
490-85779-10 MSD	RW-8 (204-214)-082015	Total/NA	Water	9012B	276133
490-85780-F-5-E MS	Matrix Spike	Total/NA	Water	9012B	276133
490-85780-F-5-F MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	276133
490-85780-F-6-D DU	Duplicate	Total/NA	Water	9012B	276133
LCS 490-276133/2-A	Lab Control Sample	Total/NA	Water	9012B	276133
MB 490-276133/1-A	Method Blank	Total/NA	Water	9012B	276133

Client Sample ID: SW-PMB-02-082015

Lab Sample ID: 490-85779-1

Date Collected: 08/20/15 09:30

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 14:53	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278441	09/02/15 16:31	RP	TAL NSH
Total/NA	Prep	3510C			280 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	280 mL	1 mL	276721	08/27/15 14:07	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 15:42	KKH	TAL NSH
Total/NA	Prep	3510C			280 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	280 mL	1 mL	279109	09/04/15 14:47	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 15:31	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 14:00	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 21:19	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 15:30	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 16:58	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277871	08/31/15 16:08	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 22:04	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 13:44	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:26	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 18:19	BMC	TAL NSH

Client Sample ID: SW-PMB-01-082015

Lab Sample ID: 490-85779-2

Date Collected: 08/20/15 10:10

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 15:20	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278441	09/02/15 16:59	RP	TAL NSH
Total/NA	Prep	3510C			280 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	280 mL	1 mL	276721	08/27/15 14:31	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 16:09	KKH	TAL NSH
Total/NA	Prep	3510C			290 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	290 mL	1 mL	279109	09/04/15 15:03	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 15:55	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 14:06	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH

Client Sample ID: SW-PMB-01-082015

Lab Sample ID: 490-85779-2

Date Collected: 08/20/15 10:10

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 21:25	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 15:36	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 17:01	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277871	08/31/15 16:08	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 22:06	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 13:44	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:26	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 18:24	BMC	TAL NSH

Client Sample ID: SW-03-082015

Lab Sample ID: 490-85779-3

Date Collected: 08/20/15 11:00

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 15:48	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278441	09/02/15 17:28	RP	TAL NSH
Total/NA	Prep	3510C			285 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	285 mL	1 mL	276721	08/27/15 14:54	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 16:37	KKH	TAL NSH
Total/NA	Prep	3510C			290 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	290 mL	1 mL	279109	09/04/15 15:19	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 16:19	JHS	TAL NSH
Total/NA	Analysis	9056A		5	10 mL		278029	08/31/15 16:43	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 14:11	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		5	50 mL	50 mL	279070	09/03/15 14:16	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 21:30	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 15:41	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 17:03	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277871	08/31/15 16:08	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 22:09	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 13:44	ADJ	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: SW-03-082015

Date Collected: 08/20/15 11:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:27	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 18:30	BMC	TAL NSH

Client Sample ID: SW-MRB-03-082015

Date Collected: 08/20/15 11:40
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 16:15	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278441	09/02/15 17:57	RP	TAL NSH
Total/NA	Prep	3510C			285 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	285 mL	1 mL	276721	08/27/15 15:18	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 17:04	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	279109	09/04/15 15:34	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 17:07	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 14:21	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 21:36	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 15:47	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 17:05	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277871	08/31/15 16:08	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 22:11	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 13:44	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:28	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 18:35	BMC	TAL NSH

Client Sample ID: SW-MRB-02-082015

Date Collected: 08/20/15 12:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 16:42	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278441	09/02/15 18:25	RP	TAL NSH
Total/NA	Prep	3510C			285 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	285 mL	1 mL	276721	08/27/15 15:41	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH

Client Sample ID: SW-MRB-02-082015

Lab Sample ID: 490-85779-5

Date Collected: 08/20/15 12:15

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 17:31	KKH	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	270 mL	1 mL	279109	09/04/15 15:50	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 17:31	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 14:37	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 21:42	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 15:53	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 17:08	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277871	08/31/15 16:08	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 22:14	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 13:44	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:29	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 18:40	BMC	TAL NSH

Client Sample ID: SW-MRB-01-082015

Lab Sample ID: 490-85779-6

Date Collected: 08/20/15 14:15

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 17:09	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278441	09/02/15 18:54	RP	TAL NSH
Total/NA	Prep	3510C			280 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	280 mL	1 mL	276721	08/27/15 16:05	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 17:58	KKH	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	270 mL	1 mL	279109	09/04/15 16:06	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 17:55	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 14:42	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 21:59	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 16:10	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH

Client Sample ID: SW-MRB-01-082015

Lab Sample ID: 490-85779-6

Date Collected: 08/20/15 14:15

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 17:10	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277871	08/31/15 16:08	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 22:16	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 13:44	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:30	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 18:44	BMC	TAL NSH

Client Sample ID: SW-MRB-00-082015

Lab Sample ID: 490-85779-7

Date Collected: 08/20/15 15:00

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 17:37	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278441	09/02/15 19:23	RP	TAL NSH
Total/NA	Prep	3510C			280 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	280 mL	1 mL	276721	08/27/15 16:29	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 18:25	KKH	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	270 mL	1 mL	279109	09/04/15 16:22	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 18:19	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 14:47	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 22:05	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 16:16	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 17:13	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277871	08/31/15 16:08	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 22:23	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 13:44	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:31	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 18:49	BMC	TAL NSH

Client Sample ID: PMP-Pond-082015

Lab Sample ID: 490-85779-8

Date Collected: 08/20/15 16:00

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278001	09/01/15 19:54	JJR	TAL NSH

Client Sample ID: PMP-Pond-082015

Lab Sample ID: 490-85779-8

Date Collected: 08/20/15 16:00

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278441	09/02/15 19:51	RP	TAL NSH
Total/NA	Prep	3510C			290 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	290 mL	1 mL	276721	08/27/15 16:52	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 18:52	KKH	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	270 mL	1 mL	279109	09/04/15 16:38	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 18:43	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 14:52	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 22:11	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 16:22	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 17:15	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277871	08/31/15 16:08	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 22:26	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 13:44	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:31	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 19:07	BMC	TAL NSH

Client Sample ID: RW-10A (51-61)-082015

Lab Sample ID: 490-85779-9

Date Collected: 08/20/15 09:15

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278001	09/01/15 20:21	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278441	09/02/15 20:20	RP	TAL NSH
Total/NA	Prep	3510C			200 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	200 mL	1 mL	276721	08/27/15 17:16	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 19:18	KKH	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	270 mL	1 mL	279109	09/04/15 16:53	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 19:07	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 14:58	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH

Client Sample ID: RW-10A (51-61)-082015

Lab Sample ID: 490-85779-9

Date Collected: 08/20/15 09:15

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020A		5	50 mL	50 mL	279070	09/03/15 15:03	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 22:17	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 16:28	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		10	50 mL	50 mL	277043	08/27/15 17:03	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 17:22	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277871	08/31/15 16:08	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 22:28	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 13:44	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:32	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 19:12	BMC	TAL NSH

Client Sample ID: RW-8 (204-214)-082015

Lab Sample ID: 490-85779-10

Date Collected: 08/20/15 14:15

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278001	09/01/15 20:48	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278441	09/02/15 20:49	RP	TAL NSH
Total/NA	Prep	3510C			275 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	275 mL	1 mL	276721	08/27/15 17:40	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 19:45	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	279109	09/04/15 17:09	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278255	09/01/15 16:26	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/27/15 09:52	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/27/15 09:52	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 15:08	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 22:22	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 16:33	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	278310	08/31/15 19:53	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	277940	08/31/15 19:53	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	278590	09/02/15 14:58	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277871	08/31/15 16:08	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 22:31	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 13:44	ADJ	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Client Sample ID: RW-8 (204-214)-082015

Date Collected: 08/20/15 14:15
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:34	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 19:18	BMC	TAL NSH

Client Sample ID: TB-11-082115

Date Collected: 08/21/15 00:01
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85779-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278001	09/01/15 16:15	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278441	09/02/15 15:05	RP	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
9056A	Anions, Ion Chromatography	SW846	TAL NSH
6020A	Metals (ICP/MS)	SW846	TAL NSH
7470A	Mercury (CVAA)	SW846	TAL NSH
9012B	Cyanide, Total andor Amenable	SW846	TAL NSH
SM 2320B	Alkalinity	SM	TAL NSH

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85779-1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	TN965	10-30-15 *

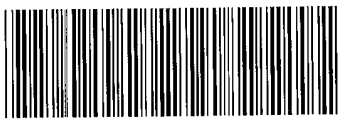
The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total
8260C		Water	Dichlorobromomethane
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	1,4-Dioxane
8260C SIM		Water	Ethylene Dibromide
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3

* Certification renewal pending - certification considered valid.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM


490-85779 Chain of Custody

Cooler Received/Opened On 8/22/2015 @ 1045

1. Tracking # 3283 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 94660220

2. Temperature of rep. sample or temp blank when opened: 0.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? (YES)..NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) MDM

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other (None)

9. Cooling process: (Ice) Ice-pack (Ice (direct contact)) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? (YES)..NO...NA

b. Was there any observable headspace present in any VOA vial? YES..(NO)...NA

14. Was there a Trip Blank in this cooler? (YES)..NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA

16. Was residual chlorine present? YES...NO..(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES...(NO)..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

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Nashville, TN

Loc: 490
85779

COOLER RECEIPT FORM

LLC

Cooler Received/Opened On 8/22/2015 @ 1045

1. Tracking # 3261 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 2.3 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# _____

BIS = Broken in shipment

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Nashville, TN

Loc: 490
85779

COOLER RECEIPT FORM

Cooler Received/Opened On 8/22/2015 @1045

1. Tracking # 3250 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 97310166

2. Temperature of rep. sample or temp blank when opened: 3.0 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO (NA)

4. Were custody seals on outside of cooler? YES..(NO)...NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? YES..(NO)..NA

I certify that I opened the cooler and answered questions 1-6 (intial) HKG

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other (None)

9. Cooling process: (Ice) Ice-pack (Ice (direct contact)) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? YES..(NO)..NA

b. Was there any observable headspace present in any VOA vial? YES...NO..(NA)

14. Was there a Trip Blank in this cooler? YES..(NO)..NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? (YES)..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA

16. Was residual chlorine present? YES..(NO)..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica
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Nashville, TN

Loc: 490
85779

COOLER RECEIPT FORM

Cooler Received/Opened On 8/22/2015 @ 10:45

1. Tracking # 3272 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 3.9 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES..NO..NA

I certify that I opened the cooler and answered questions 1-6 (intial) ADH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO..NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES..NO..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO..#_____

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
85779

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

10/15/2015

Client Information	Sampler: Robert Lautenberg	Lab PM: Brown, Shali	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com	Page:
Company: Cornerstone Environmental Group, LLC/ FORD			Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:		
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package		
State, Zip: NY, 10941			
Phone: 845-695-0252(Tel)	PO #:		
Email: tim.roeper@cornerstoneeg.com	WO #:		
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
	Preservation Code:																					
1	SW-PMB-02-082015	8/20/15	09:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
2	SW-PMB-01-082015	8/20/15	10:10	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
3	SW-03-082015	8/20/15	11:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
4	SW-MRB-03-082015	8/20/15	11:40	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
5	SW-MRB-02-082015	8/20/15	12:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
6	SW-MRB-01-082015	8/20/15	14:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
7	SW-MRB-00-082015	8/20/15	15:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
8	PMP Pond-082015	8/20/15	16:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
9	RW-10A(51-61)-082015	8/20/15	09:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
10	RW-8(204-214)-082015	8/20/15	14:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	H	✓	H	H					Limited Sample Volume, please analyze if sufficient volume available
11	TB-11-082115	8/21/15	—	—	Water	N	N	✓	✓													

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:	Date/Time: 8/21/15 830	Company: CORNERSTONE	Received by: James Thiessen	Date/Time: 8/21/15 830	Company: TA		
Relinquished by: James Thiessen	Date/Time: 8-21-15 1135	Company: TA	Received by:	Date/Time: 8/21/15 1135	Company: TAB		
Relinquished by:	Date/Time: 8/21/15 1900	Company: TAB	Received by:	Date/Time: 8-22-15 1045	Company: TAN		
Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 0.1				

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 490-85779-1

Login Number: 85779
List Number: 1
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.1C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-85780-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Tim Roeper

Authorized for release by:
9/21/2015 11:50:00 AM

Shali Brown, Project Manager II
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LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-85780-1	SW-PAB-03-082115	Water	08/21/15 10:30	08/22/15 10:45
490-85780-2	SW-PAB-02-082115	Water	08/21/15 11:25	08/22/15 10:45
490-85780-3	SW-PAB-01A-082115	Water	08/21/15 12:20	08/22/15 10:45
490-85780-4	SW-PAB-01-082115	Water	08/21/15 12:45	08/22/15 10:45
490-85780-5	SW-11-082115	Water	08/21/15 13:10	08/22/15 10:45
490-85780-6	SW-PAB-00-082115	Water	08/21/15 13:50	08/22/15 10:45
490-85780-7	RW-9A (85-95)-082115	Water	08/21/15 10:45	08/22/15 10:45
490-85780-8	RW-9 (206-216)-082115	Water	08/21/15 09:25	08/22/15 10:45
490-85780-9	TB-12-082115	Water	08/21/15 01:00	08/22/15 10:45
490-85780-10	RW-2 (279-289)-082115	Water	08/21/15 13:45	08/22/15 10:45

Job ID: 490-85780-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 490-85780-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 8/22/2015 10:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.5º C, 5.8º C and 5.9º C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples SW-PAB-03-082115 (490-85780-1), SW-PAB-02-082115 (490-85780-2), SW-PAB-01A-082115 (490-85780-3), SW-PAB-01-082115 (490-85780-4), SW-11-082115 (490-85780-5), SW-PAB-00-082115 (490-85780-6), RW-9A (85-95)-082115 (490-85780-7), RW-9 (206-216)-082115 (490-85780-8), TB-12-082115 (490-85780-9) and RW-2 (279-289)-082115 (490-85780-10) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 09/02/2015.

Methylene Chloride was detected in method blank MB 490-278444/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Cyclohexane failed the recovery criteria high for LCS 490-278444/3. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Job ID: 490-85780-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

Cyclohexane failed the recovery criteria high for the MSD of sample SW-11-082115MSD (490-85780-5) in batch 490-278444. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS SIM)

Samples SW-PAB-03-082115 (490-85780-1), SW-PAB-02-082115 (490-85780-2), SW-PAB-01A-082115 (490-85780-3), SW-PAB-01-082115 (490-85780-4), SW-11-082115 (490-85780-5), SW-PAB-00-082115 (490-85780-6), RW-9A (85-95)-082115 (490-85780-7), RW-9 (206-216)-082115 (490-85780-8), TB-12-082115 (490-85780-9) and RW-2 (279-289)-082115 (490-85780-10) were analyzed for volatile organic compounds (GC-MS SIM) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/27/2015, 08/31/2015 and 09/02/2015.

Ethylene Dibromide failed the recovery criteria low for LCS 490-276673/3. Ethylene Dibromide failed the recovery criteria low for LCSD 490-276673/4. Refer to the QC report for details.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 490-277754.

The continuing calibration verification (CCV) associated with batch 490-278441 recovered above the upper control limit for 4-Bromofluorobenzene (Surr). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCVIS 490-278441/2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GC MS)

Samples SW-PAB-03-082115 (490-85780-1), SW-PAB-02-082115 (490-85780-2), SW-PAB-01A-082115 (490-85780-3), SW-PAB-01-082115 (490-85780-4), SW-11-082115 (490-85780-5), SW-PAB-00-082115 (490-85780-6), RW-9A (85-95)-082115 (490-85780-7), RW-9 (206-216)-082115 (490-85780-8) and RW-2 (279-289)-082115 (490-85780-10) were analyzed for semivolatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/26/2015 and 09/01/2015 and analyzed on 08/27/2015 and 09/05/2015.

2,4,6-Tribromophenol (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria high for LCS 490-277998/2-A. All associated sample surrogates fell within acceptance criteria; therefore, the data has been reported.

Benzaldehyde failed the recovery criteria high for LCS 490-277998/2-A. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for 490-276471 were outside control limits because no spike was added during the preparation phase. The parent and MS/MSD were submitted for re-extraction; however, the re-extracts were outside holding time. Both sets of data have been reported. The associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples SW-PAB-03-082115 (490-85780-1), SW-PAB-02-082115 (490-85780-2), SW-PAB-01A-082115 (490-85780-3), SW-PAB-01-082115 (490-85780-4), SW-11-082115 (490-85780-5), SW-PAB-00-082115 (490-85780-6), RW-9A (85-95)-082115 (490-85780-7) and RW-2 (279-289)-082115 (490-85780-10) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 09/03/2015 and analyzed on 09/04/2015.

There was insufficient volume for the extraction and analysis of 8082 PCBs for sample RW-9 (206-216)-082115 (490-85780-8)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

Job ID: 490-85780-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

Samples SW-PAB-03-082115 (490-85780-1), SW-PAB-02-082115 (490-85780-2), SW-PAB-01A-082115 (490-85780-3), SW-PAB-01-082115 (490-85780-4), SW-11-082115 (490-85780-5), SW-PAB-00-082115 (490-85780-6), RW-9A (85-95)-082115 (490-85780-7), RW-9 (206-216)-082115 (490-85780-8) and RW-2 (279-289)-082115 (490-85780-10) were analyzed for polycyclic aromatic hydrocarbons (PAHs) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/27/2015 and 09/01/2015 and analyzed on 08/29/2015, 08/30/2015 and 09/01/2015.

2,4,6-Tribromophenol, 2-Fluorobiphenyl (Surr), 2-Fluorophenol, Phenol-d5 and Terphenyl-d14 failed the surrogate recovery criteria low for RW-2 (279-289)-082115 (490-85780-10). Nitrobenzene-d5 and Phenol-d5 failed the surrogate recovery criteria low for SW-PAB-01-082115 (490-85780-4). 2,4,6-Tribromophenol, 2-Fluorobiphenyl (Surr), 2-Fluorophenol, Phenol-d5 and Terphenyl-d14 failed the surrogate recovery criteria low for SW-11-082115 (490-85780-5). 2,4,6-Tribromophenol, 2-Fluorobiphenyl (Surr), 2-Fluorophenol, Phenol-d5 and Terphenyl-d14 failed the surrogate recovery criteria low for RW-9 (206-216)-082115 (490-85780-8). Re-extraction was performed outside of holding time. Both sets of data have been reported.

Pentachlorophenol exceeded the RPD limit for LCSD 490-277972/3-A. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED METALS (ICPMS)

Samples SW-PAB-03-082115 (490-85780-1), SW-PAB-02-082115 (490-85780-2), SW-PAB-01A-082115 (490-85780-3), SW-PAB-01-082115 (490-85780-4), SW-11-082115 (490-85780-5), SW-PAB-00-082115 (490-85780-6), RW-9A (85-95)-082115 (490-85780-7) and RW-2 (279-289)-082115 (490-85780-10) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/26/2015 and analyzed on 09/03/2015.

Vanadium was detected in method blank MB 490-276511/1-B at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Sample RW-2 (279-289)-082115 (490-85780-10)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

METALS (ICPMS)

Samples SW-PAB-03-082115 (490-85780-1), SW-PAB-02-082115 (490-85780-2), SW-PAB-01A-082115 (490-85780-3), SW-PAB-01-082115 (490-85780-4), SW-11-082115 (490-85780-5), SW-PAB-00-082115 (490-85780-6), RW-9A (85-95)-082115 (490-85780-7), RW-9 (206-216)-082115 (490-85780-8) and RW-2 (279-289)-082115 (490-85780-10) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/25/2015 and analyzed on 08/26/2015, 08/27/2015 and 08/31/2015.

Vanadium was detected in method blank MB 490-275892/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Samples RW-9 (206-216)-082115 (490-85780-8)[20X] and RW-2 (279-289)-082115 (490-85780-10)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED MERCURY (CVAA)

Samples SW-PAB-03-082115 (490-85780-1), SW-PAB-02-082115 (490-85780-2), SW-PAB-01A-082115 (490-85780-3), SW-PAB-01-082115 (490-85780-4), SW-11-082115 (490-85780-5), SW-PAB-00-082115 (490-85780-6), RW-9A (85-95)-082115 (490-85780-7) and RW-2 (279-289)-082115 (490-85780-10) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/27/2015 and analyzed on 08/30/2015 and 08/31/2015.

Job ID: 490-85780-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples SW-PAB-03-082115 (490-85780-1), SW-PAB-02-082115 (490-85780-2), SW-PAB-01A-082115 (490-85780-3), SW-PAB-01-082115 (490-85780-4), SW-11-082115 (490-85780-5), SW-PAB-00-082115 (490-85780-6), RW-9A (85-95)-082115 (490-85780-7), RW-9 (206-216)-082115 (490-85780-8) and RW-2 (279-289)-082115 (490-85780-10) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 08/31/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ALKALINITY

Samples SW-PAB-03-082115 (490-85780-1), SW-PAB-02-082115 (490-85780-2), SW-PAB-01A-082115 (490-85780-3), SW-PAB-01-082115 (490-85780-4), SW-11-082115 (490-85780-5), SW-PAB-00-082115 (490-85780-6), RW-9A (85-95)-082115 (490-85780-7) and RW-2 (279-289)-082115 (490-85780-10) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/25/2015.

Method 2320B is an automated titration of an unaltered sample to an electrometrically determined end point of pH 4.5 and then to 4.2. The following sample had an initial pH of 4.52 or less: (490-85673-D-4) and (490-85673-D-4 DU).

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL CYANIDE

Samples SW-PAB-03-082115 (490-85780-1), SW-PAB-02-082115 (490-85780-2), SW-PAB-01A-082115 (490-85780-3), SW-PAB-01-082115 (490-85780-4), SW-11-082115 (490-85780-5), SW-PAB-00-082115 (490-85780-6), RW-9A (85-95)-082115 (490-85780-7), RW-9 (206-216)-082115 (490-85780-8) and RW-2 (279-289)-082115 (490-85780-10) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared on 08/25/2015 and analyzed on 08/27/2015.

Cyanide, Total failed the recovery criteria low for the MS of sample SW-11-082115MS (490-85780-5) in batch 490-276914. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS

Samples SW-PAB-03-082115 (490-85780-1), SW-PAB-02-082115 (490-85780-2), SW-PAB-01A-082115 (490-85780-3), SW-PAB-01-082115 (490-85780-4), SW-11-082115 (490-85780-5), SW-PAB-00-082115 (490-85780-6), RW-9A (85-95)-082115 (490-85780-7) and RW-2 (279-289)-082115 (490-85780-10) were analyzed for anions in accordance with SW-846 Method 9056. The samples were analyzed on 08/31/2015 and 09/01/2015.

Sample RW-2 (279-289)-082115 (490-85780-10)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ORGANIC PREP

Insufficient sample volume available for the following 490-85780-08 for the 8082 analysis. Multiple extractions required for 8270 SIM and all samples were consumed.: RW-9 (206-216)-082115 (490-85780-8).

Method(s) 3510C: The following sample was improperly preserved in the field:RW-9 (206-216)-082115 (490-85780-8). The preservative used is not compatible with the analytes requested. pH was 11.0

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
H	Sample was prepped or analyzed beyond the specified holding time
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD is outside acceptance limits.
E	Result exceeded calibration range.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
H	Sample was prepped or analyzed beyond the specified holding time
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-03-082115
Date Collected: 08/21/15 10:30
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-1
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.29	J	10	0.27	ug/L			08/27/15 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/27/15 20:07*	*1*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*		*08/27/15 20:07*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*08/27/15 20:07*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/27/15 20:07*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/31/15 20:06	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/31/15 20:06	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/31/15 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*08/31/15 20:06*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/31/15 20:06*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*08/31/15 20:06*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*08/31/15 20:06*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 18:31	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 18:31	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 18:31	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 18:31	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 18:31	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 18:31	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 18:31	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 18:31	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 18:31	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 18:31	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 18:31	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 18:31	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 18:31	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 18:31	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 18:31	1
Acetone	2.7	U	25	2.7	ug/L			09/02/15 18:31	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 18:31	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 18:31	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 18:31	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 18:31	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 18:31	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 18:31	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 18:31	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 18:31	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 18:31	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 18:31	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 18:31	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 18:31	1

Client Sample ID: SW-PAB-03-082115
Date Collected: 08/21/15 10:30
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/02/15 18:31	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 18:31	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 18:31	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 18:31	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 18:31	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 18:31	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 18:31	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 18:31	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 18:31	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 18:31	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 18:31	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 18:31	1
Toluene	0.17	U	1.0	0.17	ug/L			09/02/15 18:31	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 18:31	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 18:31	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 18:31	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 18:31	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 18:31	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 18:31	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 18:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 18:31*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 18:31*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*09/02/15 18:31*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*09/02/15 18:31*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*09/02/15 18:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*09/02/15 18:31*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 20:12	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 20:12	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 20:12	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 20:12	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 20:12	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 20:12	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*96*		*10 - 120*	*08/27/15 16:15*	*08/29/15 20:12*	*1*
2-Fluorobiphenyl (Surr)	*75*		*29 - 120*	*08/27/15 16:15*	*08/29/15 20:12*	*1*
Nitrobenzene-d5	*78*		*27 - 120*	*08/27/15 16:15*	*08/29/15 20:12*	*1*
Terphenyl-d14	*97*		*13 - 120*	*08/27/15 16:15*	*08/29/15 20:12*	*1*
2-Fluorophenol	*51*		*10 - 120*	*08/27/15 16:15*	*08/29/15 20:12*	*1*
Phenol-d5	*36*		*10 - 120*	*08/27/15 16:15*	*08/29/15 20:12*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-03-082115
Date Collected: 08/21/15 10:30
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 18:03	1
1,2,4,5-Tetrachlorobenzene	1.9	U	8.9	1.9	ug/L		08/26/15 15:47	08/27/15 18:03	1
2,3,4,6-Tetrachlorophenol	6.2	U	8.9	6.2	ug/L		08/26/15 15:47	08/27/15 18:03	1
2,4,5-Trichlorophenol	6.3	U	8.9	6.3	ug/L		08/26/15 15:47	08/27/15 18:03	1
2,4,6-Trichlorophenol	6.1	U	8.9	6.1	ug/L		08/26/15 15:47	08/27/15 18:03	1
2,4-Dichlorophenol	5.0	U	8.9	5.0	ug/L		08/26/15 15:47	08/27/15 18:03	1
2,4-Dimethylphenol	3.8	U	8.9	3.8	ug/L		08/26/15 15:47	08/27/15 18:03	1
2,4-Dinitrophenol	5.3	U	22	5.3	ug/L		08/26/15 15:47	08/27/15 18:03	1
2,4-Dinitrotoluene	2.9	U	8.9	2.9	ug/L		08/26/15 15:47	08/27/15 18:03	1
2,6-Dinitrotoluene	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 18:03	1
2-Chloronaphthalene	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 18:03	1
2-Chlorophenol	4.3	U	8.9	4.3	ug/L		08/26/15 15:47	08/27/15 18:03	1
2-Methylnaphthalene	0.36	U	1.8	0.36	ug/L		08/26/15 15:47	08/27/15 18:03	1
2-Methylphenol	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 18:03	1
2-Nitroaniline	3.3	U	22	3.3	ug/L		08/26/15 15:47	08/27/15 18:03	1
2-Nitrophenol	4.7	U	8.9	4.7	ug/L		08/26/15 15:47	08/27/15 18:03	1
3,3'-Dichlorobenzidine	2.9	U	8.9	2.9	ug/L		08/26/15 15:47	08/27/15 18:03	1
3 & 4 Methylphenol	2.0	U	8.9	2.0	ug/L		08/26/15 15:47	08/27/15 18:03	1
3-Nitroaniline	2.4	U	22	2.4	ug/L		08/26/15 15:47	08/27/15 18:03	1
4,6-Dinitro-2-methylphenol	8.3	U	22	8.3	ug/L		08/26/15 15:47	08/27/15 18:03	1
4-Bromophenyl phenyl ether	2.4	U	8.9	2.4	ug/L		08/26/15 15:47	08/27/15 18:03	1
4-Chloro-3-methylphenol	4.0	U	8.9	4.0	ug/L		08/26/15 15:47	08/27/15 18:03	1
4-Chloroaniline	3.8	U	8.9	3.8	ug/L		08/26/15 15:47	08/27/15 18:03	1
4-Chlorophenyl phenyl ether	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 18:03	1
4-Nitroaniline	2.8	U	22	2.8	ug/L		08/26/15 15:47	08/27/15 18:03	1
4-Nitrophenol	4.8	U	22	4.8	ug/L		08/26/15 15:47	08/27/15 18:03	1
Acenaphthylene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 18:03	1
Acetophenone	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 18:03	1
Anthracene	0.34	U	1.8	0.34	ug/L		08/26/15 15:47	08/27/15 18:03	1
Benzaldehyde	5.1	U	8.9	5.1	ug/L		08/26/15 15:47	08/27/15 18:03	1
Benzo[g,h,i]perylene	0.55	U	1.8	0.55	ug/L		08/26/15 15:47	08/27/15 18:03	1
Benzo[k]fluoranthene	0.33	U	1.8	0.33	ug/L		08/26/15 15:47	08/27/15 18:03	1
Bis(2-chloroethoxy)methane	2.8	U	8.9	2.8	ug/L		08/26/15 15:47	08/27/15 18:03	1
Bis(2-chloroethyl)ether	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 18:03	1
Butyl benzyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 15:47	08/27/15 18:03	1
Bis(2-ethylhexyl) phthalate	5.4	U	8.9	5.4	ug/L		08/26/15 15:47	08/27/15 18:03	1
Carbazole	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 18:03	1
Caprolactam	2.1	U	8.9	2.1	ug/L		08/26/15 15:47	08/27/15 18:03	1
Chrysene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 18:03	1
Dibenz(a,h)anthracene	0.40	U	1.8	0.40	ug/L		08/26/15 15:47	08/27/15 18:03	1
Dibenzofuran	2.6	U	8.9	2.6	ug/L		08/26/15 15:47	08/27/15 18:03	1
Diethyl phthalate	2.7	U	8.9	2.7	ug/L		08/26/15 15:47	08/27/15 18:03	1
Dimethyl phthalate	2.8	U	8.9	2.8	ug/L		08/26/15 15:47	08/27/15 18:03	1
Di-n-butyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 15:47	08/27/15 18:03	1
Fluoranthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 18:03	1
Fluorene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 18:03	1
Hexachlorocyclopentadiene	1.6	U	8.9	1.6	ug/L		08/26/15 15:47	08/27/15 18:03	1
Hexachloroethane	1.7	U	8.9	1.7	ug/L		08/26/15 15:47	08/27/15 18:03	1
Indeno[1,2,3-cd]pyrene	0.37	U	1.8	0.37	ug/L		08/26/15 15:47	08/27/15 18:03	1

Client Sample ID: SW-PAB-03-082115
Date Collected: 08/21/15 10:30
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	2.8	U	8.9	2.8	ug/L		08/26/15 15:47	08/27/15 18:03	1
Naphthalene	0.33	U	1.8	0.33	ug/L		08/26/15 15:47	08/27/15 18:03	1
Nitrobenzene	2.4	U	8.9	2.4	ug/L		08/26/15 15:47	08/27/15 18:03	1
N-Nitrosodi-n-propylamine	3.0	U	8.9	3.0	ug/L		08/26/15 15:47	08/27/15 18:03	1
N-Nitrosodiphenylamine	3.2	U	8.9	3.2	ug/L		08/26/15 15:47	08/27/15 18:03	1
Phenanthrene	0.38	U	1.8	0.38	ug/L		08/26/15 15:47	08/27/15 18:03	1
Phenol	1.3	U	8.9	1.3	ug/L		08/26/15 15:47	08/27/15 18:03	1
Pyrene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 18:03	1
Diphenyl	2.0	U	8.9	2.0	ug/L		08/26/15 15:47	08/27/15 18:03	1
Di-n-octyl phthalate	2.2	U	8.9	2.2	ug/L		08/26/15 15:47	08/27/15 18:03	1
2,2'-oxybis[1-chloropropane]	2.5	U	8.9	2.5	ug/L		08/26/15 15:47	08/27/15 18:03	1
Atrazine	2.6	U	8.9	2.6	ug/L		08/26/15 15:47	08/27/15 18:03	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Octadecanoic acid	*3.8*	*J N*	*ug/L*		*8.47*	*57-11-4*	*08/26/15 15:47*	*08/27/15 18:03*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*82*		*10 - 120*	*08/26/15 15:47*	*08/27/15 18:03*	*1*
2-Fluorobiphenyl (Surr)	*59*		*29 - 120*	*08/26/15 15:47*	*08/27/15 18:03*	*1*
2-Fluorophenol (Surr)	*30*		*10 - 120*	*08/26/15 15:47*	*08/27/15 18:03*	*1*
Nitrobenzene-d5 (Surr)	*57*		*27 - 120*	*08/26/15 15:47*	*08/27/15 18:03*	*1*
Phenol-d5 (Surr)	*20*		*10 - 120*	*08/26/15 15:47*	*08/27/15 18:03*	*1*
Terphenyl-d14 (Surr)	*76*		*13 - 120*	*08/26/15 15:47*	*08/27/15 18:03*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.40	U	0.46	0.40	ug/L		09/03/15 06:55	09/04/15 17:25	1
PCB-1221	0.31	U	0.46	0.31	ug/L		09/03/15 06:55	09/04/15 17:25	1
PCB-1232	0.37	U	0.46	0.37	ug/L		09/03/15 06:55	09/04/15 17:25	1
PCB-1242	0.20	U	0.46	0.20	ug/L		09/03/15 06:55	09/04/15 17:25	1
PCB-1248	0.14	U	0.46	0.14	ug/L		09/03/15 06:55	09/04/15 17:25	1
PCB-1254	0.16	U	0.46	0.16	ug/L		09/03/15 06:55	09/04/15 17:25	1
PCB-1260	0.17	U	0.46	0.17	ug/L		09/03/15 06:55	09/04/15 17:25	1
Polychlorinated biphenyls, Total	0.40	U	0.46	0.40	ug/L		09/03/15 06:55	09/04/15 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*76*		*10 - 150*	*09/03/15 06:55*	*09/04/15 17:25*	*1*
Tetrachloro-m-xylene	*48*		*10 - 150*	*09/03/15 06:55*	*09/04/15 17:25*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.42**		1.00	0.70	mg/L			08/31/15 20:19	1
Sulfate	**5.04**		1.00	0.60	mg/L			08/31/15 20:19	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 20:21	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:21	1
Arsenic	**0.00054**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:21	1
Barium	**0.062**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:21	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:21	1

Client Sample ID: SW-PAB-03-082115
Date Collected: 08/21/15 10:30
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-1
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 20:21	1
Calcium	**25.3**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:21	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:21	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:21	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:21	1
Iron	**3.7**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 20:21	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 20:21	1
Magnesium	**4.1**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:21	1
Manganese	**0.76**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:21	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:21	1
Potassium	**0.58**	**J**	1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:21	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 14:32	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:21	1
Sodium	**7.1**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:21	1
Thallium	**0.0011**	**J**	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 20:21	1
Vanadium	**0.0014**	**J B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 20:21	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 20:21	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 13:09	1
Antimony	**0.00098**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:09	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:09	1
Barium	**0.060**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:09	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:09	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 13:09	1
Calcium	**22.1**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:09	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:09	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:09	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:09	1
Iron	**0.073**		0.025	0.010	mg/L		08/26/15 17:11	09/03/15 13:09	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 13:09	1
Magnesium	**3.8**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:09	1
Manganese	**0.69**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:09	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:09	1
Potassium	**0.52**	**J**	1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:09	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 13:09	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:09	1
Sodium	**6.4**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:09	1
Thallium	**0.00088**	**J**	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 13:09	1
Vanadium	**0.00078**	**J B**	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 13:09	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 13:09	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:08	08/31/15 21:42	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 16:41	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-03-082115
Date Collected: 08/21/15 10:30
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-1
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 13:44	08/27/15 11:38	1
Bicarbonate Alkalinity as CaCO3	**65.6**		10.0	5.0	mg/L			08/25/15 19:23	1
Total Alkalinity as CaCO3	**65.6**		10.0	5.0	mg/L			08/25/15 19:23	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-02-082115
Date Collected: 08/21/15 11:25
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-2
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.79	J	10	0.27	ug/L			08/27/15 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*08/27/15 20:36*	*1*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*		*08/27/15 20:36*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*08/27/15 20:36*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/27/15 20:36*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/31/15 20:34	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/31/15 20:34	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/31/15 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*08/31/15 20:34*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/31/15 20:34*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/31/15 20:34*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/31/15 20:34*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 18:58	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 18:58	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 18:58	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 18:58	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 18:58	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 18:58	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 18:58	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 18:58	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 18:58	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 18:58	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 18:58	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 18:58	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 18:58	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 18:58	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 18:58	1
Acetone	2.7	U	25	2.7	ug/L			09/02/15 18:58	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 18:58	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 18:58	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 18:58	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 18:58	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 18:58	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 18:58	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 18:58	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 18:58	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 18:58	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 18:58	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 18:58	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 18:58	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-02-082115
Date Collected: 08/21/15 11:25
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/02/15 18:58	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 18:58	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 18:58	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 18:58	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 18:58	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 18:58	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 18:58	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 18:58	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 18:58	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 18:58	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 18:58	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 18:58	1
Toluene	0.17	U	1.0	0.17	ug/L			09/02/15 18:58	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 18:58	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 18:58	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 18:58	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 18:58	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 18:58	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 18:58	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 18:58	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 18:58*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 18:58*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*09/02/15 18:58*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*09/02/15 18:58*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/02/15 18:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*09/02/15 18:58*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 20:39	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 20:39	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 20:39	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 20:39	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 20:39	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 20:39	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*73*		*10 - 120*	*08/27/15 16:15*	*08/29/15 20:39*	*1*
2-Fluorobiphenyl (Surr)	*62*		*29 - 120*	*08/27/15 16:15*	*08/29/15 20:39*	*1*
Nitrobenzene-d5	*57*		*27 - 120*	*08/27/15 16:15*	*08/29/15 20:39*	*1*
Terphenyl-d14	*73*		*13 - 120*	*08/27/15 16:15*	*08/29/15 20:39*	*1*
2-Fluorophenol	*41*		*10 - 120*	*08/27/15 16:15*	*08/29/15 20:39*	*1*
Phenol-d5	*28*		*10 - 120*	*08/27/15 16:15*	*08/29/15 20:39*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-02-082115
Date Collected: 08/21/15 11:25
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 18:27	1
1,2,4,5-Tetrachlorobenzene	1.9	U	9.1	1.9	ug/L		08/26/15 15:47	08/27/15 18:27	1
2,3,4,6-Tetrachlorophenol	6.3	U	9.1	6.3	ug/L		08/26/15 15:47	08/27/15 18:27	1
2,4,5-Trichlorophenol	6.5	U	9.1	6.5	ug/L		08/26/15 15:47	08/27/15 18:27	1
2,4,6-Trichlorophenol	6.2	U	9.1	6.2	ug/L		08/26/15 15:47	08/27/15 18:27	1
2,4-Dichlorophenol	5.1	U	9.1	5.1	ug/L		08/26/15 15:47	08/27/15 18:27	1
2,4-Dimethylphenol	3.8	U	9.1	3.8	ug/L		08/26/15 15:47	08/27/15 18:27	1
2,4-Dinitrophenol	5.4	U	23	5.4	ug/L		08/26/15 15:47	08/27/15 18:27	1
2,4-Dinitrotoluene	2.9	U	9.1	2.9	ug/L		08/26/15 15:47	08/27/15 18:27	1
2,6-Dinitrotoluene	2.1	U	9.1	2.1	ug/L		08/26/15 15:47	08/27/15 18:27	1
2-Chloronaphthalene	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 18:27	1
2-Chlorophenol	4.4	U	9.1	4.4	ug/L		08/26/15 15:47	08/27/15 18:27	1
2-Methylnaphthalene	0.36	U	1.8	0.36	ug/L		08/26/15 15:47	08/27/15 18:27	1
2-Methylphenol	2.1	U	9.1	2.1	ug/L		08/26/15 15:47	08/27/15 18:27	1
2-Nitroaniline	3.4	U	23	3.4	ug/L		08/26/15 15:47	08/27/15 18:27	1
2-Nitrophenol	4.8	U	9.1	4.8	ug/L		08/26/15 15:47	08/27/15 18:27	1
3,3'-Dichlorobenzidine	3.0	U	9.1	3.0	ug/L		08/26/15 15:47	08/27/15 18:27	1
3 & 4 Methylphenol	2.0	U	9.1	2.0	ug/L		08/26/15 15:47	08/27/15 18:27	1
3-Nitroaniline	2.5	U	23	2.5	ug/L		08/26/15 15:47	08/27/15 18:27	1
4,6-Dinitro-2-methylphenol	8.5	U	23	8.5	ug/L		08/26/15 15:47	08/27/15 18:27	1
4-Bromophenyl phenyl ether	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 18:27	1
4-Chloro-3-methylphenol	4.1	U	9.1	4.1	ug/L		08/26/15 15:47	08/27/15 18:27	1
4-Chloroaniline	3.8	U	9.1	3.8	ug/L		08/26/15 15:47	08/27/15 18:27	1
4-Chlorophenyl phenyl ether	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 18:27	1
4-Nitroaniline	2.8	U	23	2.8	ug/L		08/26/15 15:47	08/27/15 18:27	1
4-Nitrophenol	4.9	U	23	4.9	ug/L		08/26/15 15:47	08/27/15 18:27	1
Acenaphthylene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 18:27	1
Acetophenone	2.1	U	9.1	2.1	ug/L		08/26/15 15:47	08/27/15 18:27	1
Anthracene	0.35	U	1.8	0.35	ug/L		08/26/15 15:47	08/27/15 18:27	1
Benzaldehyde	5.2	U	9.1	5.2	ug/L		08/26/15 15:47	08/27/15 18:27	1
Benzo[g,h,i]perylene	0.56	U	1.8	0.56	ug/L		08/26/15 15:47	08/27/15 18:27	1
Benzo[k]fluoranthene	0.34	U	1.8	0.34	ug/L		08/26/15 15:47	08/27/15 18:27	1
Bis(2-chloroethoxy)methane	2.8	U	9.1	2.8	ug/L		08/26/15 15:47	08/27/15 18:27	1
Bis(2-chloroethyl)ether	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 18:27	1
Butyl benzyl phthalate	2.3	U	9.1	2.3	ug/L		08/26/15 15:47	08/27/15 18:27	1
Bis(2-ethylhexyl) phthalate	5.5	U	9.1	5.5	ug/L		08/26/15 15:47	08/27/15 18:27	1
Carbazole	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 18:27	1
Caprolactam	2.2	U	9.1	2.2	ug/L		08/26/15 15:47	08/27/15 18:27	1
Chrysene	0.30	U	1.8	0.30	ug/L		08/26/15 15:47	08/27/15 18:27	1
Dibenz(a,h)anthracene	0.41	U	1.8	0.41	ug/L		08/26/15 15:47	08/27/15 18:27	1
Dibenzofuran	2.6	U	9.1	2.6	ug/L		08/26/15 15:47	08/27/15 18:27	1
Diethyl phthalate	2.7	U	9.1	2.7	ug/L		08/26/15 15:47	08/27/15 18:27	1
Dimethyl phthalate	2.8	U	9.1	2.8	ug/L		08/26/15 15:47	08/27/15 18:27	1
Di-n-butyl phthalate	2.3	U	9.1	2.3	ug/L		08/26/15 15:47	08/27/15 18:27	1
Fluoranthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 18:27	1
Fluorene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 18:27	1
Hexachlorocyclopentadiene	1.6	U	9.1	1.6	ug/L		08/26/15 15:47	08/27/15 18:27	1
Hexachloroethane	1.7	U	9.1	1.7	ug/L		08/26/15 15:47	08/27/15 18:27	1
Indeno[1,2,3-cd]pyrene	0.37	U	1.8	0.37	ug/L		08/26/15 15:47	08/27/15 18:27	1

Client Sample ID: SW-PAB-02-082115
Date Collected: 08/21/15 11:25
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	2.8	U	9.1	2.8	ug/L		08/26/15 15:47	08/27/15 18:27	1
Naphthalene	0.34	U	1.8	0.34	ug/L		08/26/15 15:47	08/27/15 18:27	1
Nitrobenzene	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 18:27	1
N-Nitrosodi-n-propylamine	3.1	U	9.1	3.1	ug/L		08/26/15 15:47	08/27/15 18:27	1
N-Nitrosodiphenylamine	3.3	U	9.1	3.3	ug/L		08/26/15 15:47	08/27/15 18:27	1
Phenanthrene	0.38	U	1.8	0.38	ug/L		08/26/15 15:47	08/27/15 18:27	1
Phenol	1.4	U	9.1	1.4	ug/L		08/26/15 15:47	08/27/15 18:27	1
Pyrene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 18:27	1
Diphenyl	2.0	U	9.1	2.0	ug/L		08/26/15 15:47	08/27/15 18:27	1
Di-n-octyl phthalate	2.3	U	9.1	2.3	ug/L		08/26/15 15:47	08/27/15 18:27	1
2,2'-oxybis[1-chloropropane]	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 18:27	1
Atrazine	2.6	U	9.1	2.6	ug/L		08/26/15 15:47	08/27/15 18:27	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Oleic Acid	*14*	*J N*	*ug/L*		*8.40*	*112-80-1*	*08/26/15 15:47*	*08/27/15 18:27*	*1*
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'-	*4.6*	*J N*	*ug/L*		*9.19*	*366-29-0*	*08/26/15 15:47*	*08/27/15 18:27*	*1*
2,6,10,14,18,22-Tetracosahexaene, 2,6,10	*3.2*	*J N*	*ug/L*		*10.24*	*111-02-4*	*08/26/15 15:47*	*08/27/15 18:27*	*1*
Oxirane, heptadecyl-	*3.2*	*J N*	*ug/L*		*11.36*	*67860-04-2*	*08/26/15 15:47*	*08/27/15 18:27*	*1*
Acetic acid, chloro-, octadecyl ester	*4.1*	*J N*	*ug/L*		*11.58*	*5348-82-3*	*08/26/15 15:47*	*08/27/15 18:27*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*87*		*10 - 120*	*08/26/15 15:47*	*08/27/15 18:27*	*1*
2-Fluorobiphenyl (Surr)	*63*		*29 - 120*	*08/26/15 15:47*	*08/27/15 18:27*	*1*
2-Fluorophenol (Surr)	*32*		*10 - 120*	*08/26/15 15:47*	*08/27/15 18:27*	*1*
Nitrobenzene-d5 (Surr)	*60*		*27 - 120*	*08/26/15 15:47*	*08/27/15 18:27*	*1*
Phenol-d5 (Surr)	*21*		*10 - 120*	*08/26/15 15:47*	*08/27/15 18:27*	*1*
Terphenyl-d14 (Surr)	*77*		*13 - 120*	*08/26/15 15:47*	*08/27/15 18:27*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.38	U	0.45	0.38	ug/L		09/03/15 06:55	09/04/15 17:41	1
PCB-1221	0.30	U	0.45	0.30	ug/L		09/03/15 06:55	09/04/15 17:41	1
PCB-1232	0.36	U	0.45	0.36	ug/L		09/03/15 06:55	09/04/15 17:41	1
PCB-1242	0.20	U	0.45	0.20	ug/L		09/03/15 06:55	09/04/15 17:41	1
PCB-1248	0.13	U	0.45	0.13	ug/L		09/03/15 06:55	09/04/15 17:41	1
PCB-1254	0.15	U	0.45	0.15	ug/L		09/03/15 06:55	09/04/15 17:41	1
PCB-1260	0.16	U	0.45	0.16	ug/L		09/03/15 06:55	09/04/15 17:41	1
Polychlorinated biphenyls, Total	0.38	U	0.45	0.38	ug/L		09/03/15 06:55	09/04/15 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*88*		*10 - 150*	*09/03/15 06:55*	*09/04/15 17:41*	*1*
Tetrachloro-m-xylene	*78*		*10 - 150*	*09/03/15 06:55*	*09/04/15 17:41*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.88**		1.00	0.70	mg/L			08/31/15 20:43	1
Sulfate	**0.78**	**J**	1.00	0.60	mg/L			08/31/15 20:43	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-02-082115
Date Collected: 08/21/15 11:25
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-2
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.010**	**J**	0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 20:27	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:27	1
Arsenic	**0.00056**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:27	1
Barium	**0.073**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:27	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:27	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 20:27	1
Calcium	**29.4**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:27	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:27	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:27	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:27	1
Iron	**2.8**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 20:27	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 20:27	1
Magnesium	**5.0**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:27	1
Manganese	**0.98**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:27	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:27	1
Potassium	**1.4**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:27	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 14:37	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:27	1
Sodium	**5.4**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:27	1
Thallium	**0.00033**	**J**	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 20:27	1
Vanadium	**0.0014**	**J B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 20:27	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 20:27	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 13:14	1
Antimony	**0.0010**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:14	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:14	1
Barium	**0.067**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:14	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:14	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 13:14	1
Calcium	**27.3**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:14	1
Chromium	**0.0030**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:14	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:14	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:14	1
Iron	**0.082**		0.025	0.010	mg/L		08/26/15 17:11	09/03/15 13:14	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 13:14	1
Magnesium	**4.9**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:14	1
Manganese	**0.60**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:14	1
Nickel	**0.00053**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:14	1
Potassium	**1.4**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:14	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 13:14	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:14	1
Sodium	**5.3**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:14	1
Thallium	**0.00040**	**J**	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 13:14	1
Vanadium	**0.00079**	**J B**	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 13:14	1
Zinc	**0.023**	**J**	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 13:14	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-02-082115
Date Collected: 08/21/15 11:25
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-2
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:08	08/31/15 21:54	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 16:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 13:44	08/27/15 11:39	1
Bicarbonate Alkalinity as CaCO3	**88.4**		10.0	5.0	mg/L			08/25/15 19:28	1
Total Alkalinity as CaCO3	**88.4**		10.0	5.0	mg/L			08/25/15 19:28	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-01A-082115
Date Collected: 08/21/15 12:20
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-3
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.1	J	10	0.27	ug/L			08/27/15 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/27/15 21:04*	*1*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*		*08/27/15 21:04*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*08/27/15 21:04*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/27/15 21:04*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/31/15 21:03	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/31/15 21:03	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/31/15 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*		*08/31/15 21:03*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/31/15 21:03*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/31/15 21:03*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*08/31/15 21:03*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 19:26	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 19:26	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 19:26	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 19:26	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 19:26	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 19:26	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 19:26	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 19:26	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 19:26	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 19:26	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 19:26	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 19:26	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 19:26	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 19:26	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 19:26	1
Acetone	2.7	U	25	2.7	ug/L			09/02/15 19:26	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 19:26	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 19:26	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 19:26	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 19:26	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 19:26	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 19:26	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 19:26	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 19:26	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 19:26	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 19:26	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 19:26	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 19:26	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-01A-082115
Date Collected: 08/21/15 12:20
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/02/15 19:26	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 19:26	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 19:26	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 19:26	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 19:26	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 19:26	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 19:26	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 19:26	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 19:26	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 19:26	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 19:26	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 19:26	1
Toluene	0.17	U	1.0	0.17	ug/L			09/02/15 19:26	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 19:26	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 19:26	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 19:26	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 19:26	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 19:26	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 19:26	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 19:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 19:26*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 19:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*09/02/15 19:26*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*09/02/15 19:26*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/02/15 19:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*09/02/15 19:26*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 21:05	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 21:05	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 21:05	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 21:05	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 21:05	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 21:05	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 21:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*90*		*10 - 120*	*08/27/15 16:15*	*08/29/15 21:05*	*1*
2-Fluorobiphenyl (Surr)	*85*		*29 - 120*	*08/27/15 16:15*	*08/29/15 21:05*	*1*
Nitrobenzene-d5	*78*		*27 - 120*	*08/27/15 16:15*	*08/29/15 21:05*	*1*
Terphenyl-d14	*101*		*13 - 120*	*08/27/15 16:15*	*08/29/15 21:05*	*1*
2-Fluorophenol	*49*		*10 - 120*	*08/27/15 16:15*	*08/29/15 21:05*	*1*
Phenol-d5	*34*		*10 - 120*	*08/27/15 16:15*	*08/29/15 21:05*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-01A-082115
Date Collected: 08/21/15 12:20
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 18:51	1
1,2,4,5-Tetrachlorobenzene	1.9	U	9.1	1.9	ug/L		08/26/15 15:47	08/27/15 18:51	1
2,3,4,6-Tetrachlorophenol	6.3	U	9.1	6.3	ug/L		08/26/15 15:47	08/27/15 18:51	1
2,4,5-Trichlorophenol	6.5	U	9.1	6.5	ug/L		08/26/15 15:47	08/27/15 18:51	1
2,4,6-Trichlorophenol	6.2	U	9.1	6.2	ug/L		08/26/15 15:47	08/27/15 18:51	1
2,4-Dichlorophenol	5.1	U	9.1	5.1	ug/L		08/26/15 15:47	08/27/15 18:51	1
2,4-Dimethylphenol	3.8	U	9.1	3.8	ug/L		08/26/15 15:47	08/27/15 18:51	1
2,4-Dinitrophenol	5.4	U	23	5.4	ug/L		08/26/15 15:47	08/27/15 18:51	1
2,4-Dinitrotoluene	2.9	U	9.1	2.9	ug/L		08/26/15 15:47	08/27/15 18:51	1
2,6-Dinitrotoluene	2.1	U	9.1	2.1	ug/L		08/26/15 15:47	08/27/15 18:51	1
2-Chloronaphthalene	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 18:51	1
2-Chlorophenol	4.4	U	9.1	4.4	ug/L		08/26/15 15:47	08/27/15 18:51	1
2-Methylnaphthalene	0.36	U	1.8	0.36	ug/L		08/26/15 15:47	08/27/15 18:51	1
2-Methylphenol	2.1	U	9.1	2.1	ug/L		08/26/15 15:47	08/27/15 18:51	1
2-Nitroaniline	3.4	U	23	3.4	ug/L		08/26/15 15:47	08/27/15 18:51	1
2-Nitrophenol	4.8	U	9.1	4.8	ug/L		08/26/15 15:47	08/27/15 18:51	1
3,3'-Dichlorobenzidine	3.0	U	9.1	3.0	ug/L		08/26/15 15:47	08/27/15 18:51	1
3 & 4 Methylphenol	2.0	U	9.1	2.0	ug/L		08/26/15 15:47	08/27/15 18:51	1
3-Nitroaniline	2.5	U	23	2.5	ug/L		08/26/15 15:47	08/27/15 18:51	1
4,6-Dinitro-2-methylphenol	8.5	U	23	8.5	ug/L		08/26/15 15:47	08/27/15 18:51	1
4-Bromophenyl phenyl ether	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 18:51	1
4-Chloro-3-methylphenol	4.1	U	9.1	4.1	ug/L		08/26/15 15:47	08/27/15 18:51	1
4-Chloroaniline	3.8	U	9.1	3.8	ug/L		08/26/15 15:47	08/27/15 18:51	1
4-Chlorophenyl phenyl ether	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 18:51	1
4-Nitroaniline	2.8	U	23	2.8	ug/L		08/26/15 15:47	08/27/15 18:51	1
4-Nitrophenol	4.9	U	23	4.9	ug/L		08/26/15 15:47	08/27/15 18:51	1
Acenaphthylene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 18:51	1
Acetophenone	2.1	U	9.1	2.1	ug/L		08/26/15 15:47	08/27/15 18:51	1
Anthracene	0.35	U	1.8	0.35	ug/L		08/26/15 15:47	08/27/15 18:51	1
Benzaldehyde	5.2	U	9.1	5.2	ug/L		08/26/15 15:47	08/27/15 18:51	1
Benzo[g,h,i]perylene	0.56	U	1.8	0.56	ug/L		08/26/15 15:47	08/27/15 18:51	1
Benzo[k]fluoranthene	0.34	U	1.8	0.34	ug/L		08/26/15 15:47	08/27/15 18:51	1
Bis(2-chloroethoxy)methane	2.8	U	9.1	2.8	ug/L		08/26/15 15:47	08/27/15 18:51	1
Bis(2-chloroethyl)ether	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 18:51	1
Butyl benzyl phthalate	2.3	U	9.1	2.3	ug/L		08/26/15 15:47	08/27/15 18:51	1
Bis(2-ethylhexyl) phthalate	5.5	U	9.1	5.5	ug/L		08/26/15 15:47	08/27/15 18:51	1
Carbazole	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 18:51	1
Caprolactam	2.2	U	9.1	2.2	ug/L		08/26/15 15:47	08/27/15 18:51	1
Chrysene	0.30	U	1.8	0.30	ug/L		08/26/15 15:47	08/27/15 18:51	1
Dibenz(a,h)anthracene	0.41	U	1.8	0.41	ug/L		08/26/15 15:47	08/27/15 18:51	1
Dibenzofuran	2.6	U	9.1	2.6	ug/L		08/26/15 15:47	08/27/15 18:51	1
Diethyl phthalate	2.7	U	9.1	2.7	ug/L		08/26/15 15:47	08/27/15 18:51	1
Dimethyl phthalate	2.8	U	9.1	2.8	ug/L		08/26/15 15:47	08/27/15 18:51	1
Di-n-butyl phthalate	2.3	U	9.1	2.3	ug/L		08/26/15 15:47	08/27/15 18:51	1
Fluoranthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 18:51	1
Fluorene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 18:51	1
Hexachlorocyclopentadiene	1.6	U	9.1	1.6	ug/L		08/26/15 15:47	08/27/15 18:51	1
Hexachloroethane	1.7	U	9.1	1.7	ug/L		08/26/15 15:47	08/27/15 18:51	1
Indeno[1,2,3-cd]pyrene	0.37	U	1.8	0.37	ug/L		08/26/15 15:47	08/27/15 18:51	1

Client Sample ID: SW-PAB-01A-082115
Date Collected: 08/21/15 12:20
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	2.8	U	9.1	2.8	ug/L		08/26/15 15:47	08/27/15 18:51	1
Naphthalene	0.34	U	1.8	0.34	ug/L		08/26/15 15:47	08/27/15 18:51	1
Nitrobenzene	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 18:51	1
N-Nitrosodi-n-propylamine	3.1	U	9.1	3.1	ug/L		08/26/15 15:47	08/27/15 18:51	1
N-Nitrosodiphenylamine	3.3	U	9.1	3.3	ug/L		08/26/15 15:47	08/27/15 18:51	1
Phenanthrene	0.38	U	1.8	0.38	ug/L		08/26/15 15:47	08/27/15 18:51	1
Phenol	1.4	U	9.1	1.4	ug/L		08/26/15 15:47	08/27/15 18:51	1
Pyrene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 18:51	1
Diphenyl	2.0	U	9.1	2.0	ug/L		08/26/15 15:47	08/27/15 18:51	1
Di-n-octyl phthalate	2.3	U	9.1	2.3	ug/L		08/26/15 15:47	08/27/15 18:51	1
2,2'-oxybis[1-chloropropane]	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 18:51	1
Atrazine	2.6	U	9.1	2.6	ug/L		08/26/15 15:47	08/27/15 18:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tridecanoic acid	*4.9*	*J N*	*ug/L*		*7.83*	*638-53-9*	*08/26/15 15:47*	*08/27/15 18:51*	*1*
9-Octadecenoic acid, (E)-	*6.5*	*J N*	*ug/L*		*8.40*	*112-79-8*	*08/26/15 15:47*	*08/27/15 18:51*	*1*
Octadecanoic acid	*3.2*	*J N*	*ug/L*		*8.47*	*57-11-4*	*08/26/15 15:47*	*08/27/15 18:51*	*1*
1,2-Benzenedicarboxylic acid, diisooctyl	*3.3*	*J N*	*ug/L*		*10.08*	*27554-26-3*	*08/26/15 15:47*	*08/27/15 18:51*	*1*
Octaethylene glycol monododecyl ether	*3.1*	*J N*	*ug/L*		*10.48*	*3055-98-9*	*08/26/15 15:47*	*08/27/15 18:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*89*		*10 - 120*	*08/26/15 15:47*	*08/27/15 18:51*	*1*
2-Fluorobiphenyl (Surr)	*66*		*29 - 120*	*08/26/15 15:47*	*08/27/15 18:51*	*1*
2-Fluorophenol (Surr)	*29*		*10 - 120*	*08/26/15 15:47*	*08/27/15 18:51*	*1*
Nitrobenzene-d5 (Surr)	*59*		*27 - 120*	*08/26/15 15:47*	*08/27/15 18:51*	*1*
Phenol-d5 (Surr)	*19*		*10 - 120*	*08/26/15 15:47*	*08/27/15 18:51*	*1*
Terphenyl-d14 (Surr)	*78*		*13 - 120*	*08/26/15 15:47*	*08/27/15 18:51*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.38	U	0.45	0.38	ug/L		09/03/15 06:55	09/04/15 17:56	1
PCB-1221	0.30	U	0.45	0.30	ug/L		09/03/15 06:55	09/04/15 17:56	1
PCB-1232	0.36	U	0.45	0.36	ug/L		09/03/15 06:55	09/04/15 17:56	1
PCB-1242	0.20	U	0.45	0.20	ug/L		09/03/15 06:55	09/04/15 17:56	1
PCB-1248	0.13	U	0.45	0.13	ug/L		09/03/15 06:55	09/04/15 17:56	1
PCB-1254	0.15	U	0.45	0.15	ug/L		09/03/15 06:55	09/04/15 17:56	1
PCB-1260	0.16	U	0.45	0.16	ug/L		09/03/15 06:55	09/04/15 17:56	1
Polychlorinated biphenyls, Total	0.38	U	0.45	0.38	ug/L		09/03/15 06:55	09/04/15 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*85*		*10 - 150*	*09/03/15 06:55*	*09/04/15 17:56*	*1*
Tetrachloro-m-xylene	*76*		*10 - 150*	*09/03/15 06:55*	*09/04/15 17:56*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.75**		1.00	0.70	mg/L			08/31/15 21:07	1
Sulfate	**1.74**		1.00	0.60	mg/L			08/31/15 21:07	1

Client Sample ID: SW-PAB-01A-082115

Date Collected: 08/21/15 12:20
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-3

Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.051**		0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 20:33	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:33	1
Arsenic	**0.0013**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:33	1
Barium	**0.065**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:33	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:33	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 20:33	1
Calcium	**28.8**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:33	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:33	1
Cobalt	**0.00070**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:33	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:33	1
Iron	**7.3**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 20:33	1
Lead	**0.00028**	**J**	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 20:33	1
Magnesium	**5.0**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:33	1
Manganese	**2.0**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:33	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:33	1
Potassium	**1.7**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:33	1
Selenium	**0.00063**	**J**	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 14:43	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:33	1
Sodium	**4.5**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:33	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 20:33	1
Vanadium	**0.0017**	**J B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 20:33	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 20:33	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 13:19	1
Antimony	**0.00084**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:19	1
Arsenic	**0.00062**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:19	1
Barium	**0.050**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:19	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:19	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 13:19	1
Calcium	**27.0**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:19	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:19	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:19	1
Copper	**0.00053**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:19	1
Iron	**0.81**		0.025	0.010	mg/L		08/26/15 17:11	09/03/15 13:19	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 13:19	1
Magnesium	**5.1**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:19	1
Manganese	**1.5**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:19	1
Nickel	**0.00052**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:19	1
Potassium	**1.7**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:19	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 13:19	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:19	1
Sodium	**3.6**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:19	1
Thallium	**0.00020**	**J**	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 13:19	1
Vanadium	**0.00079**	**J B**	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 13:19	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 13:19	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-01A-082115
Date Collected: 08/21/15 12:20
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-3
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:16	08/31/15 23:02	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 16:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 13:44	08/27/15 11:40	1
Bicarbonate Alkalinity as CaCO3	**92.1**		10.0	5.0	mg/L			08/25/15 19:33	1
Total Alkalinity as CaCO3	**92.1**		10.0	5.0	mg/L			08/25/15 19:33	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-01-082115
Date Collected: 08/21/15 12:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-4
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/27/15 21:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/27/15 21:33*	*1*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*		*08/27/15 21:33*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*08/27/15 21:33*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/27/15 21:33*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/31/15 21:31	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/31/15 21:31	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/31/15 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*08/31/15 21:31*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/31/15 21:31*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*08/31/15 21:31*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*08/31/15 21:31*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 19:53	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 19:53	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 19:53	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 19:53	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 19:53	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 19:53	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 19:53	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 19:53	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 19:53	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 19:53	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 19:53	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 19:53	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 19:53	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 19:53	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 19:53	1
Acetone	2.7	U	25	2.7	ug/L			09/02/15 19:53	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 19:53	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 19:53	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 19:53	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 19:53	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 19:53	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 19:53	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 19:53	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 19:53	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 19:53	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 19:53	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 19:53	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 19:53	1

Client Sample ID: SW-PAB-01-082115
Date Collected: 08/21/15 12:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/02/15 19:53	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 19:53	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 19:53	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 19:53	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 19:53	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 19:53	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 19:53	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 19:53	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 19:53	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 19:53	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 19:53	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 19:53	1
Toluene	0.17	U	1.0	0.17	ug/L			09/02/15 19:53	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 19:53	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 19:53	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 19:53	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 19:53	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 19:53	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 19:53	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 19:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 19:53*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 19:53*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*09/02/15 19:53*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*09/02/15 19:53*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/02/15 19:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*09/02/15 19:53*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 21:32	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 21:32	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 21:32	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 21:32	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 21:32	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 21:32	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 21:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*35*		*10 - 120*	*08/27/15 16:15*	*08/29/15 21:32*	*1*
2-Fluorobiphenyl (Surr)	*29*		*29 - 120*	*08/27/15 16:15*	*08/29/15 21:32*	*1*
Nitrobenzene-d5	*26*	*X*	*27 - 120*	*08/27/15 16:15*	*08/29/15 21:32*	*1*
Terphenyl-d14	*34*		*13 - 120*	*08/27/15 16:15*	*08/29/15 21:32*	*1*
2-Fluorophenol	*12*		*10 - 120*	*08/27/15 16:15*	*08/29/15 21:32*	*1*
Phenol-d5	*7*	*X*	*10 - 120*	*08/27/15 16:15*	*08/29/15 21:32*	*1*

Client Sample ID: SW-PAB-01-082115
Date Collected: 08/21/15 12:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-4
Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.022	U H	0.045	0.022	ug/L		09/01/15 05:42	09/01/15 21:19	1
Benzo[a]pyrene	0.022	U H	0.045	0.022	ug/L		09/01/15 05:42	09/01/15 21:19	1
Benzo[b]fluoranthene	0.022	U H	0.045	0.022	ug/L		09/01/15 05:42	09/01/15 21:19	1
Hexachlorobenzene	0.013	U H	0.018	0.013	ug/L		09/01/15 05:42	09/01/15 21:19	1
Hexachlorobutadiene	0.18	U H	0.36	0.18	ug/L		09/01/15 05:42	09/01/15 21:19	1
N-Nitrosodimethylamine	0.18	U H	0.71	0.18	ug/L		09/01/15 05:42	09/01/15 21:19	1
Pentachlorophenol	0.089	U H *	0.27	0.089	ug/L		09/01/15 05:42	09/01/15 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*79*		*10 - 120*	*09/01/15 05:42*	*09/01/15 21:19*	*1*
2-Fluorobiphenyl (Surr)	*66*		*29 - 120*	*09/01/15 05:42*	*09/01/15 21:19*	*1*
Nitrobenzene-d5	*71*		*27 - 120*	*09/01/15 05:42*	*09/01/15 21:19*	*1*
Terphenyl-d14	*77*		*13 - 120*	*09/01/15 05:42*	*09/01/15 21:19*	*1*
2-Fluorophenol	*49*		*10 - 120*	*09/01/15 05:42*	*09/01/15 21:19*	*1*
Phenol-d5	*34*		*10 - 120*	*09/01/15 05:42*	*09/01/15 21:19*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.28	U	1.8	0.28	ug/L		08/26/15 15:47	08/27/15 19:14	1
1,2,4,5-Tetrachlorobenzene	1.8	U	8.8	1.8	ug/L		08/26/15 15:47	08/27/15 19:14	1
2,3,4,6-Tetrachlorophenol	6.1	U	8.8	6.1	ug/L		08/26/15 15:47	08/27/15 19:14	1
2,4,5-Trichlorophenol	6.2	U	8.8	6.2	ug/L		08/26/15 15:47	08/27/15 19:14	1
2,4,6-Trichlorophenol	6.0	U	8.8	6.0	ug/L		08/26/15 15:47	08/27/15 19:14	1
2,4-Dichlorophenol	4.9	U	8.8	4.9	ug/L		08/26/15 15:47	08/27/15 19:14	1
2,4-Dimethylphenol	3.7	U	8.8	3.7	ug/L		08/26/15 15:47	08/27/15 19:14	1
2,4-Dinitrophenol	5.2	U	22	5.2	ug/L		08/26/15 15:47	08/27/15 19:14	1
2,4-Dinitrotoluene	2.8	U	8.8	2.8	ug/L		08/26/15 15:47	08/27/15 19:14	1
2,6-Dinitrotoluene	2.0	U	8.8	2.0	ug/L		08/26/15 15:47	08/27/15 19:14	1
2-Chloronaphthalene	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 19:14	1
2-Chlorophenol	4.2	U	8.8	4.2	ug/L		08/26/15 15:47	08/27/15 19:14	1
2-Methylnaphthalene	0.35	U	1.8	0.35	ug/L		08/26/15 15:47	08/27/15 19:14	1
2-Methylphenol	2.0	U	8.8	2.0	ug/L		08/26/15 15:47	08/27/15 19:14	1
2-Nitroaniline	3.2	U	22	3.2	ug/L		08/26/15 15:47	08/27/15 19:14	1
2-Nitrophenol	4.6	U	8.8	4.6	ug/L		08/26/15 15:47	08/27/15 19:14	1
3,3'-Dichlorobenzidine	2.9	U	8.8	2.9	ug/L		08/26/15 15:47	08/27/15 19:14	1
3 & 4 Methylphenol	1.9	U	8.8	1.9	ug/L		08/26/15 15:47	08/27/15 19:14	1
3-Nitroaniline	2.4	U	22	2.4	ug/L		08/26/15 15:47	08/27/15 19:14	1
4,6-Dinitro-2-methylphenol	8.2	U	22	8.2	ug/L		08/26/15 15:47	08/27/15 19:14	1
4-Bromophenyl phenyl ether	2.4	U	8.8	2.4	ug/L		08/26/15 15:47	08/27/15 19:14	1
4-Chloro-3-methylphenol	3.9	U	8.8	3.9	ug/L		08/26/15 15:47	08/27/15 19:14	1
4-Chloroaniline	3.7	U	8.8	3.7	ug/L		08/26/15 15:47	08/27/15 19:14	1
4-Chlorophenyl phenyl ether	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 19:14	1
4-Nitroaniline	2.7	U	22	2.7	ug/L		08/26/15 15:47	08/27/15 19:14	1
4-Nitrophenol	4.7	U	22	4.7	ug/L		08/26/15 15:47	08/27/15 19:14	1
Acenaphthylene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 19:14	1
Acetophenone	2.0	U	8.8	2.0	ug/L		08/26/15 15:47	08/27/15 19:14	1
Anthracene	0.33	U	1.8	0.33	ug/L		08/26/15 15:47	08/27/15 19:14	1
Benzaldehyde	5.0	U	8.8	5.0	ug/L		08/26/15 15:47	08/27/15 19:14	1
Benzo[g,h,i]perylene	0.54	U	1.8	0.54	ug/L		08/26/15 15:47	08/27/15 19:14	1
Benzo[k]fluoranthene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 19:14	1

Client Sample ID: SW-PAB-01-082115
Date Collected: 08/21/15 12:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	2.7	U	8.8	2.7	ug/L		08/26/15 15:47	08/27/15 19:14	1
Bis(2-chloroethyl)ether	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 19:14	1
Butyl benzyl phthalate	2.2	U	8.8	2.2	ug/L		08/26/15 15:47	08/27/15 19:14	1
Bis(2-ethylhexyl) phthalate	5.3	U	8.8	5.3	ug/L		08/26/15 15:47	08/27/15 19:14	1
Carbazole	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 19:14	1
Caprolactam	2.1	U	8.8	2.1	ug/L		08/26/15 15:47	08/27/15 19:14	1
Chrysene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 19:14	1
Dibenz(a,h)anthracene	0.39	U	1.8	0.39	ug/L		08/26/15 15:47	08/27/15 19:14	1
Dibenzofuran	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 19:14	1
Diethyl phthalate	2.6	U	8.8	2.6	ug/L		08/26/15 15:47	08/27/15 19:14	1
Dimethyl phthalate	2.7	U	8.8	2.7	ug/L		08/26/15 15:47	08/27/15 19:14	1
Di-n-butyl phthalate	2.2	U	8.8	2.2	ug/L		08/26/15 15:47	08/27/15 19:14	1
Fluoranthene	0.28	U	1.8	0.28	ug/L		08/26/15 15:47	08/27/15 19:14	1
Fluorene	0.28	U	1.8	0.28	ug/L		08/26/15 15:47	08/27/15 19:14	1
Hexachlorocyclopentadiene	1.6	U	8.8	1.6	ug/L		08/26/15 15:47	08/27/15 19:14	1
Hexachloroethane	1.7	U	8.8	1.7	ug/L		08/26/15 15:47	08/27/15 19:14	1
Indeno[1,2,3-cd]pyrene	0.36	U	1.8	0.36	ug/L		08/26/15 15:47	08/27/15 19:14	1
Isophorone	2.7	U	8.8	2.7	ug/L		08/26/15 15:47	08/27/15 19:14	1
Naphthalene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 19:14	1
Nitrobenzene	2.4	U	8.8	2.4	ug/L		08/26/15 15:47	08/27/15 19:14	1
N-Nitrosodi-n-propylamine	3.0	U	8.8	3.0	ug/L		08/26/15 15:47	08/27/15 19:14	1
N-Nitrosodiphenylamine	3.2	U	8.8	3.2	ug/L		08/26/15 15:47	08/27/15 19:14	1
Phenanthrene	0.37	U	1.8	0.37	ug/L		08/26/15 15:47	08/27/15 19:14	1
Phenol	1.3	U	8.8	1.3	ug/L		08/26/15 15:47	08/27/15 19:14	1
Pyrene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 19:14	1
Diphenyl	1.9	U	8.8	1.9	ug/L		08/26/15 15:47	08/27/15 19:14	1
Di-n-octyl phthalate	2.2	U	8.8	2.2	ug/L		08/26/15 15:47	08/27/15 19:14	1
2,2'-oxybis[1-chloropropane]	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 19:14	1
Atrazine	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 19:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Heptadecane	*4.2*	*J N*	*ug/L*		*11.90*	*629-78-7*	*08/26/15 15:47*	*08/27/15 19:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*92*		*10 - 120*	*08/26/15 15:47*	*08/27/15 19:14*	*1*
2-Fluorobiphenyl (Surr)	*69*		*29 - 120*	*08/26/15 15:47*	*08/27/15 19:14*	*1*
2-Fluorophenol (Surr)	*33*		*10 - 120*	*08/26/15 15:47*	*08/27/15 19:14*	*1*
Nitrobenzene-d5 (Surr)	*64*		*27 - 120*	*08/26/15 15:47*	*08/27/15 19:14*	*1*
Phenol-d5 (Surr)	*21*		*10 - 120*	*08/26/15 15:47*	*08/27/15 19:14*	*1*
Terphenyl-d14 (Surr)	*80*		*13 - 120*	*08/26/15 15:47*	*08/27/15 19:14*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.37	U	0.43	0.37	ug/L		09/03/15 06:55	09/04/15 18:12	1
PCB-1221	0.29	U	0.43	0.29	ug/L		09/03/15 06:55	09/04/15 18:12	1
PCB-1232	0.34	U	0.43	0.34	ug/L		09/03/15 06:55	09/04/15 18:12	1
PCB-1242	0.19	U	0.43	0.19	ug/L		09/03/15 06:55	09/04/15 18:12	1
PCB-1248	0.13	U	0.43	0.13	ug/L		09/03/15 06:55	09/04/15 18:12	1
PCB-1254	0.15	U	0.43	0.15	ug/L		09/03/15 06:55	09/04/15 18:12	1
PCB-1260	0.16	U	0.43	0.16	ug/L		09/03/15 06:55	09/04/15 18:12	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-01-082115
Date Collected: 08/21/15 12:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-4
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.37	U	0.43	0.37	ug/L		09/03/15 06:55	09/04/15 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*61*		*10 - 150*	*09/03/15 06:55*	*09/04/15 18:12*	*1*
Tetrachloro-m-xylene	*60*		*10 - 150*	*09/03/15 06:55*	*09/04/15 18:12*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.07**		1.00	0.70	mg/L			08/31/15 21:31	1
Sulfate	**4.78**		1.00	0.60	mg/L			08/31/15 21:31	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.033**		0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 20:50	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:50	1
Arsenic	**0.00052**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:50	1
Barium	**0.044**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:50	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:50	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 20:50	1
Calcium	**9.8**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:50	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:50	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:50	1
Copper	**0.00056**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:50	1
Iron	**3.1**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 20:50	1
Lead	**0.00061**	**J**	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 20:50	1
Magnesium	**2.2**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:50	1
Manganese	**0.30**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:50	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:50	1
Potassium	**0.74**	**J**	1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:50	1
Selenium	**0.00074**	**J**	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 15:01	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:50	1
Sodium	**3.5**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:50	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 20:50	1
Vanadium	**0.0016**	**J B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 20:50	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 20:50	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 13:35	1
Antimony	**0.0010**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:35	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:35	1
Barium	**0.047**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:35	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:35	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 13:35	1
Calcium	**8.8**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:35	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:35	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:35	1
Copper	**0.00073**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:35	1
Iron	**0.34**		0.025	0.010	mg/L		08/26/15 17:11	09/03/15 13:35	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 13:35	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-01-082115
Date Collected: 08/21/15 12:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-4
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	**2.1**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:35	1
Manganese	**0.30**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:35	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:35	1
Potassium	**0.68**	**J**	1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:35	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 13:35	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:35	1
Sodium	**3.2**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:35	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 13:35	1
Vanadium	**0.00090**	**J B**	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 13:35	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 13:35	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:16	08/31/15 23:05	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 16:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 13:44	08/27/15 11:40	1
Bicarbonate Alkalinity as CaCO3	**32.4**		10.0	5.0	mg/L			08/25/15 19:38	1
Total Alkalinity as CaCO3	**32.4**		10.0	5.0	mg/L			08/25/15 19:38	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-11-082115
Date Collected: 08/21/15 13:10
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-5
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/31/15 22:00	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/31/15 22:00	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/31/15 22:00	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/31/15 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*08/31/15 22:00*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/31/15 22:00*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 130*		*08/31/15 22:00*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/31/15 22:00*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 18:04	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 18:04	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 18:04	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 18:04	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 18:04	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 18:04	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 18:04	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 18:04	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 18:04	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 18:04	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 18:04	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 18:04	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 18:04	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 18:04	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 18:04	1
Acetone	2.7	U	25	2.7	ug/L			09/02/15 18:04	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 18:04	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 18:04	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 18:04	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 18:04	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 18:04	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 18:04	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 18:04	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 18:04	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 18:04	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 18:04	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 18:04	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 18:04	1
Cyclohexane	0.13	U F1 *	5.0	0.13	ug/L			09/02/15 18:04	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 18:04	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 18:04	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 18:04	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 18:04	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 18:04	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 18:04	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 18:04	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 18:04	1

Client Sample ID: SW-11-082115
Date Collected: 08/21/15 13:10
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 18:04	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 18:04	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 18:04	1
Toluene	0.17	U	1.0	0.17	ug/L			09/02/15 18:04	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 18:04	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 18:04	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 18:04	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 18:04	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 18:04	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 18:04	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 18:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 18:04*	*1*
total Alkanes TIC	*None*		*ug/L*					*09/02/15 18:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*09/02/15 18:04*	*1*
Dibromofluoromethane (Surr)	*116*		*70 - 130*		*09/02/15 18:04*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/02/15 18:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*09/02/15 18:04*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 21:59	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 21:59	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 21:59	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 21:59	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 21:59	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 21:59	1
Pentachlorophenol	**0.11**	**J**	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*2*	*X*	*10 - 120*	*08/27/15 16:15*	*08/29/15 21:59*	*1*
2-Fluorobiphenyl (Surr)	*0.4*	*X*	*29 - 120*	*08/27/15 16:15*	*08/29/15 21:59*	*1*
Nitrobenzene-d5	*57*		*27 - 120*	*08/27/15 16:15*	*08/29/15 21:59*	*1*
Terphenyl-d14	*0*	*X*	*13 - 120*	*08/27/15 16:15*	*08/29/15 21:59*	*1*
2-Fluorophenol	*0*	*X*	*10 - 120*	*08/27/15 16:15*	*08/29/15 21:59*	*1*
Phenol-d5	*0*	*X*	*10 - 120*	*08/27/15 16:15*	*08/29/15 21:59*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.023	U H	0.046	0.023	ug/L		09/01/15 05:42	09/01/15 19:57	1
Benzo[a]pyrene	0.023	U H	0.046	0.023	ug/L		09/01/15 05:42	09/01/15 19:57	1
Benzo[b]fluoranthene	0.023	U H	0.046	0.023	ug/L		09/01/15 05:42	09/01/15 19:57	1
Hexachlorobenzene	0.013	U H	0.019	0.013	ug/L		09/01/15 05:42	09/01/15 19:57	1
Hexachlorobutadiene	0.19	U H	0.37	0.19	ug/L		09/01/15 05:42	09/01/15 19:57	1
N-Nitrosodimethylamine	0.19	U H	0.74	0.19	ug/L		09/01/15 05:42	09/01/15 19:57	1
Pentachlorophenol	0.093	U H *	0.28	0.093	ug/L		09/01/15 05:42	09/01/15 19:57	1

Client Sample ID: SW-11-082115
Date Collected: 08/21/15 13:10
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-5
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*93*		*10 - 120*	*09/01/15 05:42*	*09/01/15 19:57*	*1*
2-Fluorobiphenyl (Surr)	*80*		*29 - 120*	*09/01/15 05:42*	*09/01/15 19:57*	*1*
Nitrobenzene-d5	*83*		*27 - 120*	*09/01/15 05:42*	*09/01/15 19:57*	*1*
Terphenyl-d14	*94*		*13 - 120*	*09/01/15 05:42*	*09/01/15 19:57*	*1*
2-Fluorophenol	*61*		*10 - 120*	*09/01/15 05:42*	*09/01/15 19:57*	*1*
Phenol-d5	*43*		*10 - 120*	*09/01/15 05:42*	*09/01/15 19:57*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 19:38	1
1,2,4,5-Tetrachlorobenzene	1.9	U	9.1	1.9	ug/L		08/26/15 15:47	08/27/15 19:38	1
2,3,4,6-Tetrachlorophenol	6.3	U	9.1	6.3	ug/L		08/26/15 15:47	08/27/15 19:38	1
2,4,5-Trichlorophenol	6.5	U	9.1	6.5	ug/L		08/26/15 15:47	08/27/15 19:38	1
2,4,6-Trichlorophenol	6.2	U	9.1	6.2	ug/L		08/26/15 15:47	08/27/15 19:38	1
2,4-Dichlorophenol	5.1	U	9.1	5.1	ug/L		08/26/15 15:47	08/27/15 19:38	1
2,4-Dimethylphenol	3.8	U	9.1	3.8	ug/L		08/26/15 15:47	08/27/15 19:38	1
2,4-Dinitrophenol	5.4	U	23	5.4	ug/L		08/26/15 15:47	08/27/15 19:38	1
2,4-Dinitrotoluene	2.9	U	9.1	2.9	ug/L		08/26/15 15:47	08/27/15 19:38	1
2,6-Dinitrotoluene	2.1	U	9.1	2.1	ug/L		08/26/15 15:47	08/27/15 19:38	1
2-Chloronaphthalene	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 19:38	1
2-Chlorophenol	4.4	U	9.1	4.4	ug/L		08/26/15 15:47	08/27/15 19:38	1
2-Methylnaphthalene	0.36	U	1.8	0.36	ug/L		08/26/15 15:47	08/27/15 19:38	1
2-Methylphenol	2.1	U	9.1	2.1	ug/L		08/26/15 15:47	08/27/15 19:38	1
2-Nitroaniline	3.4	U	23	3.4	ug/L		08/26/15 15:47	08/27/15 19:38	1
2-Nitrophenol	4.8	U	9.1	4.8	ug/L		08/26/15 15:47	08/27/15 19:38	1
3,3'-Dichlorobenzidine	3.0	U	9.1	3.0	ug/L		08/26/15 15:47	08/27/15 19:38	1
3 & 4 Methylphenol	2.0	U	9.1	2.0	ug/L		08/26/15 15:47	08/27/15 19:38	1
3-Nitroaniline	2.5	U	23	2.5	ug/L		08/26/15 15:47	08/27/15 19:38	1
4,6-Dinitro-2-methylphenol	8.5	U	23	8.5	ug/L		08/26/15 15:47	08/27/15 19:38	1
4-Bromophenyl phenyl ether	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 19:38	1
4-Chloro-3-methylphenol	4.1	U	9.1	4.1	ug/L		08/26/15 15:47	08/27/15 19:38	1
4-Chloroaniline	3.8	U	9.1	3.8	ug/L		08/26/15 15:47	08/27/15 19:38	1
4-Chlorophenyl phenyl ether	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 19:38	1
4-Nitroaniline	2.8	U	23	2.8	ug/L		08/26/15 15:47	08/27/15 19:38	1
4-Nitrophenol	4.9	U	23	4.9	ug/L		08/26/15 15:47	08/27/15 19:38	1
Acenaphthylene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 19:38	1
Acetophenone	2.1	U	9.1	2.1	ug/L		08/26/15 15:47	08/27/15 19:38	1
Anthracene	0.35	U	1.8	0.35	ug/L		08/26/15 15:47	08/27/15 19:38	1
Benzaldehyde	5.2	U	9.1	5.2	ug/L		08/26/15 15:47	08/27/15 19:38	1
Benzo[g,h,i]perylene	0.56	U	1.8	0.56	ug/L		08/26/15 15:47	08/27/15 19:38	1
Benzo[k]fluoranthene	0.34	U	1.8	0.34	ug/L		08/26/15 15:47	08/27/15 19:38	1
Bis(2-chloroethoxy)methane	2.8	U	9.1	2.8	ug/L		08/26/15 15:47	08/27/15 19:38	1
Bis(2-chloroethyl)ether	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 19:38	1
Butyl benzyl phthalate	2.3	U	9.1	2.3	ug/L		08/26/15 15:47	08/27/15 19:38	1
Bis(2-ethylhexyl) phthalate	5.5	U	9.1	5.5	ug/L		08/26/15 15:47	08/27/15 19:38	1
Carbazole	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 19:38	1
Caprolactam	2.2	U	9.1	2.2	ug/L		08/26/15 15:47	08/27/15 19:38	1
Chrysene	0.30	U	1.8	0.30	ug/L		08/26/15 15:47	08/27/15 19:38	1
Dibenz(a,h)anthracene	0.41	U	1.8	0.41	ug/L		08/26/15 15:47	08/27/15 19:38	1
Dibenzofuran	2.6	U	9.1	2.6	ug/L		08/26/15 15:47	08/27/15 19:38	1

Client Sample ID: SW-11-082115
Date Collected: 08/21/15 13:10
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	2.7	U	9.1	2.7	ug/L		08/26/15 15:47	08/27/15 19:38	1
Dimethyl phthalate	2.8	U	9.1	2.8	ug/L		08/26/15 15:47	08/27/15 19:38	1
Di-n-butyl phthalate	2.3	U	9.1	2.3	ug/L		08/26/15 15:47	08/27/15 19:38	1
Fluoranthene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 19:38	1
Fluorene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 19:38	1
Hexachlorocyclopentadiene	1.6	U	9.1	1.6	ug/L		08/26/15 15:47	08/27/15 19:38	1
Hexachloroethane	1.7	U	9.1	1.7	ug/L		08/26/15 15:47	08/27/15 19:38	1
Indeno[1,2,3-cd]pyrene	0.37	U	1.8	0.37	ug/L		08/26/15 15:47	08/27/15 19:38	1
Isophorone	2.8	U	9.1	2.8	ug/L		08/26/15 15:47	08/27/15 19:38	1
Naphthalene	0.34	U	1.8	0.34	ug/L		08/26/15 15:47	08/27/15 19:38	1
Nitrobenzene	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 19:38	1
N-Nitrosodi-n-propylamine	3.1	U	9.1	3.1	ug/L		08/26/15 15:47	08/27/15 19:38	1
N-Nitrosodiphenylamine	3.3	U	9.1	3.3	ug/L		08/26/15 15:47	08/27/15 19:38	1
Phenanthrene	0.38	U	1.8	0.38	ug/L		08/26/15 15:47	08/27/15 19:38	1
Phenol	1.4	U	9.1	1.4	ug/L		08/26/15 15:47	08/27/15 19:38	1
Pyrene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 19:38	1
Diphenyl	2.0	U	9.1	2.0	ug/L		08/26/15 15:47	08/27/15 19:38	1
Di-n-octyl phthalate	2.3	U	9.1	2.3	ug/L		08/26/15 15:47	08/27/15 19:38	1
2,2'-oxybis[1-chloropropane]	2.5	U	9.1	2.5	ug/L		08/26/15 15:47	08/27/15 19:38	1
Atrazine	2.6	U	9.1	2.6	ug/L		08/26/15 15:47	08/27/15 19:38	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Oleic Acid	*6.9*	*J N*	*ug/L*		*8.40*	*112-80-1*	*08/26/15 15:47*	*08/27/15 19:38*	*1*
Diethylene glycol dibenzoate	*8.1*	*J N*	*ug/L*		*9.43*	*120-55-8*	*08/26/15 15:47*	*08/27/15 19:38*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*77*		*10 - 120*	*08/26/15 15:47*	*08/27/15 19:38*	*1*
2-Fluorobiphenyl (Surr)	*55*		*29 - 120*	*08/26/15 15:47*	*08/27/15 19:38*	*1*
2-Fluorophenol (Surr)	*27*		*10 - 120*	*08/26/15 15:47*	*08/27/15 19:38*	*1*
Nitrobenzene-d5 (Surr)	*52*		*27 - 120*	*08/26/15 15:47*	*08/27/15 19:38*	*1*
Phenol-d5 (Surr)	*18*		*10 - 120*	*08/26/15 15:47*	*08/27/15 19:38*	*1*
Terphenyl-d14 (Surr)	*75*		*13 - 120*	*08/26/15 15:47*	*08/27/15 19:38*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.29	U H	1.8	0.29	ug/L		09/01/15 09:09	09/05/15 03:31	1
1,2,4,5-Tetrachlorobenzene	1.9	U H	8.9	1.9	ug/L		09/01/15 09:09	09/05/15 03:31	1
2,3,4,6-Tetrachlorophenol	6.2	U H	8.9	6.2	ug/L		09/01/15 09:09	09/05/15 03:31	1
2,4,5-Trichlorophenol	6.3	U H	8.9	6.3	ug/L		09/01/15 09:09	09/05/15 03:31	1
2,4,6-Trichlorophenol	6.1	U H	8.9	6.1	ug/L		09/01/15 09:09	09/05/15 03:31	1
2,4-Dichlorophenol	5.0	U H	8.9	5.0	ug/L		09/01/15 09:09	09/05/15 03:31	1
2,4-Dimethylphenol	3.8	U H	8.9	3.8	ug/L		09/01/15 09:09	09/05/15 03:31	1
2,4-Dinitrophenol	**5.8**	**J H**	22	5.3	ug/L		09/01/15 09:09	09/05/15 03:31	1
2,4-Dinitrotoluene	2.9	U H	8.9	2.9	ug/L		09/01/15 09:09	09/05/15 03:31	1
2,6-Dinitrotoluene	2.1	U H	8.9	2.1	ug/L		09/01/15 09:09	09/05/15 03:31	1
2-Chloronaphthalene	2.5	U H	8.9	2.5	ug/L		09/01/15 09:09	09/05/15 03:31	1
2-Chlorophenol	4.3	U H	8.9	4.3	ug/L		09/01/15 09:09	09/05/15 03:31	1
2-Methylnaphthalene	0.36	U H	1.8	0.36	ug/L		09/01/15 09:09	09/05/15 03:31	1
2-Methylphenol	2.1	U H	8.9	2.1	ug/L		09/01/15 09:09	09/05/15 03:31	1
2-Nitroaniline	3.3	U H	22	3.3	ug/L		09/01/15 09:09	09/05/15 03:31	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-11-082115
Date Collected: 08/21/15 13:10
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	4.7	U H	8.9	4.7	ug/L		09/01/15 09:09	09/05/15 03:31	1
3,3'-Dichlorobenzidine	2.9	U H	8.9	2.9	ug/L		09/01/15 09:09	09/05/15 03:31	1
3 & 4 Methylphenol	2.0	U H	8.9	2.0	ug/L		09/01/15 09:09	09/05/15 03:31	1
3-Nitroaniline	2.4	U H	22	2.4	ug/L		09/01/15 09:09	09/05/15 03:31	1
4,6-Dinitro-2-methylphenol	8.3	U H	22	8.3	ug/L		09/01/15 09:09	09/05/15 03:31	1
4-Bromophenyl phenyl ether	2.4	U H	8.9	2.4	ug/L		09/01/15 09:09	09/05/15 03:31	1
4-Chloro-3-methylphenol	4.0	U H	8.9	4.0	ug/L		09/01/15 09:09	09/05/15 03:31	1
4-Chloroaniline	3.8	U H	8.9	3.8	ug/L		09/01/15 09:09	09/05/15 03:31	1
4-Chlorophenyl phenyl ether	2.5	U H	8.9	2.5	ug/L		09/01/15 09:09	09/05/15 03:31	1
4-Nitroaniline	2.8	U H	22	2.8	ug/L		09/01/15 09:09	09/05/15 03:31	1
4-Nitrophenol	4.8	U H	22	4.8	ug/L		09/01/15 09:09	09/05/15 03:31	1
Acenaphthylene	0.31	U H	1.8	0.31	ug/L		09/01/15 09:09	09/05/15 03:31	1
Acetophenone	2.1	U H	8.9	2.1	ug/L		09/01/15 09:09	09/05/15 03:31	1
Anthracene	0.34	U H	1.8	0.34	ug/L		09/01/15 09:09	09/05/15 03:31	1
Benzaldehyde	5.1	U H *	8.9	5.1	ug/L		09/01/15 09:09	09/05/15 03:31	1
Benzo[g,h,i]perylene	0.55	U H	1.8	0.55	ug/L		09/01/15 09:09	09/05/15 03:31	1
Benzo[k]fluoranthene	0.33	U H	1.8	0.33	ug/L		09/01/15 09:09	09/05/15 03:31	1
Bis(2-chloroethoxy)methane	2.8	U H	8.9	2.8	ug/L		09/01/15 09:09	09/05/15 03:31	1
Bis(2-chloroethyl)ether	2.5	U H	8.9	2.5	ug/L		09/01/15 09:09	09/05/15 03:31	1
Butyl benzyl phthalate	2.2	U H	8.9	2.2	ug/L		09/01/15 09:09	09/05/15 03:31	1
Bis(2-ethylhexyl) phthalate	5.4	U H	8.9	5.4	ug/L		09/01/15 09:09	09/05/15 03:31	1
Carbazole	2.5	U H	8.9	2.5	ug/L		09/01/15 09:09	09/05/15 03:31	1
Caprolactam	2.1	U H	8.9	2.1	ug/L		09/01/15 09:09	09/05/15 03:31	1
Chrysene	0.29	U H	1.8	0.29	ug/L		09/01/15 09:09	09/05/15 03:31	1
Dibenz(a,h)anthracene	0.40	U H	1.8	0.40	ug/L		09/01/15 09:09	09/05/15 03:31	1
Dibenzofuran	2.6	U H	8.9	2.6	ug/L		09/01/15 09:09	09/05/15 03:31	1
Diethyl phthalate	2.7	U H	8.9	2.7	ug/L		09/01/15 09:09	09/05/15 03:31	1
Dimethyl phthalate	2.8	U H	8.9	2.8	ug/L		09/01/15 09:09	09/05/15 03:31	1
Di-n-butyl phthalate	2.2	U H	8.9	2.2	ug/L		09/01/15 09:09	09/05/15 03:31	1
Fluoranthene	0.29	U H	1.8	0.29	ug/L		09/01/15 09:09	09/05/15 03:31	1
Fluorene	0.29	U H	1.8	0.29	ug/L		09/01/15 09:09	09/05/15 03:31	1
Hexachlorocyclopentadiene	1.6	U H	8.9	1.6	ug/L		09/01/15 09:09	09/05/15 03:31	1
Hexachloroethane	1.7	U H	8.9	1.7	ug/L		09/01/15 09:09	09/05/15 03:31	1
Indeno[1,2,3-cd]pyrene	0.37	U H	1.8	0.37	ug/L		09/01/15 09:09	09/05/15 03:31	1
Isophorone	2.8	U H	8.9	2.8	ug/L		09/01/15 09:09	09/05/15 03:31	1
Naphthalene	0.33	U H	1.8	0.33	ug/L		09/01/15 09:09	09/05/15 03:31	1
Nitrobenzene	2.4	U H	8.9	2.4	ug/L		09/01/15 09:09	09/05/15 03:31	1
N-Nitrosodi-n-propylamine	3.0	U H	8.9	3.0	ug/L		09/01/15 09:09	09/05/15 03:31	1
N-Nitrosodiphenylamine	3.2	U H	8.9	3.2	ug/L		09/01/15 09:09	09/05/15 03:31	1
Phenanthrene	0.38	U H	1.8	0.38	ug/L		09/01/15 09:09	09/05/15 03:31	1
Phenol	1.3	U H	8.9	1.3	ug/L		09/01/15 09:09	09/05/15 03:31	1
Pyrene	0.31	U H	1.8	0.31	ug/L		09/01/15 09:09	09/05/15 03:31	1
Diphenyl	2.0	U H	8.9	2.0	ug/L		09/01/15 09:09	09/05/15 03:31	1
Di-n-octyl phthalate	2.2	U H	8.9	2.2	ug/L		09/01/15 09:09	09/05/15 03:31	1
2,2'-oxybis[1-chloropropane]	2.5	U H	8.9	2.5	ug/L		09/01/15 09:09	09/05/15 03:31	1
Atrazine	2.6	U H	8.9	2.6	ug/L		09/01/15 09:09	09/05/15 03:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tetradecanoic acid	*7.4*	*H J N*	*ug/L*		*8.99*	*544-63-8*	*09/01/15 09:09*	*09/05/15 03:31*	*1*
9-Octadecenoic acid, (E)-	*13*	*H J N*	*ug/L*		*9.59*	*112-79-8*	*09/01/15 09:09*	*09/05/15 03:31*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-11-082115
Date Collected: 08/21/15 13:10
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	1.7	U H	ug/L			120-82-1	09/01/15 09:09	09/05/15 03:31	1
1,2-Dichlorobenzene	1.8	U H	ug/L			95-50-1	09/01/15 09:09	09/05/15 03:31	1
1,3,5-Trinitrobenzene	Err	H	ug/L			99-35-4	09/01/15 09:09	09/05/15 03:31	1
1,3-Dichlorobenzene	1.7	U H	ug/L			541-73-1	09/01/15 09:09	09/05/15 03:31	1
1,3-Dinitrobenzene	1.9	U H	ug/L			99-65-0	09/01/15 09:09	09/05/15 03:31	1
1,4-Dichlorobenzene	1.8	U H	ug/L			106-46-7	09/01/15 09:09	09/05/15 03:31	1
1,4-Dioxane	1.3	U H	ug/L			123-91-1	09/01/15 09:09	09/05/15 03:31	1
1,4-Naphthoquinone	Err	H	ug/L			130-15-4	09/01/15 09:09	09/05/15 03:31	1
1-Chloronaphthalene	Err	H	ug/L			90-13-1	09/01/15 09:09	09/05/15 03:31	1
1-Methylnaphthalene	0.32	U H	ug/L			90-12-0	09/01/15 09:09	09/05/15 03:31	1
1-Naphthylamine	Err	H	ug/L			134-32-7	09/01/15 09:09	09/05/15 03:31	1
2,3-Dichlorobenzenamine	Err	H	ug/L			608-27-5	09/01/15 09:09	09/05/15 03:31	1
2,6-Dichlorophenol	5.1	U H	ug/L			87-65-0	09/01/15 09:09	09/05/15 03:31	1
2-Acetylaminofluorene	Err	H	ug/L			53-96-3	09/01/15 09:09	09/05/15 03:31	1
2-Butoxyethanol	Err	H	ug/L			111-76-2	09/01/15 09:09	09/05/15 03:31	1
2-Naphthylamine	Err	H	ug/L			91-59-8	09/01/15 09:09	09/05/15 03:31	1
2-Picoline	Err	H	ug/L			109-06-8	09/01/15 09:09	09/05/15 03:31	1
2-Toluidine	Err	H	ug/L			95-53-4	09/01/15 09:09	09/05/15 03:31	1
3,3'-Dimethylbenzidine	Err	H	ug/L			119-93-7	09/01/15 09:09	09/05/15 03:31	1
3,4-Dichlorophenol	Err	H	ug/L			95-77-2	09/01/15 09:09	09/05/15 03:31	1
3-Methylcholanthrene	Err	H	ug/L			56-49-5	09/01/15 09:09	09/05/15 03:31	1
4,4'-DDD	Err	H	ug/L			72-54-8	09/01/15 09:09	09/05/15 03:31	1
4,4'-DDE	Err	H	ug/L			72-55-9	09/01/15 09:09	09/05/15 03:31	1
4,4'-DDT	Err	H	ug/L			50-29-3	09/01/15 09:09	09/05/15 03:31	1
4,4'-Methylene bis(2-chloroaniline)	Err	H	ug/L			101-14-4	09/01/15 09:09	09/05/15 03:31	1
4-Aminobiphenyl	Err	H	ug/L			92-67-1	09/01/15 09:09	09/05/15 03:31	1
4-Chlorophenol	Err	H	ug/L			106-48-9	09/01/15 09:09	09/05/15 03:31	1
4-Nitroquinoline-1-oxide	Err	H	ug/L			56-57-5	09/01/15 09:09	09/05/15 03:31	1
6-Methylchrysene	Err	H	ug/L			1705-85-7	09/01/15 09:09	09/05/15 03:31	1
7,12-Dimethylbenz(a)anthracene	Err	H	ug/L			57-97-6	09/01/15 09:09	09/05/15 03:31	1
alpha,alpha-Dimethyl phenethylamine	Err	H	ug/L			122-09-8	09/01/15 09:09	09/05/15 03:31	1
Alpha-Terpineol	Err	H	ug/L			98-55-5	09/01/15 09:09	09/05/15 03:31	1
Aniline	4.6	U H	ug/L			62-53-3	09/01/15 09:09	09/05/15 03:31	1
Aramite Peak 1	Err	H	ug/L			STL00690	09/01/15 09:09	09/05/15 03:31	1
Aramite Peak 2	Err	H	ug/L			STL00691	09/01/15 09:09	09/05/15 03:31	1
Azobenzene	2.8	U H	ug/L			103-33-3	09/01/15 09:09	09/05/15 03:31	1
Benzidine	22	U H F1	ug/L			92-87-5	09/01/15 09:09	09/05/15 03:31	1
Benzidine_T	Err	H	ug/L			92-87-5	09/01/15 09:09	09/05/15 03:31	1
Benzoic acid	15	U H F1	ug/L			65-85-0	09/01/15 09:09	09/05/15 03:31	1
Benzyl alcohol	2.7	U H	ug/L			100-51-6	09/01/15 09:09	09/05/15 03:31	1
C10-C21	Err	H	ug/L			STL00066	09/01/15 09:09	09/05/15 03:31	1
C10-C28	Err	H	ug/L			STL00143	09/01/15 09:09	09/05/15 03:31	1
C21	Err	H	ug/L			629-94-7	09/01/15 09:09	09/05/15 03:31	1
C21-C35	Err	H	ug/L			STL00252	09/01/15 09:09	09/05/15 03:31	1
C35	Err	H	ug/L			630-07-9	09/01/15 09:09	09/05/15 03:31	1
Chlorobenzilate	3.0	U H	ug/L			510-15-6	09/01/15 09:09	09/05/15 03:31	1
Di(2-ethylhexyl)adipate	Err	H	ug/L			103-23-1	09/01/15 09:09	09/05/15 03:31	1
Diallate Peak 1	Err	H	ug/L			2303-16-4	09/01/15 09:09	09/05/15 03:31	1
Diallate Peak 2	Err	H	ug/L			2303-16-4	09/01/15 09:09	09/05/15 03:31	1

Client Sample ID: SW-11-082115
Date Collected: 08/21/15 13:10
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	Err	H	ug/L			226-36-8	09/01/15 09:09	09/05/15 03:31	1
Dibenz[a,j]acridine	Err	H	ug/L			224-42-0	09/01/15 09:09	09/05/15 03:31	1
Dimethoate	Err	H	ug/L			60-51-5	09/01/15 09:09	09/05/15 03:31	1
Dinoseb	Err	H	ug/L			88-85-7	09/01/15 09:09	09/05/15 03:31	1
Disulfoton	Err	H	ug/L			298-04-4	09/01/15 09:09	09/05/15 03:31	1
Ethyl methanesulfonate	Err	H	ug/L			62-50-0	09/01/15 09:09	09/05/15 03:31	1
Ethyl Parathion	Err	H	ug/L			56-38-2	09/01/15 09:09	09/05/15 03:31	1
Famphur	Err	H	ug/L			52-85-7	09/01/15 09:09	09/05/15 03:31	1
Famphur Peak 1	Err	H	ug/L			52-85-7	09/01/15 09:09	09/05/15 03:31	1
Famphur Peak 2	Err	H	ug/L			52-85-7	09/01/15 09:09	09/05/15 03:31	1
Hexachlorophene	Err	H	ug/L			70-30-4	09/01/15 09:09	09/05/15 03:31	1
Hexachloropropene	Err	H	ug/L			1888-71-7	09/01/15 09:09	09/05/15 03:31	1
Indene	4.5	U H	ug/L			95-13-6	09/01/15 09:09	09/05/15 03:31	1
Isodrin	Err	H	ug/L			465-73-6	09/01/15 09:09	09/05/15 03:31	1
Isosafrole	Err	H	ug/L			120-58-1	09/01/15 09:09	09/05/15 03:31	1
Isosafrole Peak 1	Err	H	ug/L			120-58-1	09/01/15 09:09	09/05/15 03:31	1
Isosafrole Peak 2	Err	H	ug/L			120-58-1	09/01/15 09:09	09/05/15 03:31	1
Kepone	Err	H	ug/L			143-50-0	09/01/15 09:09	09/05/15 03:31	1
Methapyrilene	Err	H	ug/L			91-80-5	09/01/15 09:09	09/05/15 03:31	1
Methyl methanesulfonate	Err	H	ug/L			66-27-3	09/01/15 09:09	09/05/15 03:31	1
Methyl parathion	Err	H	ug/L			298-00-0	09/01/15 09:09	09/05/15 03:31	1
n-Decane	Err	H F1	ug/L			124-18-5	09/01/15 09:09	09/05/15 03:31	1
n-Hexacosane	Err	H	ug/L			630-01-3	09/01/15 09:09	09/05/15 03:31	1
N-Nitro-o-toluidine	Err	H	ug/L			99-55-8	09/01/15 09:09	09/05/15 03:31	1
N-Nitrosodiethylamine	Err	H	ug/L			55-18-5	09/01/15 09:09	09/05/15 03:31	1
N-Nitrosodimethylamine	1.9	U H	ug/L			62-75-9	09/01/15 09:09	09/05/15 03:31	1
N-Nitrosodi-n-butylamine	Err	H	ug/L			924-16-3	09/01/15 09:09	09/05/15 03:31	1
N-Nitrosomethylethylamine	Err	H	ug/L			10595-95-6	09/01/15 09:09	09/05/15 03:31	1
N-Nitrosomorpholine	Err	H	ug/L			59-89-2	09/01/15 09:09	09/05/15 03:31	1
N-Nitrosopiperidine	Err	H	ug/L			100-75-4	09/01/15 09:09	09/05/15 03:31	1
N-Nitrosopyrrolidine	Err	H	ug/L			930-55-2	09/01/15 09:09	09/05/15 03:31	1
n-Octacosane	Err	H	ug/L			630-02-4	09/01/15 09:09	09/05/15 03:31	1
n-Octadecane	Err	H F1	ug/L			593-45-3	09/01/15 09:09	09/05/15 03:31	1
o,o',o''-Triethylphosphorothioate	Err	H	ug/L			126-68-1	09/01/15 09:09	09/05/15 03:31	1
p-Dimethylamino azobenzene	Err	H	ug/L			60-11-7	09/01/15 09:09	09/05/15 03:31	1
Pentachlorobenzene	Err	H	ug/L			608-93-5	09/01/15 09:09	09/05/15 03:31	1
Pentachloroethane	Err	H	ug/L			76-01-7	09/01/15 09:09	09/05/15 03:31	1
Pentachloronitrobenzene	Err	H	ug/L			82-68-8	09/01/15 09:09	09/05/15 03:31	1
Pentachlorophenol_T	Err	H	ug/L			87-86-5	09/01/15 09:09	09/05/15 03:31	1
Phenacetin	7.5	U H	ug/L			62-44-2	09/01/15 09:09	09/05/15 03:31	1
Phenylmercaptan	Err	H	ug/L			108-98-5	09/01/15 09:09	09/05/15 03:31	1
Phorate	Err	H	ug/L			298-02-2	09/01/15 09:09	09/05/15 03:31	1
p-Phenylene diamine	Err	H	ug/L			106-50-3	09/01/15 09:09	09/05/15 03:31	1
Pronamide	Err	H	ug/L			23950-58-5	09/01/15 09:09	09/05/15 03:31	1
Pyridine	2.3	U H	ug/L			110-86-1	09/01/15 09:09	09/05/15 03:31	1
Quinoline	Err	H	ug/L			91-22-5	09/01/15 09:09	09/05/15 03:31	1
Safrole, Total	Err	H	ug/L			94-59-7	09/01/15 09:09	09/05/15 03:31	1
Sulfotepp	Err	H	ug/L			3689-24-5	09/01/15 09:09	09/05/15 03:31	1
Thionazin	Err	H	ug/L			297-97-2	09/01/15 09:09	09/05/15 03:31	1

Client Sample ID: SW-11-082115

Date Collected: 08/21/15 13:10
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	*120*		*10 - 120*	*09/01/15 09:09*	*09/05/15 03:31*	*1*
2-Fluorobiphenyl (Surr)	*98*		*29 - 120*	*09/01/15 09:09*	*09/05/15 03:31*	*1*
2-Fluorophenol (Surr)	*58*		*10 - 120*	*09/01/15 09:09*	*09/05/15 03:31*	*1*
Nitrobenzene-d5 (Surr)	*96*		*27 - 120*	*09/01/15 09:09*	*09/05/15 03:31*	*1*
Phenol-d5 (Surr)	*39*		*10 - 120*	*09/01/15 09:09*	*09/05/15 03:31*	*1*
Terphenyl-d14 (Surr)	*120*		*13 - 120*	*09/01/15 09:09*	*09/05/15 03:31*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.37	U	0.43	0.37	ug/L		09/03/15 06:55	09/04/15 18:28	1
PCB-1221	0.29	U	0.43	0.29	ug/L		09/03/15 06:55	09/04/15 18:28	1
PCB-1232	0.34	U	0.43	0.34	ug/L		09/03/15 06:55	09/04/15 18:28	1
PCB-1242	0.19	U	0.43	0.19	ug/L		09/03/15 06:55	09/04/15 18:28	1
PCB-1248	0.13	U	0.43	0.13	ug/L		09/03/15 06:55	09/04/15 18:28	1
PCB-1254	0.15	U	0.43	0.15	ug/L		09/03/15 06:55	09/04/15 18:28	1
PCB-1260	0.16	U	0.43	0.16	ug/L		09/03/15 06:55	09/04/15 18:28	1
Polychlorinated biphenyls, Total	0.37	U	0.43	0.37	ug/L		09/03/15 06:55	09/04/15 18:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	*97*		*10 - 150*	*09/03/15 06:55*	*09/04/15 18:28*	*1*
Tetrachloro-m-xylene	*88*		*10 - 150*	*09/03/15 06:55*	*09/04/15 18:28*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.08**		1.00	0.70	mg/L			08/31/15 21:55	1
Sulfate	**7.00**		1.00	0.60	mg/L			08/31/15 21:55	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.065**		0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 19:52	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:52	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:52	1
Barium	**0.0081**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:52	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:52	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 19:52	1
Calcium	**10.2**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 19:52	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:52	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:52	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:52	1
Iron	**0.17**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 19:52	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 19:52	1
Magnesium	**2.8**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 19:52	1
Manganese	**0.022**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:52	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:52	1
Potassium	**0.58**	**J**	1.0	0.13	mg/L		08/25/15 08:27	08/26/15 19:52	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 14:03	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:52	1
Sodium	**3.6**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 19:52	1
Thallium	**0.00079**	**J**	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 19:52	1
Vanadium	**0.0018**	**J B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 19:52	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 19:52	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.016**	**J**	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 12:43	1
Antimony	**0.0011**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:43	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:43	1
Barium	**0.0079**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:43	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:43	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 12:43	1
Calcium	**9.8**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 12:43	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:43	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:43	1
Copper	**0.00077**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:43	1
Iron	**0.063**		0.025	0.010	mg/L		08/26/15 17:11	09/03/15 12:43	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 12:43	1
Magnesium	**2.9**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 12:43	1
Manganese	**0.015**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:43	1
Nickel	**0.00052**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:43	1
Potassium	**0.58**	**J**	1.0	0.13	mg/L		08/26/15 17:11	09/03/15 12:43	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 12:43	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:43	1
Sodium	**3.6**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 12:43	1
Thallium	**0.00068**	**J**	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 12:43	1
Vanadium	**0.0011**	**J B**	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 12:43	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 12:43	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:16	08/31/15 22:55	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 16:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U F1	0.010	0.0070	mg/L		08/25/15 16:32	08/27/15 11:41	1
Bicarbonate Alkalinity as CaCO3	**30.6**		10.0	5.0	mg/L			08/25/15 19:44	1
Total Alkalinity as CaCO3	**30.6**		10.0	5.0	mg/L			08/25/15 19:44	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-00-082115
Date Collected: 08/21/15 13:50
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-6
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/31/15 22:29	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/31/15 22:29	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/31/15 22:29	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/31/15 22:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*08/31/15 22:29*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/31/15 22:29*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*08/31/15 22:29*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/31/15 22:29*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 20:20	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 20:20	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 20:20	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 20:20	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 20:20	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 20:20	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 20:20	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 20:20	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 20:20	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 20:20	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 20:20	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 20:20	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 20:20	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 20:20	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 20:20	1
Acetone	2.7	U	25	2.7	ug/L			09/02/15 20:20	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 20:20	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 20:20	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 20:20	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 20:20	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 20:20	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 20:20	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 20:20	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 20:20	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 20:20	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 20:20	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 20:20	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 20:20	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/02/15 20:20	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 20:20	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 20:20	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 20:20	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 20:20	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 20:20	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 20:20	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 20:20	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 20:20	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-00-082115
Date Collected: 08/21/15 13:50
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 20:20	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 20:20	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 20:20	1
Toluene	0.17	U	1.0	0.17	ug/L			09/02/15 20:20	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 20:20	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 20:20	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 20:20	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 20:20	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 20:20	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 20:20	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 20:20	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 20:20*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 20:20*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*09/02/15 20:20*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*09/02/15 20:20*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/02/15 20:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/02/15 20:20*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 23:18	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 23:18	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 23:18	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 23:18	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 23:18	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 23:18	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 23:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*73*		*10 - 120*	*08/27/15 16:15*	*08/29/15 23:18*	*1*
2-Fluorobiphenyl (Surr)	*66*		*29 - 120*	*08/27/15 16:15*	*08/29/15 23:18*	*1*
Nitrobenzene-d5	*61*		*27 - 120*	*08/27/15 16:15*	*08/29/15 23:18*	*1*
Terphenyl-d14	*79*		*13 - 120*	*08/27/15 16:15*	*08/29/15 23:18*	*1*
2-Fluorophenol	*44*		*10 - 120*	*08/27/15 16:15*	*08/29/15 23:18*	*1*
Phenol-d5	*30*		*10 - 120*	*08/27/15 16:15*	*08/29/15 23:18*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.28	U	1.8	0.28	ug/L		08/26/15 15:47	08/27/15 20:49	1
1,2,4,5-Tetrachlorobenzene	1.8	U	8.8	1.8	ug/L		08/26/15 15:47	08/27/15 20:49	1
2,3,4,6-Tetrachlorophenol	6.1	U	8.8	6.1	ug/L		08/26/15 15:47	08/27/15 20:49	1
2,4,5-Trichlorophenol	6.2	U	8.8	6.2	ug/L		08/26/15 15:47	08/27/15 20:49	1
2,4,6-Trichlorophenol	6.0	U	8.8	6.0	ug/L		08/26/15 15:47	08/27/15 20:49	1
2,4-Dichlorophenol	4.9	U	8.8	4.9	ug/L		08/26/15 15:47	08/27/15 20:49	1
2,4-Dimethylphenol	3.7	U	8.8	3.7	ug/L		08/26/15 15:47	08/27/15 20:49	1
2,4-Dinitrophenol	5.2	U	22	5.2	ug/L		08/26/15 15:47	08/27/15 20:49	1
2,4-Dinitrotoluene	2.8	U	8.8	2.8	ug/L		08/26/15 15:47	08/27/15 20:49	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-00-082115
Date Collected: 08/21/15 13:50
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-6
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.0	U	8.8	2.0	ug/L		08/26/15 15:47	08/27/15 20:49	1
2-Chloronaphthalene	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 20:49	1
2-Chlorophenol	4.2	U	8.8	4.2	ug/L		08/26/15 15:47	08/27/15 20:49	1
2-Methylnaphthalene	0.35	U	1.8	0.35	ug/L		08/26/15 15:47	08/27/15 20:49	1
2-Methylphenol	2.0	U	8.8	2.0	ug/L		08/26/15 15:47	08/27/15 20:49	1
2-Nitroaniline	3.2	U	22	3.2	ug/L		08/26/15 15:47	08/27/15 20:49	1
2-Nitrophenol	4.6	U	8.8	4.6	ug/L		08/26/15 15:47	08/27/15 20:49	1
3,3'-Dichlorobenzidine	2.9	U	8.8	2.9	ug/L		08/26/15 15:47	08/27/15 20:49	1
3 & 4 Methylphenol	1.9	U	8.8	1.9	ug/L		08/26/15 15:47	08/27/15 20:49	1
3-Nitroaniline	2.4	U	22	2.4	ug/L		08/26/15 15:47	08/27/15 20:49	1
4,6-Dinitro-2-methylphenol	8.2	U	22	8.2	ug/L		08/26/15 15:47	08/27/15 20:49	1
4-Bromophenyl phenyl ether	2.4	U	8.8	2.4	ug/L		08/26/15 15:47	08/27/15 20:49	1
4-Chloro-3-methylphenol	3.9	U	8.8	3.9	ug/L		08/26/15 15:47	08/27/15 20:49	1
4-Chloroaniline	3.7	U	8.8	3.7	ug/L		08/26/15 15:47	08/27/15 20:49	1
4-Chlorophenyl phenyl ether	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 20:49	1
4-Nitroaniline	2.7	U	22	2.7	ug/L		08/26/15 15:47	08/27/15 20:49	1
4-Nitrophenol	4.7	U	22	4.7	ug/L		08/26/15 15:47	08/27/15 20:49	1
Acenaphthylene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 20:49	1
Acetophenone	2.0	U	8.8	2.0	ug/L		08/26/15 15:47	08/27/15 20:49	1
Anthracene	0.33	U	1.8	0.33	ug/L		08/26/15 15:47	08/27/15 20:49	1
Benzaldehyde	5.0	U	8.8	5.0	ug/L		08/26/15 15:47	08/27/15 20:49	1
Benzo[g,h,i]perylene	0.54	U	1.8	0.54	ug/L		08/26/15 15:47	08/27/15 20:49	1
Benzo[k]fluoranthene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 20:49	1
Bis(2-chloroethoxy)methane	2.7	U	8.8	2.7	ug/L		08/26/15 15:47	08/27/15 20:49	1
Bis(2-chloroethyl)ether	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 20:49	1
Butyl benzyl phthalate	2.2	U	8.8	2.2	ug/L		08/26/15 15:47	08/27/15 20:49	1
Bis(2-ethylhexyl) phthalate	5.3	U	8.8	5.3	ug/L		08/26/15 15:47	08/27/15 20:49	1
Carbazole	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 20:49	1
Caprolactam	2.1	U	8.8	2.1	ug/L		08/26/15 15:47	08/27/15 20:49	1
Chrysene	0.29	U	1.8	0.29	ug/L		08/26/15 15:47	08/27/15 20:49	1
Dibenz(a,h)anthracene	0.39	U	1.8	0.39	ug/L		08/26/15 15:47	08/27/15 20:49	1
Dibenzofuran	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 20:49	1
Diethyl phthalate	2.6	U	8.8	2.6	ug/L		08/26/15 15:47	08/27/15 20:49	1
Dimethyl phthalate	2.7	U	8.8	2.7	ug/L		08/26/15 15:47	08/27/15 20:49	1
Di-n-butyl phthalate	2.2	U	8.8	2.2	ug/L		08/26/15 15:47	08/27/15 20:49	1
Fluoranthene	0.28	U	1.8	0.28	ug/L		08/26/15 15:47	08/27/15 20:49	1
Fluorene	0.28	U	1.8	0.28	ug/L		08/26/15 15:47	08/27/15 20:49	1
Hexachlorocyclopentadiene	1.6	U	8.8	1.6	ug/L		08/26/15 15:47	08/27/15 20:49	1
Hexachloroethane	1.7	U	8.8	1.7	ug/L		08/26/15 15:47	08/27/15 20:49	1
Indeno[1,2,3-cd]pyrene	0.36	U	1.8	0.36	ug/L		08/26/15 15:47	08/27/15 20:49	1
Isophorone	2.7	U	8.8	2.7	ug/L		08/26/15 15:47	08/27/15 20:49	1
Naphthalene	0.32	U	1.8	0.32	ug/L		08/26/15 15:47	08/27/15 20:49	1
Nitrobenzene	2.4	U	8.8	2.4	ug/L		08/26/15 15:47	08/27/15 20:49	1
N-Nitrosodi-n-propylamine	3.0	U	8.8	3.0	ug/L		08/26/15 15:47	08/27/15 20:49	1
N-Nitrosodiphenylamine	3.2	U	8.8	3.2	ug/L		08/26/15 15:47	08/27/15 20:49	1
Phenanthrene	0.37	U	1.8	0.37	ug/L		08/26/15 15:47	08/27/15 20:49	1
Phenol	1.3	U	8.8	1.3	ug/L		08/26/15 15:47	08/27/15 20:49	1
Pyrene	0.31	U	1.8	0.31	ug/L		08/26/15 15:47	08/27/15 20:49	1
Diphenyl	1.9	U	8.8	1.9	ug/L		08/26/15 15:47	08/27/15 20:49	1

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Lab Sample ID: 490-85780-6
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.2	U	8.8	2.2	ug/L		08/26/15 15:47	08/27/15 20:49	1
2,2'-oxybis[1-chloropropane]	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 20:49	1
Atrazine	2.5	U	8.8	2.5	ug/L		08/26/15 15:47	08/27/15 20:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Oleic Acid	*5.7*	*J N*	*ug/L*		*8.40*	*112-80-1*	*08/26/15 15:47*	*08/27/15 20:49*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*87*		*10 - 120*	*08/26/15 15:47*	*08/27/15 20:49*	*1*
2-Fluorobiphenyl (Surr)	*65*		*29 - 120*	*08/26/15 15:47*	*08/27/15 20:49*	*1*
2-Fluorophenol (Surr)	*30*		*10 - 120*	*08/26/15 15:47*	*08/27/15 20:49*	*1*
Nitrobenzene-d5 (Surr)	*62*		*27 - 120*	*08/26/15 15:47*	*08/27/15 20:49*	*1*
Phenol-d5 (Surr)	*20*		*10 - 120*	*08/26/15 15:47*	*08/27/15 20:49*	*1*
Terphenyl-d14 (Surr)	*81*		*13 - 120*	*08/26/15 15:47*	*08/27/15 20:49*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/03/15 06:55	09/04/15 19:15	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/03/15 06:55	09/04/15 19:15	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/03/15 06:55	09/04/15 19:15	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/03/15 06:55	09/04/15 19:15	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/03/15 06:55	09/04/15 19:15	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/03/15 06:55	09/04/15 19:15	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/03/15 06:55	09/04/15 19:15	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/03/15 06:55	09/04/15 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*93*		*10 - 150*	*09/03/15 06:55*	*09/04/15 19:15*	*1*
Tetrachloro-m-xylene	*79*		*10 - 150*	*09/03/15 06:55*	*09/04/15 19:15*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.01**		1.00	0.70	mg/L			08/31/15 23:07	1
Sulfate	**8.15**		1.00	0.60	mg/L			08/31/15 23:07	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.18**		0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 20:56	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:56	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:56	1
Barium	**0.0098**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:56	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:56	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 20:56	1
Calcium	**10.8**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:56	1
Chromium	**0.00057**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:56	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:56	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:56	1
Iron	**0.23**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 20:56	1
Lead	**0.00036**	**J**	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 20:56	1
Magnesium	**3.0**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:56	1
Manganese	**0.028**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:56	1

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Lab Sample ID: 490-85780-6
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:56	1
Potassium	**0.64**	**J**	1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:56	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 15:06	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 20:56	1
Sodium	**4.5**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 20:56	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 20:56	1
Vanadium	**0.0020**	**B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 20:56	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 20:56	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.016**	**J**	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 13:40	1
Antimony	**0.00050**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:40	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:40	1
Barium	**0.0086**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:40	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:40	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 13:40	1
Calcium	**10.2**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:40	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:40	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:40	1
Copper	**0.00074**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:40	1
Iron	**0.035**		0.025	0.010	mg/L		08/26/15 17:11	09/03/15 13:40	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 13:40	1
Magnesium	**2.9**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:40	1
Manganese	**0.0026**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:40	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:40	1
Potassium	**0.59**	**J**	1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:40	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 13:40	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:40	1
Sodium	**4.2**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:40	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 13:40	1
Vanadium	**0.0013**	**J B**	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 13:40	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 13:40	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:16	08/31/15 23:07	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 16:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 16:32	08/27/15 11:44	1
Bicarbonate Alkalinity as CaCO3	**31.4**		10.0	5.0	mg/L			08/25/15 21:48	1
Total Alkalinity as CaCO3	**31.4**		10.0	5.0	mg/L			08/25/15 21:48	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: RW-9A (85-95)-082115
Date Collected: 08/21/15 10:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-7
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/31/15 22:57	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/31/15 22:57	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/31/15 22:57	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/31/15 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*08/31/15 22:57*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/31/15 22:57*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*08/31/15 22:57*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*08/31/15 22:57*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 20:47	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 20:47	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 20:47	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 20:47	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 20:47	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 20:47	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 20:47	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 20:47	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 20:47	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 20:47	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 20:47	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 20:47	1
2-Butanone (MEK)	**11**	**J**	50	2.6	ug/L			09/02/15 20:47	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 20:47	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 20:47	1
Acetone	**3.9**	**J**	25	2.7	ug/L			09/02/15 20:47	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 20:47	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 20:47	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 20:47	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 20:47	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 20:47	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 20:47	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 20:47	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 20:47	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 20:47	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 20:47	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 20:47	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 20:47	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/02/15 20:47	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 20:47	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 20:47	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 20:47	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 20:47	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 20:47	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 20:47	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 20:47	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 20:47	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: RW-9A (85-95)-082115
Date Collected: 08/21/15 10:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 20:47	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 20:47	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 20:47	1
Toluene	0.17	U	1.0	0.17	ug/L			09/02/15 20:47	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 20:47	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 20:47	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 20:47	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 20:47	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 20:47	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 20:47	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 20:47	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 20:47*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 20:47*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*09/02/15 20:47*	*1*
Dibromofluoromethane (Surr)	*116*		*70 - 130*		*09/02/15 20:47*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/02/15 20:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*09/02/15 20:47*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 23:44	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 23:44	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 23:44	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 23:44	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 23:44	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 23:44	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*86*		*10 - 120*	*08/27/15 16:15*	*08/29/15 23:44*	*1*
2-Fluorobiphenyl (Surr)	*81*		*29 - 120*	*08/27/15 16:15*	*08/29/15 23:44*	*1*
Nitrobenzene-d5	*65*		*27 - 120*	*08/27/15 16:15*	*08/29/15 23:44*	*1*
Terphenyl-d14	*86*		*13 - 120*	*08/27/15 16:15*	*08/29/15 23:44*	*1*
2-Fluorophenol	*52*		*10 - 120*	*08/27/15 16:15*	*08/29/15 23:44*	*1*
Phenol-d5	*37*		*10 - 120*	*08/27/15 16:15*	*08/29/15 23:44*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.30	U	1.9	0.30	ug/L		08/26/15 15:47	08/27/15 21:12	1
1,2,4,5-Tetrachlorobenzene	1.9	U	9.3	1.9	ug/L		08/26/15 15:47	08/27/15 21:12	1
2,3,4,6-Tetrachlorophenol	6.4	U	9.3	6.4	ug/L		08/26/15 15:47	08/27/15 21:12	1
2,4,5-Trichlorophenol	6.6	U	9.3	6.6	ug/L		08/26/15 15:47	08/27/15 21:12	1
2,4,6-Trichlorophenol	6.3	U	9.3	6.3	ug/L		08/26/15 15:47	08/27/15 21:12	1
2,4-Dichlorophenol	5.2	U	9.3	5.2	ug/L		08/26/15 15:47	08/27/15 21:12	1
2,4-Dimethylphenol	3.9	U	9.3	3.9	ug/L		08/26/15 15:47	08/27/15 21:12	1
2,4-Dinitrophenol	5.5	U	23	5.5	ug/L		08/26/15 15:47	08/27/15 21:12	1
2,4-Dinitrotoluene	3.0	U	9.3	3.0	ug/L		08/26/15 15:47	08/27/15 21:12	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: RW-9A (85-95)-082115
Date Collected: 08/21/15 10:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-7
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.1	U	9.3	2.1	ug/L		08/26/15 15:47	08/27/15 21:12	1
2-Chloronaphthalene	2.6	U	9.3	2.6	ug/L		08/26/15 15:47	08/27/15 21:12	1
2-Chlorophenol	4.4	U	9.3	4.4	ug/L		08/26/15 15:47	08/27/15 21:12	1
2-Methylnaphthalene	0.37	U	1.9	0.37	ug/L		08/26/15 15:47	08/27/15 21:12	1
2-Methylphenol	2.1	U	9.3	2.1	ug/L		08/26/15 15:47	08/27/15 21:12	1
2-Nitroaniline	3.4	U	23	3.4	ug/L		08/26/15 15:47	08/27/15 21:12	1
2-Nitrophenol	4.9	U	9.3	4.9	ug/L		08/26/15 15:47	08/27/15 21:12	1
3,3'-Dichlorobenzidine	3.1	U	9.3	3.1	ug/L		08/26/15 15:47	08/27/15 21:12	1
3 & 4 Methylphenol	2.0	U	9.3	2.0	ug/L		08/26/15 15:47	08/27/15 21:12	1
3-Nitroaniline	2.5	U	23	2.5	ug/L		08/26/15 15:47	08/27/15 21:12	1
4,6-Dinitro-2-methylphenol	8.6	U	23	8.6	ug/L		08/26/15 15:47	08/27/15 21:12	1
4-Bromophenyl phenyl ether	2.5	U	9.3	2.5	ug/L		08/26/15 15:47	08/27/15 21:12	1
4-Chloro-3-methylphenol	4.2	U	9.3	4.2	ug/L		08/26/15 15:47	08/27/15 21:12	1
4-Chloroaniline	3.9	U	9.3	3.9	ug/L		08/26/15 15:47	08/27/15 21:12	1
4-Chlorophenyl phenyl ether	2.6	U	9.3	2.6	ug/L		08/26/15 15:47	08/27/15 21:12	1
4-Nitroaniline	2.9	U	23	2.9	ug/L		08/26/15 15:47	08/27/15 21:12	1
4-Nitrophenol	5.0	U	23	5.0	ug/L		08/26/15 15:47	08/27/15 21:12	1
Acenaphthylene	0.32	U	1.9	0.32	ug/L		08/26/15 15:47	08/27/15 21:12	1
Acetophenone	2.1	U	9.3	2.1	ug/L		08/26/15 15:47	08/27/15 21:12	1
Anthracene	0.35	U	1.9	0.35	ug/L		08/26/15 15:47	08/27/15 21:12	1
Benzaldehyde	5.3	U	9.3	5.3	ug/L		08/26/15 15:47	08/27/15 21:12	1
Benzo[g,h,i]perylene	0.57	U	1.9	0.57	ug/L		08/26/15 15:47	08/27/15 21:12	1
Benzo[k]fluoranthene	0.34	U	1.9	0.34	ug/L		08/26/15 15:47	08/27/15 21:12	1
Bis(2-chloroethoxy)methane	2.9	U	9.3	2.9	ug/L		08/26/15 15:47	08/27/15 21:12	1
Bis(2-chloroethyl)ether	2.6	U	9.3	2.6	ug/L		08/26/15 15:47	08/27/15 21:12	1
Butyl benzyl phthalate	2.3	U	9.3	2.3	ug/L		08/26/15 15:47	08/27/15 21:12	1
Bis(2-ethylhexyl) phthalate	5.6	U	9.3	5.6	ug/L		08/26/15 15:47	08/27/15 21:12	1
Carbazole	2.6	U	9.3	2.6	ug/L		08/26/15 15:47	08/27/15 21:12	1
Caprolactam	2.2	U	9.3	2.2	ug/L		08/26/15 15:47	08/27/15 21:12	1
Chrysene	0.31	U	1.9	0.31	ug/L		08/26/15 15:47	08/27/15 21:12	1
Dibenz(a,h)anthracene	0.42	U	1.9	0.42	ug/L		08/26/15 15:47	08/27/15 21:12	1
Dibenzofuran	2.7	U	9.3	2.7	ug/L		08/26/15 15:47	08/27/15 21:12	1
Diethyl phthalate	2.8	U	9.3	2.8	ug/L		08/26/15 15:47	08/27/15 21:12	1
Dimethyl phthalate	2.9	U	9.3	2.9	ug/L		08/26/15 15:47	08/27/15 21:12	1
Di-n-butyl phthalate	2.3	U	9.3	2.3	ug/L		08/26/15 15:47	08/27/15 21:12	1
Fluoranthene	0.30	U	1.9	0.30	ug/L		08/26/15 15:47	08/27/15 21:12	1
Fluorene	0.30	U	1.9	0.30	ug/L		08/26/15 15:47	08/27/15 21:12	1
Hexachlorocyclopentadiene	1.7	U	9.3	1.7	ug/L		08/26/15 15:47	08/27/15 21:12	1
Hexachloroethane	1.8	U	9.3	1.8	ug/L		08/26/15 15:47	08/27/15 21:12	1
Indeno[1,2,3-cd]pyrene	0.38	U	1.9	0.38	ug/L		08/26/15 15:47	08/27/15 21:12	1
Isophorone	2.9	U	9.3	2.9	ug/L		08/26/15 15:47	08/27/15 21:12	1
Naphthalene	0.34	U	1.9	0.34	ug/L		08/26/15 15:47	08/27/15 21:12	1
Nitrobenzene	2.5	U	9.3	2.5	ug/L		08/26/15 15:47	08/27/15 21:12	1
N-Nitrosodi-n-propylamine	3.1	U	9.3	3.1	ug/L		08/26/15 15:47	08/27/15 21:12	1
N-Nitrosodiphenylamine	3.3	U	9.3	3.3	ug/L		08/26/15 15:47	08/27/15 21:12	1
Phenanthrene	0.39	U	1.9	0.39	ug/L		08/26/15 15:47	08/27/15 21:12	1
Phenol	1.4	U	9.3	1.4	ug/L		08/26/15 15:47	08/27/15 21:12	1
Pyrene	0.32	U	1.9	0.32	ug/L		08/26/15 15:47	08/27/15 21:12	1
Diphenyl	2.0	U	9.3	2.0	ug/L		08/26/15 15:47	08/27/15 21:12	1

Client Sample ID: RW-9A (85-95)-082115

Date Collected: 08/21/15 10:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-7

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.3	U	9.3	2.3	ug/L		08/26/15 15:47	08/27/15 21:12	1
2,2'-oxybis[1-chloropropane]	2.6	U	9.3	2.6	ug/L		08/26/15 15:47	08/27/15 21:12	1
Atrazine	2.7	U	9.3	2.7	ug/L		08/26/15 15:47	08/27/15 21:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
9-Octadecenoic acid, (E)-	*14*	*J N*	*ug/L*		*8.40*	*112-79-8*	*08/26/15 15:47*	*08/27/15 21:12*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*52*		*10 - 120*	*08/26/15 15:47*	*08/27/15 21:12*	*1*
2-Fluorobiphenyl (Surr)	*42*		*29 - 120*	*08/26/15 15:47*	*08/27/15 21:12*	*1*
2-Fluorophenol (Surr)	*24*		*10 - 120*	*08/26/15 15:47*	*08/27/15 21:12*	*1*
Nitrobenzene-d5 (Surr)	*40*		*27 - 120*	*08/26/15 15:47*	*08/27/15 21:12*	*1*
Phenol-d5 (Surr)	*16*		*10 - 120*	*08/26/15 15:47*	*08/27/15 21:12*	*1*
Terphenyl-d14 (Surr)	*53*		*13 - 120*	*08/26/15 15:47*	*08/27/15 21:12*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/03/15 06:55	09/04/15 19:31	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/03/15 06:55	09/04/15 19:31	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/03/15 06:55	09/04/15 19:31	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/03/15 06:55	09/04/15 19:31	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/03/15 06:55	09/04/15 19:31	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/03/15 06:55	09/04/15 19:31	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/03/15 06:55	09/04/15 19:31	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/03/15 06:55	09/04/15 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*116*		*10 - 150*	*09/03/15 06:55*	*09/04/15 19:31*	*1*
Tetrachloro-m-xylene	*94*		*10 - 150*	*09/03/15 06:55*	*09/04/15 19:31*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.52**		1.00	0.70	mg/L			08/31/15 23:31	1
Sulfate	**14.2**		1.00	0.60	mg/L			08/31/15 23:31	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.059**		0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 21:02	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:02	1
Arsenic	**0.0032**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:02	1
Barium	**0.012**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:02	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:02	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 21:02	1
Calcium	**26.5**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:02	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:02	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:02	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:02	1
Iron	**0.34**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:02	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:02	1
Magnesium	**5.6**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:02	1
Manganese	**0.046**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:02	1

Client Sample ID: RW-9A (85-95)-082115

Date Collected: 08/21/15 10:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-7

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0049**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:02	1
Potassium	**2.7**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:02	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 15:12	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:02	1
Sodium	**5.9**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:02	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:02	1
Vanadium	**0.0014**	**J B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 21:02	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:02	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 13:45	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:45	1
Arsenic	**0.0034**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:45	1
Barium	**0.012**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:45	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:45	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 13:45	1
Calcium	**23.2**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:45	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:45	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:45	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:45	1
Iron	**0.060**		0.025	0.010	mg/L		08/26/15 17:11	09/03/15 13:45	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 13:45	1
Magnesium	**5.1**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:45	1
Manganese	**0.038**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:45	1
Nickel	**0.00096**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:45	1
Potassium	**2.2**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:45	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 13:45	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:45	1
Sodium	**6.4**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:45	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 13:45	1
Vanadium	**0.00098**	**J B**	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 13:45	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 13:45	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:16	08/31/15 23:10	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 02:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 17:05	08/27/15 11:45	1
Bicarbonate Alkalinity as CaCO3	**76.6**		10.0	5.0	mg/L			08/25/15 19:54	1
Total Alkalinity as CaCO3	**76.6**		10.0	5.0	mg/L			08/25/15 19:54	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: RW-9 (206-216)-082115
Date Collected: 08/21/15 09:25
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-8
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/02/15 15:34	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/02/15 15:34	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/02/15 15:34	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/02/15 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/02/15 15:34*	*1*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*		*09/02/15 15:34*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*09/02/15 15:34*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/02/15 15:34*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 21:15	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 21:15	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 21:15	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 21:15	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 21:15	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 21:15	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 21:15	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 21:15	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 21:15	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 21:15	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 21:15	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 21:15	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 21:15	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 21:15	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 21:15	1
Acetone	**5.6**	**J**	25	2.7	ug/L			09/02/15 21:15	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 21:15	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 21:15	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 21:15	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 21:15	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 21:15	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 21:15	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 21:15	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 21:15	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 21:15	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 21:15	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 21:15	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 21:15	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/02/15 21:15	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 21:15	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 21:15	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 21:15	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 21:15	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 21:15	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 21:15	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 21:15	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 21:15	1

Client Sample ID: RW-9 (206-216)-082115
Date Collected: 08/21/15 09:25
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 21:15	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 21:15	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 21:15	1
Toluene	**0.20**	**J**	1.0	0.17	ug/L			09/02/15 21:15	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 21:15	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 21:15	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 21:15	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 21:15	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 21:15	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 21:15	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 21:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 21:15*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 21:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*09/02/15 21:15*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*09/02/15 21:15*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/02/15 21:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*09/02/15 21:15*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/30/15 00:11	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/30/15 00:11	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/30/15 00:11	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/30/15 00:11	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/30/15 00:11	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/30/15 00:11	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/30/15 00:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*0*	*X*	*10 - 120*	*08/27/15 16:15*	*08/30/15 00:11*	*1*
2-Fluorobiphenyl (Surr)	*0*	*X*	*29 - 120*	*08/27/15 16:15*	*08/30/15 00:11*	*1*
Nitrobenzene-d5	*59*		*27 - 120*	*08/27/15 16:15*	*08/30/15 00:11*	*1*
Terphenyl-d14	*0.7*	*X*	*13 - 120*	*08/27/15 16:15*	*08/30/15 00:11*	*1*
2-Fluorophenol	*0*	*X*	*10 - 120*	*08/27/15 16:15*	*08/30/15 00:11*	*1*
Phenol-d5	*0*	*X*	*10 - 120*	*08/27/15 16:15*	*08/30/15 00:11*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U H	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 22:13	1
Benzo[a]pyrene	0.025	U H	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 22:13	1
Benzo[b]fluoranthene	0.025	U H	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 22:13	1
Hexachlorobenzene	0.014	U H	0.020	0.014	ug/L		09/01/15 05:42	09/01/15 22:13	1
Hexachlorobutadiene	0.20	U H	0.40	0.20	ug/L		09/01/15 05:42	09/01/15 22:13	1
N-Nitrosodimethylamine	0.20	U H	0.80	0.20	ug/L		09/01/15 05:42	09/01/15 22:13	1
Pentachlorophenol	0.10	U H *	0.30	0.10	ug/L		09/01/15 05:42	09/01/15 22:13	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: RW-9 (206-216)-082115
Date Collected: 08/21/15 09:25
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-8
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*82*		*10 - 120*	*09/01/15 05:42*	*09/01/15 22:13*	*1*
2-Fluorobiphenyl (Surr)	*63*		*29 - 120*	*09/01/15 05:42*	*09/01/15 22:13*	*1*
Nitrobenzene-d5	*75*		*27 - 120*	*09/01/15 05:42*	*09/01/15 22:13*	*1*
Terphenyl-d14	*76*		*13 - 120*	*09/01/15 05:42*	*09/01/15 22:13*	*1*
2-Fluorophenol	*56*		*10 - 120*	*09/01/15 05:42*	*09/01/15 22:13*	*1*
Phenol-d5	*39*		*10 - 120*	*09/01/15 05:42*	*09/01/15 22:13*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/26/15 15:47	08/27/15 21:35	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/26/15 15:47	08/27/15 21:35	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/26/15 15:47	08/27/15 21:35	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/26/15 15:47	08/27/15 21:35	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/26/15 15:47	08/27/15 21:35	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/26/15 15:47	08/27/15 21:35	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/26/15 15:47	08/27/15 21:35	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/26/15 15:47	08/27/15 21:35	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/26/15 15:47	08/27/15 21:35	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/26/15 15:47	08/27/15 21:35	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/26/15 15:47	08/27/15 21:35	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/26/15 15:47	08/27/15 21:35	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/26/15 15:47	08/27/15 21:35	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/26/15 15:47	08/27/15 21:35	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/26/15 15:47	08/27/15 21:35	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/26/15 15:47	08/27/15 21:35	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/26/15 15:47	08/27/15 21:35	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/26/15 15:47	08/27/15 21:35	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/26/15 15:47	08/27/15 21:35	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/26/15 15:47	08/27/15 21:35	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/26/15 15:47	08/27/15 21:35	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/26/15 15:47	08/27/15 21:35	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/26/15 15:47	08/27/15 21:35	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/26/15 15:47	08/27/15 21:35	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/26/15 15:47	08/27/15 21:35	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/26/15 15:47	08/27/15 21:35	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/26/15 15:47	08/27/15 21:35	1
Acetophenone	2.3	U	10	2.3	ug/L		08/26/15 15:47	08/27/15 21:35	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/26/15 15:47	08/27/15 21:35	1
Benzaldehyde	5.7	U	10	5.7	ug/L		08/26/15 15:47	08/27/15 21:35	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/26/15 15:47	08/27/15 21:35	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/26/15 15:47	08/27/15 21:35	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/26/15 15:47	08/27/15 21:35	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/26/15 15:47	08/27/15 21:35	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 15:47	08/27/15 21:35	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/26/15 15:47	08/27/15 21:35	1
Carbazole	2.8	U	10	2.8	ug/L		08/26/15 15:47	08/27/15 21:35	1
Caprolactam	2.4	U	10	2.4	ug/L		08/26/15 15:47	08/27/15 21:35	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/26/15 15:47	08/27/15 21:35	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/26/15 15:47	08/27/15 21:35	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/26/15 15:47	08/27/15 21:35	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: RW-9 (206-216)-082115
Date Collected: 08/21/15 09:25
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-8
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/26/15 15:47	08/27/15 21:35	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/26/15 15:47	08/27/15 21:35	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 15:47	08/27/15 21:35	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/26/15 15:47	08/27/15 21:35	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/26/15 15:47	08/27/15 21:35	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/26/15 15:47	08/27/15 21:35	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/26/15 15:47	08/27/15 21:35	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/26/15 15:47	08/27/15 21:35	1
Isophorone	3.1	U	10	3.1	ug/L		08/26/15 15:47	08/27/15 21:35	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/26/15 15:47	08/27/15 21:35	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/26/15 15:47	08/27/15 21:35	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/26/15 15:47	08/27/15 21:35	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/26/15 15:47	08/27/15 21:35	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/26/15 15:47	08/27/15 21:35	1
Phenol	1.5	U	10	1.5	ug/L		08/26/15 15:47	08/27/15 21:35	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/26/15 15:47	08/27/15 21:35	1
Diphenyl	2.2	U	10	2.2	ug/L		08/26/15 15:47	08/27/15 21:35	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 15:47	08/27/15 21:35	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/26/15 15:47	08/27/15 21:35	1
Atrazine	2.9	U	10	2.9	ug/L		08/26/15 15:47	08/27/15 21:35	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzenesulfonamide, N-butyl-	*15*	*J N*	*ug/L*		*7.30*	*3622-84-2*	*08/26/15 15:47*	*08/27/15 21:35*	*1*
Benzoic acid, 3,5-bis(1,1-dimethylethyl)	*4.8*	*J N*	*ug/L*		*7.63*	*1421-49-4*	*08/26/15 15:47*	*08/27/15 21:35*	*1*
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca -6,	*6.0*	*J N*	*ug/L*		*7.71*	*82304-66-3*	*08/26/15 15:47*	*08/27/15 21:35*	*1*
Tridecanoic acid	*5.6*	*J N*	*ug/L*		*7.83*	*638-53-9*	*08/26/15 15:47*	*08/27/15 21:35*	*1*
3,5-di-tert-Butyl-4-hydroxyphenylprop ion	*22*	*J N*	*ug/L*		*7.93*	*20170-32-5*	*08/26/15 15:47*	*08/27/15 21:35*	*1*
Oleic Acid	*17*	*J N*	*ug/L*		*8.40*	*112-80-1*	*08/26/15 15:47*	*08/27/15 21:35*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*96*		*10 - 120*	*08/26/15 15:47*	*08/27/15 21:35*	*1*
2-Fluorobiphenyl (Surr)	*71*		*29 - 120*	*08/26/15 15:47*	*08/27/15 21:35*	*1*
2-Fluorophenol (Surr)	*36*		*10 - 120*	*08/26/15 15:47*	*08/27/15 21:35*	*1*
Nitrobenzene-d5 (Surr)	*66*		*27 - 120*	*08/26/15 15:47*	*08/27/15 21:35*	*1*
Phenol-d5 (Surr)	*24*		*10 - 120*	*08/26/15 15:47*	*08/27/15 21:35*	*1*
Terphenyl-d14 (Surr)	*88*		*13 - 120*	*08/26/15 15:47*	*08/27/15 21:35*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.10**		0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 21:07	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:07	1
Arsenic	**0.0030**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:07	1
Barium	**0.035**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:07	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:07	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 21:07	1
Calcium	**27.6**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:07	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:07	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:07	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: RW-9 (206-216)-082115
Date Collected: 08/21/15 09:25
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-8
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:07	1
Iron	**0.092**		0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:07	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:07	1
Magnesium	**17.6**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:07	1
Manganese	**0.0046**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:07	1
Nickel	**0.00057**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:07	1
Potassium	**50.9**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:07	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 15:18	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:07	1
Sodium	**162**		20.0	2.5	mg/L		08/25/15 08:27	08/31/15 15:14	20
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:07	1
Vanadium	**0.0015**	**J B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 21:07	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:07	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:16	08/31/15 23:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 17:05	08/27/15 11:46	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: TB-12-082115
Date Collected: 08/21/15 01:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-9
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/31/15 17:14	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/31/15 17:14	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/31/15 17:14	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/31/15 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/31/15 17:14*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/31/15 17:14*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/31/15 17:14*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/31/15 17:14*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 21:42	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 21:42	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 21:42	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 21:42	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 21:42	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 21:42	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 21:42	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 21:42	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 21:42	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 21:42	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 21:42	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 21:42	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 21:42	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 21:42	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 21:42	1
Acetone	2.7	U	25	2.7	ug/L			09/02/15 21:42	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 21:42	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 21:42	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 21:42	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 21:42	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 21:42	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 21:42	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 21:42	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 21:42	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 21:42	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 21:42	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 21:42	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 21:42	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/02/15 21:42	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 21:42	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 21:42	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 21:42	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 21:42	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 21:42	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 21:42	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 21:42	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 21:42	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: TB-12-082115
Date Collected: 08/21/15 01:00
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-9
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 21:42	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 21:42	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 21:42	1
Toluene	0.17	U	1.0	0.17	ug/L			09/02/15 21:42	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 21:42	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 21:42	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 21:42	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 21:42	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 21:42	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 21:42	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 21:42	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/15 21:42*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 21:42*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*09/02/15 21:42*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*09/02/15 21:42*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/02/15 21:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*09/02/15 21:42*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: RW-2 (279-289)-082115
Date Collected: 08/21/15 13:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-10
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/02/15 16:02	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/02/15 16:02	1
1,4-Dioxane	**10**		10	0.27	ug/L			09/02/15 16:02	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/02/15 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*09/02/15 16:02*	*1*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*		*09/02/15 16:02*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*09/02/15 16:02*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/02/15 16:02*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 22:09	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 22:09	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 22:09	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 22:09	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 22:09	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 22:09	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 22:09	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 22:09	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 22:09	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 22:09	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 22:09	1
1,4-Dichlorobenzene	**0.24**	**J**	1.0	0.17	ug/L			09/02/15 22:09	1
2-Butanone (MEK)	**3.2**	**J**	50	2.6	ug/L			09/02/15 22:09	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 22:09	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 22:09	1
Acetone	**12**	**J**	25	2.7	ug/L			09/02/15 22:09	1
Benzene	**0.22**	**J**	1.0	0.20	ug/L			09/02/15 22:09	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 22:09	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 22:09	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 22:09	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 22:09	1
Chlorobenzene	**2.3**		1.0	0.18	ug/L			09/02/15 22:09	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 22:09	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 22:09	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 22:09	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 22:09	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 22:09	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 22:09	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/02/15 22:09	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 22:09	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 22:09	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 22:09	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 22:09	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 22:09	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 22:09	1
Methyl tert-butyl ether	**0.25**	**J**	1.0	0.17	ug/L			09/02/15 22:09	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 22:09	1

Client Sample ID: RW-2 (279-289)-082115
Date Collected: 08/21/15 13:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/02/15 22:09	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 22:09	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 22:09	1
Toluene	**0.83**	**J**	1.0	0.17	ug/L			09/02/15 22:09	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 22:09	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 22:09	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 22:09	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 22:09	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 22:09	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 22:09	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 22:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*62*	*J*	*ug/L*		*1.11*			*09/02/15 22:09*	*1*
1-Propene, 2-methyl-	*3.0*	*J N*	*ug/L*		*1.30*	*115-11-7*		*09/02/15 22:09*	*1*
Ethyl ether	*1.5*	*J*	*ug/L*		*1.81*	*60-29-7*		*09/02/15 22:09*	*1*
Tetrahydrofuran	*3.3*	*J*	*ug/L*		*3.11*	*109-99-9*		*09/02/15 22:09*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/02/15 22:09*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*09/02/15 22:09*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*09/02/15 22:09*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/02/15 22:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*124*		*70 - 130*		*09/02/15 22:09*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/30/15 00:37	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/30/15 00:37	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/30/15 00:37	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/30/15 00:37	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/30/15 00:37	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/30/15 00:37	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/30/15 00:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*6*	*X*	*10 - 120*	*08/27/15 16:15*	*08/30/15 00:37*	*1*
2-Fluorobiphenyl (Surr)	*0*	*X*	*29 - 120*	*08/27/15 16:15*	*08/30/15 00:37*	*1*
Nitrobenzene-d5	*28*		*27 - 120*	*08/27/15 16:15*	*08/30/15 00:37*	*1*
Terphenyl-d14	*0*	*X*	*13 - 120*	*08/27/15 16:15*	*08/30/15 00:37*	*1*
2-Fluorophenol	*0*	*X*	*10 - 120*	*08/27/15 16:15*	*08/30/15 00:37*	*1*
Phenol-d5	*8*	*X*	*10 - 120*	*08/27/15 16:15*	*08/30/15 00:37*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U H	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 21:46	1
Benzo[a]pyrene	0.025	U H	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 21:46	1
Benzo[b]fluoranthene	0.025	U H	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 21:46	1
Hexachlorobenzene	0.014	U H	0.020	0.014	ug/L		09/01/15 05:42	09/01/15 21:46	1
Hexachlorobutadiene	0.20	U H	0.40	0.20	ug/L		09/01/15 05:42	09/01/15 21:46	1
N-Nitrosodimethylamine	0.20	U H	0.80	0.20	ug/L		09/01/15 05:42	09/01/15 21:46	1

Client Sample ID: RW-2 (279-289)-082115
Date Collected: 08/21/15 13:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-10
Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U H *	0.30	0.10	ug/L		09/01/15 05:42	09/01/15 21:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*83*		*10 - 120*	*09/01/15 05:42*	*09/01/15 21:46*	*1*
2-Fluorobiphenyl (Surr)	*63*		*29 - 120*	*09/01/15 05:42*	*09/01/15 21:46*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*09/01/15 05:42*	*09/01/15 21:46*	*1*
Terphenyl-d14	*75*		*13 - 120*	*09/01/15 05:42*	*09/01/15 21:46*	*1*
2-Fluorophenol	*54*		*10 - 120*	*09/01/15 05:42*	*09/01/15 21:46*	*1*
Phenol-d5	*37*		*10 - 120*	*09/01/15 05:42*	*09/01/15 21:46*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.31	U	2.0	0.31	ug/L		08/26/15 15:47	08/27/15 21:59	1
1,2,4,5-Tetrachlorobenzene	2.1	U	9.8	2.1	ug/L		08/26/15 15:47	08/27/15 21:59	1
2,3,4,6-Tetrachlorophenol	6.8	U	9.8	6.8	ug/L		08/26/15 15:47	08/27/15 21:59	1
2,4,5-Trichlorophenol	7.0	U	9.8	7.0	ug/L		08/26/15 15:47	08/27/15 21:59	1
2,4,6-Trichlorophenol	6.7	U	9.8	6.7	ug/L		08/26/15 15:47	08/27/15 21:59	1
2,4-Dichlorophenol	5.5	U	9.8	5.5	ug/L		08/26/15 15:47	08/27/15 21:59	1
2,4-Dimethylphenol	4.1	U	9.8	4.1	ug/L		08/26/15 15:47	08/27/15 21:59	1
2,4-Dinitrophenol	5.8	U	25	5.8	ug/L		08/26/15 15:47	08/27/15 21:59	1
2,4-Dinitrotoluene	3.1	U	9.8	3.1	ug/L		08/26/15 15:47	08/27/15 21:59	1
2,6-Dinitrotoluene	2.3	U	9.8	2.3	ug/L		08/26/15 15:47	08/27/15 21:59	1
2-Chloronaphthalene	2.7	U	9.8	2.7	ug/L		08/26/15 15:47	08/27/15 21:59	1
2-Chlorophenol	4.7	U	9.8	4.7	ug/L		08/26/15 15:47	08/27/15 21:59	1
2-Methylnaphthalene	0.39	U	2.0	0.39	ug/L		08/26/15 15:47	08/27/15 21:59	1
2-Methylphenol	2.3	U	9.8	2.3	ug/L		08/26/15 15:47	08/27/15 21:59	1
2-Nitroaniline	3.6	U	25	3.6	ug/L		08/26/15 15:47	08/27/15 21:59	1
2-Nitrophenol	5.2	U	9.8	5.2	ug/L		08/26/15 15:47	08/27/15 21:59	1
3,3'-Dichlorobenzidine	3.2	U	9.8	3.2	ug/L		08/26/15 15:47	08/27/15 21:59	1
3 & 4 Methylphenol	2.2	U	9.8	2.2	ug/L		08/26/15 15:47	08/27/15 21:59	1
3-Nitroaniline	2.6	U	25	2.6	ug/L		08/26/15 15:47	08/27/15 21:59	1
4,6-Dinitro-2-methylphenol	9.1	U	25	9.1	ug/L		08/26/15 15:47	08/27/15 21:59	1
4-Bromophenyl phenyl ether	2.6	U	9.8	2.6	ug/L		08/26/15 15:47	08/27/15 21:59	1
4-Chloro-3-methylphenol	4.4	U	9.8	4.4	ug/L		08/26/15 15:47	08/27/15 21:59	1
4-Chloroaniline	4.1	U	9.8	4.1	ug/L		08/26/15 15:47	08/27/15 21:59	1
4-Chlorophenyl phenyl ether	2.7	U	9.8	2.7	ug/L		08/26/15 15:47	08/27/15 21:59	1
4-Nitroaniline	3.0	U	25	3.0	ug/L		08/26/15 15:47	08/27/15 21:59	1
4-Nitrophenol	5.3	U	25	5.3	ug/L		08/26/15 15:47	08/27/15 21:59	1
Acenaphthylene	0.34	U	2.0	0.34	ug/L		08/26/15 15:47	08/27/15 21:59	1
Acetophenone	2.3	U	9.8	2.3	ug/L		08/26/15 15:47	08/27/15 21:59	1
Anthracene	0.37	U	2.0	0.37	ug/L		08/26/15 15:47	08/27/15 21:59	1
Benzaldehyde	5.6	U	9.8	5.6	ug/L		08/26/15 15:47	08/27/15 21:59	1
Benzo[g,h,i]perylene	0.61	U	2.0	0.61	ug/L		08/26/15 15:47	08/27/15 21:59	1
Benzo[k]fluoranthene	0.36	U	2.0	0.36	ug/L		08/26/15 15:47	08/27/15 21:59	1
Bis(2-chloroethoxy)methane	3.0	U	9.8	3.0	ug/L		08/26/15 15:47	08/27/15 21:59	1
Bis(2-chloroethyl)ether	2.7	U	9.8	2.7	ug/L		08/26/15 15:47	08/27/15 21:59	1
Butyl benzyl phthalate	2.5	U	9.8	2.5	ug/L		08/26/15 15:47	08/27/15 21:59	1
Bis(2-ethylhexyl) phthalate	5.9	U	9.8	5.9	ug/L		08/26/15 15:47	08/27/15 21:59	1
Carbazole	2.7	U	9.8	2.7	ug/L		08/26/15 15:47	08/27/15 21:59	1
Caprolactam	2.4	U	9.8	2.4	ug/L		08/26/15 15:47	08/27/15 21:59	1

Client Sample ID: RW-2 (279-289)-082115
Date Collected: 08/21/15 13:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-10
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.32	U	2.0	0.32	ug/L		08/26/15 15:47	08/27/15 21:59	1
Dibenz(a,h)anthracene	0.44	U	2.0	0.44	ug/L		08/26/15 15:47	08/27/15 21:59	1
Dibenzofuran	2.8	U	9.8	2.8	ug/L		08/26/15 15:47	08/27/15 21:59	1
Diethyl phthalate	2.9	U	9.8	2.9	ug/L		08/26/15 15:47	08/27/15 21:59	1
Dimethyl phthalate	3.0	U	9.8	3.0	ug/L		08/26/15 15:47	08/27/15 21:59	1
Di-n-butyl phthalate	2.5	U	9.8	2.5	ug/L		08/26/15 15:47	08/27/15 21:59	1
Fluoranthene	0.31	U	2.0	0.31	ug/L		08/26/15 15:47	08/27/15 21:59	1
Fluorene	0.31	U	2.0	0.31	ug/L		08/26/15 15:47	08/27/15 21:59	1
Hexachlorocyclopentadiene	1.8	U	9.8	1.8	ug/L		08/26/15 15:47	08/27/15 21:59	1
Hexachloroethane	1.9	U	9.8	1.9	ug/L		08/26/15 15:47	08/27/15 21:59	1
Indeno[1,2,3-cd]pyrene	0.40	U	2.0	0.40	ug/L		08/26/15 15:47	08/27/15 21:59	1
Isophorone	3.0	U	9.8	3.0	ug/L		08/26/15 15:47	08/27/15 21:59	1
Naphthalene	0.36	U	2.0	0.36	ug/L		08/26/15 15:47	08/27/15 21:59	1
Nitrobenzene	2.6	U	9.8	2.6	ug/L		08/26/15 15:47	08/27/15 21:59	1
N-Nitrosodi-n-propylamine	3.3	U	9.8	3.3	ug/L		08/26/15 15:47	08/27/15 21:59	1
N-Nitrosodiphenylamine	3.5	U	9.8	3.5	ug/L		08/26/15 15:47	08/27/15 21:59	1
Phenanthrene	0.41	U	2.0	0.41	ug/L		08/26/15 15:47	08/27/15 21:59	1
Phenol	**1.7**	**J**	9.8	1.5	ug/L		08/26/15 15:47	08/27/15 21:59	1
Pyrene	0.34	U	2.0	0.34	ug/L		08/26/15 15:47	08/27/15 21:59	1
Diphenyl	2.2	U	9.8	2.2	ug/L		08/26/15 15:47	08/27/15 21:59	1
Di-n-octyl phthalate	2.5	U	9.8	2.5	ug/L		08/26/15 15:47	08/27/15 21:59	1
2,2'-oxybis[1-chloropropane]	2.7	U	9.8	2.7	ug/L		08/26/15 15:47	08/27/15 21:59	1
Atrazine	2.8	U	9.8	2.8	ug/L		08/26/15 15:47	08/27/15 21:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzenesulfonamide, 2-methyl-	*9.6*	*J N*	*ug/L*		*6.70*	*88-19-7*	*08/26/15 15:47*	*08/27/15 21:59*	*1*
2(3H)-Benzothiazolone	*3.8*	*J N*	*ug/L*		*6.92*	*934-34-9*	*08/26/15 15:47*	*08/27/15 21:59*	*1*
Tetraethyleneglycol monomethylether	*3.5*	*J N*	*ug/L*		*7.17*	*23783-42-8*	*08/26/15 15:47*	*08/27/15 21:59*	*1*
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca -6,	*17*	*J N*	*ug/L*		*7.71*	*82304-66-3*	*08/26/15 15:47*	*08/27/15 21:59*	*1*
3,5-di-tert-Butyl-4-hydroxyphenylprop ion	*33*	*J N*	*ug/L*		*7.94*	*20170-32-5*	*08/26/15 15:47*	*08/27/15 21:59*	*1*
1,4-Benzenediamine, N-(1-methylethyl)-N'	*5.9*	*J N*	*ug/L*		*8.13*	*101-72-4*	*08/26/15 15:47*	*08/27/15 21:59*	*1*
Oleic Acid	*11*	*J N*	*ug/L*		*8.40*	*112-80-1*	*08/26/15 15:47*	*08/27/15 21:59*	*1*
Octadecanoic acid	*4.9*	*J N*	*ug/L*		*8.47*	*57-11-4*	*08/26/15 15:47*	*08/27/15 21:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*95*		*10 - 120*	*08/26/15 15:47*	*08/27/15 21:59*	*1*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*	*08/26/15 15:47*	*08/27/15 21:59*	*1*
2-Fluorophenol (Surr)	*43*		*10 - 120*	*08/26/15 15:47*	*08/27/15 21:59*	*1*
Nitrobenzene-d5 (Surr)	*68*		*27 - 120*	*08/26/15 15:47*	*08/27/15 21:59*	*1*
Phenol-d5 (Surr)	*30*		*10 - 120*	*08/26/15 15:47*	*08/27/15 21:59*	*1*
Terphenyl-d14 (Surr)	*85*		*13 - 120*	*08/26/15 15:47*	*08/27/15 21:59*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/03/15 06:55	09/04/15 19:47	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/03/15 06:55	09/04/15 19:47	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/03/15 06:55	09/04/15 19:47	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/03/15 06:55	09/04/15 19:47	1

Client Sample ID: RW-2 (279-289)-082115
Date Collected: 08/21/15 13:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-10
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	0.15	U	0.50	0.15	ug/L		09/03/15 06:55	09/04/15 19:47	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/03/15 06:55	09/04/15 19:47	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/03/15 06:55	09/04/15 19:47	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/03/15 06:55	09/04/15 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*114*		*10 - 150*	*09/03/15 06:55*	*09/04/15 19:47*	*1*
Tetrachloro-m-xylene	*94*		*10 - 150*	*09/03/15 06:55*	*09/04/15 19:47*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**194**		1.00	0.70	mg/L			08/31/15 23:55	1
Sulfate	**176**		5.00	3.00	mg/L			09/01/15 00:19	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.25**		0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 21:13	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:13	1
Arsenic	**0.0019**	**J**	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:13	1
Barium	**0.032**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:13	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:13	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 21:13	1
Calcium	**132**		20.0	2.5	mg/L		08/25/15 08:27	08/31/15 15:20	20
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:13	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:13	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:13	1
Iron	**0.015**	**J**	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:13	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:13	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:13	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:13	1
Nickel	**0.0029**		0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:13	1
Potassium	**23.6**		1.0	0.13	mg/L		08/25/15 08:27	08/26/15 21:13	1
Selenium	**0.00086**	**J**	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 15:24	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 21:13	1
Sodium	**134**		20.0	2.5	mg/L		08/25/15 08:27	08/31/15 15:20	20
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 21:13	1
Vanadium	**0.018**	**B**	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 21:13	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 21:13	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.25**		0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 13:50	1
Antimony	**0.00069**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:50	1
Arsenic	**0.0021**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:50	1
Barium	**0.038**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:50	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:50	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 13:50	1
Calcium	**134**		5.0	0.63	mg/L		08/26/15 17:11	09/03/15 13:55	5
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:50	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:50	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: RW-2 (279-289)-082115
Date Collected: 08/21/15 13:45
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-10
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	**0.00055**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:50	1
Iron	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 13:50	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 13:50	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:50	1
Manganese	**0.00050**	**J**	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:50	1
Nickel	**0.0032**		0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:50	1
Potassium	**25.1**		1.0	0.13	mg/L		08/26/15 17:11	09/03/15 13:50	1
Selenium	**0.00069**	**J**	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 13:50	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 13:50	1
Sodium	**125**		5.0	0.63	mg/L		08/26/15 17:11	09/03/15 13:55	5
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 13:50	1
Vanadium	**0.017**	**B**	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 13:50	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 13:50	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:16	08/31/15 23:14	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 02:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 17:05	08/27/15 11:47	1
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/25/15 20:02	1
Total Alkalinity as CaCO3	**104**		10.0	5.0	mg/L			08/25/15 20:02	1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-278444/6
Matrix: Water
Analysis Batch: 278444

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 13:58	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/02/15 13:58	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 13:58	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/02/15 13:58	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/02/15 13:58	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/02/15 13:58	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/02/15 13:58	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/02/15 13:58	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/02/15 13:58	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/02/15 13:58	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 13:58	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/02/15 13:58	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/02/15 13:58	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/02/15 13:58	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/02/15 13:58	1
Acetone	2.7	U	25	2.7	ug/L			09/02/15 13:58	1
Benzene	0.20	U	1.0	0.20	ug/L			09/02/15 13:58	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/02/15 13:58	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/02/15 13:58	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/02/15 13:58	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/02/15 13:58	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/02/15 13:58	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/02/15 13:58	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/02/15 13:58	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/02/15 13:58	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/02/15 13:58	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/02/15 13:58	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 13:58	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			09/02/15 13:58	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/02/15 13:58	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/02/15 13:58	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/02/15 13:58	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/02/15 13:58	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/02/15 13:58	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/02/15 13:58	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/02/15 13:58	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/02/15 13:58	1
Methylene Chloride	0.328	J	5.0	0.22	ug/L			09/02/15 13:58	1
Styrene	0.28	U	1.0	0.28	ug/L			09/02/15 13:58	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/02/15 13:58	1
Toluene	0.17	U	1.0	0.17	ug/L			09/02/15 13:58	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/02/15 13:58	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/02/15 13:58	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/02/15 13:58	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/02/15 13:58	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/02/15 13:58	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/02/15 13:58	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/02/15 13:58	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					09/02/15 13:58	1
Total Alkanes TIC	None		ug/L					09/02/15 13:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130		09/02/15 13:58	1
Dibromofluoromethane (Surr)	110		70 - 130		09/02/15 13:58	1
Toluene-d8 (Surr)	101		70 - 130		09/02/15 13:58	1
1,2-Dichloroethane-d4 (Surr)	123		70 - 130		09/02/15 13:58	1

Lab Sample ID: LCS 490-278444/3
Matrix: Water
Analysis Batch: 278444

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	23.0		ug/L		115	78 - 135
Freon-113	20.0	17.1		ug/L		85	77 - 129
1,1,2,2-Tetrachloroethane	20.0	19.5		ug/L		97	69 - 131
1,1,2-Trichloroethane	20.0	19.2		ug/L		96	80 - 124
1,1-Dichloroethane	20.0	21.7		ug/L		108	78 - 125
1,1-Dichloroethene	20.0	17.4		ug/L		87	79 - 124
1,2,4-Trichlorobenzene	20.0	20.7		ug/L		104	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	17.2		ug/L		86	54 - 125
1,2-Dichlorobenzene	20.0	19.5		ug/L		97	80 - 121
1,2-Dichloropropane	20.0	20.6		ug/L		103	75 - 120
1,3-Dichlorobenzene	20.0	20.4		ug/L		102	80 - 122
1,4-Dichlorobenzene	20.0	19.6		ug/L		98	80 - 120
2-Butanone (MEK)	100	98.3		ug/L		98	62 - 133
2-Hexanone	100	114		ug/L		114	60 - 142
4-Methyl-2-pentanone (MIBK)	100	103		ug/L		103	60 - 137
Acetone	100	72.8		ug/L		73	54 - 145
Benzene	20.0	21.1		ug/L		105	80 - 121
Bromoform	20.0	18.8		ug/L		94	46 - 145
Bromomethane	20.0	17.3		ug/L		87	41 - 150
Carbon disulfide	20.0	18.0		ug/L		90	77 - 126
Carbon tetrachloride	20.0	22.0		ug/L		110	64 - 147
Chlorobenzene	20.0	19.7		ug/L		99	80 - 120
Chlorodibromomethane	20.0	18.6		ug/L		93	69 - 133
Chloroethane	20.0	16.5		ug/L		82	72 - 120
Chloroform	20.0	21.4		ug/L		107	73 - 129
Chloromethane	20.0	11.8		ug/L		59	12 - 150
cis-1,2-Dichloroethene	20.0	23.2		ug/L		116	76 - 125
cis-1,3-Dichloropropene	20.0	20.1		ug/L		101	74 - 140
Cyclohexane	20.0	26.1	*	ug/L		130	73 - 122
Dichlorobromomethane	20.0	20.2		ug/L		101	75 - 129
Dichlorodifluoromethane	20.0	19.3		ug/L		96	37 - 127
Ethylbenzene	20.0	21.1		ug/L		106	80 - 130
1,2-Dibromoethane	20.0	19.5		ug/L		97	80 - 129
Isopropylbenzene	20.0	22.4		ug/L		112	80 - 141
Methyl acetate	100	66.5		ug/L		67	64 - 150
Methyl tert-butyl ether	20.0	16.8		ug/L		84	72 - 133
Methylcyclohexane	20.0	22.5		ug/L		112	71 - 129
Methylene Chloride	20.0	17.4		ug/L		87	79 - 123
Styrene	20.0	22.1		ug/L		111	80 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 490-278444/3
Matrix: Water
Analysis Batch: 278444

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	20.0	20.2		ug/L		101	80 - 126
Toluene	20.0	20.1		ug/L		100	80 - 126
trans-1,2-Dichloroethene	20.0	16.9		ug/L		85	79 - 126
trans-1,3-Dichloropropene	20.0	20.1		ug/L		100	63 - 134
Trichloroethene	20.0	19.2		ug/L		96	80 - 123
Trichlorofluoromethane	20.0	16.9		ug/L		85	65 - 124
Vinyl chloride	20.0	20.1		ug/L		100	68 - 120
1,2-Dichloroethane	20.0	22.8		ug/L		114	77 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*

Lab Sample ID: 490-85780-5 MS
Matrix: Water
Analysis Batch: 278444

Client Sample ID: SW-11-082115
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.19	U	50.0	58.6		ug/L		117	76 - 149
Freon-113	0.15	U	50.0	45.7		ug/L		91	72 - 148
1,1,2,2-Tetrachloroethane	0.19	U	50.0	46.2		ug/L		92	56 - 143
1,1,2-Trichloroethane	0.19	U	50.0	45.0		ug/L		90	74 - 134
1,1-Dichloroethane	0.24	U	50.0	54.6		ug/L		109	71 - 139
1,1-Dichloroethene	0.25	U	50.0	48.2		ug/L		96	70 - 142
1,2,4-Trichlorobenzene	0.20	U	50.0	51.7		ug/L		103	60 - 136
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	44.4		ug/L		89	52 - 126
1,2-Dichlorobenzene	0.19	U	50.0	47.6		ug/L		95	79 - 128
1,2-Dichloropropane	0.25	U	50.0	44.1		ug/L		88	67 - 131
1,3-Dichlorobenzene	0.18	U	50.0	49.6		ug/L		99	77 - 131
1,4-Dichlorobenzene	0.17	U	50.0	48.0		ug/L		96	78 - 126
2-Butanone (MEK)	2.6	U	250	233		ug/L		93	50 - 138
2-Hexanone	1.3	U	250	266		ug/L		106	50 - 150
4-Methyl-2-pentanone (MIBK)	0.81	U	250	253		ug/L		101	50 - 147
Acetone	2.7	U	250	169		ug/L		68	45 - 141
Benzene	0.20	U	50.0	53.8		ug/L		108	75 - 133
Bromoform	0.29	U	50.0	45.9		ug/L		92	42 - 147
Bromomethane	0.35	U	50.0	40.4		ug/L		81	16 - 163
Carbon disulfide	0.22	U	50.0	45.1		ug/L		90	48 - 152
Carbon tetrachloride	0.18	U	50.0	58.7		ug/L		117	62 - 164
Chlorobenzene	0.18	U	50.0	47.9		ug/L		96	80 - 129
Chlorodibromomethane	0.25	U	50.0	45.1		ug/L		90	66 - 140
Chloroethane	0.36	U	50.0	42.6		ug/L		85	58 - 137
Chloroform	0.23	U	50.0	53.9		ug/L		108	66 - 138
Chloromethane	0.36	U	50.0	31.1		ug/L		62	10 - 169
cis-1,2-Dichloroethene	0.21	U	50.0	56.4		ug/L		113	68 - 138
cis-1,3-Dichloropropene	0.17	U	50.0	47.2		ug/L		94	71 - 141

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-85780-5 MS
Matrix: Water
Analysis Batch: 278444

Client Sample ID: SW-11-082115
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	0.13	U F1 *	50.0	68.2		ug/L		136	58 - 144
Dichlorobromomethane	0.17	U	50.0	44.8		ug/L		90	70 - 140
Dichlorodifluoromethane	0.17	U	50.0	42.3		ug/L		85	40 - 127
Ethylbenzene	0.19	U	50.0	53.4		ug/L		107	79 - 139
1,2-Dibromoethane	0.21	U	50.0	48.4		ug/L		97	75 - 137
Isopropylbenzene	0.33	U	50.0	56.7		ug/L		113	80 - 153
Methyl acetate	0.58	U	250	155		ug/L		62	30 - 165
Methyl tert-butyl ether	0.17	U	50.0	40.6		ug/L		81	66 - 141
Methylcyclohexane	0.090	U	50.0	51.5		ug/L		103	59 - 151
Methylene Chloride	0.22	U	50.0	41.0		ug/L		82	64 - 139
Styrene	0.28	U	50.0	54.5		ug/L		109	61 - 148
Tetrachloroethene	0.14	U	50.0	50.6		ug/L		101	72 - 145
Toluene	0.17	U	50.0	49.5		ug/L		99	75 - 136
trans-1,2-Dichloroethene	0.23	U	50.0	43.0		ug/L		86	66 - 143
trans-1,3-Dichloropropene	0.17	U	50.0	48.4		ug/L		97	59 - 135
Trichloroethene	0.20	U	50.0	46.9		ug/L		94	73 - 144
Trichlorofluoromethane	0.21	U	50.0	45.8		ug/L		92	58 - 139
Vinyl chloride	0.18	U	50.0	47.1		ug/L		94	56 - 129
1,2-Dichloroethane	0.20	U	50.0	56.1		ug/L		112	64 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*

Lab Sample ID: 490-85780-5 MSD
Matrix: Water
Analysis Batch: 278444

Client Sample ID: SW-11-082115
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.19	U	50.0	65.0		ug/L		130	76 - 149	10	17
Freon-113	0.15	U	50.0	50.2		ug/L		100	72 - 148	9	18
1,1,2,2-Tetrachloroethane	0.19	U	50.0	49.4		ug/L		99	56 - 143	7	20
1,1,2-Trichloroethane	0.19	U	50.0	45.8		ug/L		92	74 - 134	2	15
1,1-Dichloroethane	0.24	U	50.0	60.6		ug/L		121	71 - 139	10	17
1,1-Dichloroethene	0.25	U	50.0	48.2		ug/L		96	70 - 142	0	17
1,2,4-Trichlorobenzene	0.20	U	50.0	55.1		ug/L		110	60 - 136	6	19
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	45.1		ug/L		90	52 - 126	1	24
1,2-Dichlorobenzene	0.19	U	50.0	51.0		ug/L		102	79 - 128	7	15
1,2-Dichloropropane	0.25	U	50.0	49.5		ug/L		99	67 - 131	12	17
1,3-Dichlorobenzene	0.18	U	50.0	50.5		ug/L		101	77 - 131	2	15
1,4-Dichlorobenzene	0.17	U	50.0	48.5		ug/L		97	78 - 126	1	15
2-Butanone (MEK)	2.6	U	250	272		ug/L		109	50 - 138	15	19
2-Hexanone	1.3	U	250	269		ug/L		108	50 - 150	1	15
4-Methyl-2-pentanone (MIBK)	0.81	U	250	260		ug/L		104	50 - 147	3	17
Acetone	2.7	U	250	193		ug/L		77	45 - 141	13	21
Benzene	0.20	U	50.0	59.5		ug/L		119	75 - 133	10	17

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-85780-5 MSD
Matrix: Water
Analysis Batch: 278444

Client Sample ID: SW-11-082115
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	0.29	U	50.0	45.5		ug/L		91	42 - 147	1	16
Bromomethane	0.35	U	50.0	53.6		ug/L		107	16 - 163	28	50
Carbon disulfide	0.22	U	50.0	49.5		ug/L		99	48 - 152	9	21
Carbon tetrachloride	0.18	U	50.0	64.5		ug/L		129	62 - 164	9	19
Chlorobenzene	0.18	U	50.0	49.6		ug/L		99	80 - 129	4	14
Chlorodibromomethane	0.25	U	50.0	47.0		ug/L		94	66 - 140	4	15
Chloroethane	0.36	U	50.0	47.4		ug/L		95	58 - 137	11	20
Chloroform	0.23	U	50.0	59.3		ug/L		119	66 - 138	10	18
Chloromethane	0.36	U	50.0	33.0		ug/L		66	10 - 169	6	31
cis-1,2-Dichloroethene	0.21	U	50.0	63.2		ug/L		126	68 - 138	11	17
cis-1,3-Dichloropropene	0.17	U	50.0	50.5		ug/L		101	71 - 141	7	15
Cyclohexane	0.13	U F1 *	50.0	76.0	F1	ug/L		152	58 - 144	11	16
Dichlorobromomethane	0.17	U	50.0	49.2		ug/L		98	70 - 140	9	18
Dichlorodifluoromethane	0.17	U	50.0	46.1		ug/L		92	40 - 127	8	18
Ethylbenzene	0.19	U	50.0	55.2		ug/L		110	79 - 139	3	15
1,2-Dibromoethane	0.21	U	50.0	49.5		ug/L		99	75 - 137	2	15
Isopropylbenzene	0.33	U	50.0	57.3		ug/L		115	80 - 153	1	16
Methyl acetate	0.58	U	250	171		ug/L		68	30 - 165	9	31
Methyl tert-butyl ether	0.17	U	50.0	45.2		ug/L		90	66 - 141	11	16
Methylcyclohexane	0.090	U	50.0	57.2		ug/L		114	59 - 151	11	19
Methylene Chloride	0.22	U	50.0	46.6		ug/L		93	64 - 139	13	17
Styrene	0.28	U	50.0	56.7		ug/L		113	61 - 148	4	24
Tetrachloroethene	0.14	U	50.0	50.7		ug/L		101	72 - 145	0	16
Toluene	0.17	U	50.0	50.7		ug/L		101	75 - 136	2	15
trans-1,2-Dichloroethene	0.23	U	50.0	47.8		ug/L		96	66 - 143	10	16
trans-1,3-Dichloropropene	0.17	U	50.0	49.9		ug/L		100	59 - 135	3	14
Trichloroethene	0.20	U	50.0	51.6		ug/L		103	73 - 144	10	17
Trichlorofluoromethane	0.21	U	50.0	47.7		ug/L		95	58 - 139	4	18
Vinyl chloride	0.18	U	50.0	52.0		ug/L		104	56 - 129	10	17
1,2-Dichloroethane	0.20	U	50.0	61.3		ug/L		123	64 - 136	9	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*113*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*126*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-276673/7
Matrix: Water
Analysis Batch: 276673

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/27/15 14:42	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/27/15 14:42	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/27/15 14:42	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/27/15 14:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/27/15 14:42*	*1*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*		*08/27/15 14:42*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/27/15 14:42*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/27/15 14:42*	*1*

Lab Sample ID: LCS 490-276673/3
Matrix: Water
Analysis Batch: 276673

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.500	0.377		ug/L		75	70 - 131		
1,2-Dibromo-3-Chloropropane			0.500	0.380		ug/L		76	40 - 160		
1,4-Dioxane			10.0	9.19	J	ug/L		92	40 - 160		
Ethylene Dibromide			0.500	0.337	*	ug/L		67	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 490-276673/4
Matrix: Water
Analysis Batch: 276673

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.500	0.387		ug/L		77	70 - 131	3	19
1,2-Dibromo-3-Chloropropane			0.500	0.366		ug/L		73	40 - 160	4	20
1,4-Dioxane			10.0	9.22	J	ug/L		92	40 - 160	0	20
Ethylene Dibromide			0.500	0.328	*	ug/L		66	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: MB 490-277754/26
Matrix: Water
Analysis Batch: 277754

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			08/31/15 16:46	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			08/31/15 16:46	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			08/31/15 16:46	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			08/31/15 16:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*08/31/15 16:46*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*08/31/15 16:46*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/31/15 16:46*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/31/15 16:46*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-277754/10
Matrix: Water
Analysis Batch: 277754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.500	0.558		ug/L		112	70 - 131
1,2-Dibromo-3-Chloropropane	0.500	0.563		ug/L		113	40 - 160
1,4-Dioxane	10.0	11.9		ug/L		119	40 - 160
Ethylene Dibromide	0.500	0.553		ug/L		111	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 490-277754/11
Matrix: Water
Analysis Batch: 277754

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.500	0.543		ug/L		109	70 - 131	3	19
1,2-Dibromo-3-Chloropropane	0.500	0.511		ug/L		102	40 - 160	10	20
1,4-Dioxane	10.0	10.9		ug/L		109	40 - 160	9	20
Ethylene Dibromide	0.500	0.531		ug/L		106	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: MB 490-278441/7
Matrix: Water
Analysis Batch: 278441

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/02/15 14:36	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/02/15 14:36	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/02/15 14:36	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/02/15 14:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*09/02/15 14:36*	*1*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*		*09/02/15 14:36*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*09/02/15 14:36*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/02/15 14:36*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-278441/3
Matrix: Water
Analysis Batch: 278441

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.500	0.511		ug/L		102	70 - 131
1,2-Dibromo-3-Chloropropane	0.500	0.585		ug/L		117	40 - 160
1,4-Dioxane	10.0	13.4		ug/L		134	40 - 160
Ethylene Dibromide	0.500	0.503		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 490-278441/4
Matrix: Water
Analysis Batch: 278441

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.500	0.500		ug/L		100	70 - 131	2	19
1,2-Dibromo-3-Chloropropane	0.500	0.571		ug/L		114	40 - 160	2	20
1,4-Dioxane	10.0	13.5		ug/L		135	40 - 160	1	20
Ethylene Dibromide	0.500	0.499		ug/L		100	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

Lab Sample ID: 490-85780-5 MS
Matrix: Water
Analysis Batch: 278441

Client Sample ID: SW-11-082115
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.010	U	0.500	0.536		ug/L		107	53 - 144
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.533		ug/L		107	40 - 160
1,4-Dioxane	0.27	U	10.0	15.4		ug/L		154	40 - 160
Ethylene Dibromide	0.010	U	0.500	0.502		ug/L		100	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-85780-5 MSD
Matrix: Water
Analysis Batch: 278441

Client Sample ID: SW-11-082115
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.010	U	0.500	0.472		ug/L		94	53 - 144	13	19
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.454		ug/L		91	40 - 160	16	20
1,4-Dioxane	0.27	U	10.0	12.9		ug/L		129	40 - 160	17	20
Ethylene Dibromide	0.010	U	0.500	0.441		ug/L		88	70 - 130	13	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-276471/1-A
Matrix: Water
Analysis Batch: 276721

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276471

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/26/15 15:47	08/27/15 13:20	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/26/15 15:47	08/27/15 13:20	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/26/15 15:47	08/27/15 13:20	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/26/15 15:47	08/27/15 13:20	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/26/15 15:47	08/27/15 13:20	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/26/15 15:47	08/27/15 13:20	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/26/15 15:47	08/27/15 13:20	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/26/15 15:47	08/27/15 13:20	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/26/15 15:47	08/27/15 13:20	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/26/15 15:47	08/27/15 13:20	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/26/15 15:47	08/27/15 13:20	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/26/15 15:47	08/27/15 13:20	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/26/15 15:47	08/27/15 13:20	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/26/15 15:47	08/27/15 13:20	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/26/15 15:47	08/27/15 13:20	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/26/15 15:47	08/27/15 13:20	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/26/15 15:47	08/27/15 13:20	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/26/15 15:47	08/27/15 13:20	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/26/15 15:47	08/27/15 13:20	1
Acetophenone	2.3	U	10	2.3	ug/L		08/26/15 15:47	08/27/15 13:20	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/26/15 15:47	08/27/15 13:20	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-276471/1-A
Matrix: Water
Analysis Batch: 276721

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276471

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzaldehyde	5.7	U	10	5.7	ug/L		08/26/15 15:47	08/27/15 13:20	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/26/15 15:47	08/27/15 13:20	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/26/15 15:47	08/27/15 13:20	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/26/15 15:47	08/27/15 13:20	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/26/15 15:47	08/27/15 13:20	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 15:47	08/27/15 13:20	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/26/15 15:47	08/27/15 13:20	1
Carbazole	2.8	U	10	2.8	ug/L		08/26/15 15:47	08/27/15 13:20	1
Caprolactam	2.4	U	10	2.4	ug/L		08/26/15 15:47	08/27/15 13:20	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/26/15 15:47	08/27/15 13:20	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/26/15 15:47	08/27/15 13:20	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/26/15 15:47	08/27/15 13:20	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/26/15 15:47	08/27/15 13:20	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/26/15 15:47	08/27/15 13:20	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 15:47	08/27/15 13:20	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/26/15 15:47	08/27/15 13:20	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/26/15 15:47	08/27/15 13:20	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/26/15 15:47	08/27/15 13:20	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/26/15 15:47	08/27/15 13:20	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/26/15 15:47	08/27/15 13:20	1
Isophorone	3.1	U	10	3.1	ug/L		08/26/15 15:47	08/27/15 13:20	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/26/15 15:47	08/27/15 13:20	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/26/15 15:47	08/27/15 13:20	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/26/15 15:47	08/27/15 13:20	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/26/15 15:47	08/27/15 13:20	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/26/15 15:47	08/27/15 13:20	1
Phenol	1.5	U	10	1.5	ug/L		08/26/15 15:47	08/27/15 13:20	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/26/15 15:47	08/27/15 13:20	1
Diphenyl	2.2	U	10	2.2	ug/L		08/26/15 15:47	08/27/15 13:20	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/26/15 15:47	08/27/15 13:20	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/26/15 15:47	08/27/15 13:20	1
Atrazine	2.9	U	10	2.9	ug/L		08/26/15 15:47	08/27/15 13:20	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/15 15:47*	*08/27/15 13:20*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*78*		*10 - 120*	*08/26/15 15:47*	*08/27/15 13:20*	*1*
2-Fluorobiphenyl (Surr)	*63*		*29 - 120*	*08/26/15 15:47*	*08/27/15 13:20*	*1*
2-Fluorophenol (Surr)	*33*		*10 - 120*	*08/26/15 15:47*	*08/27/15 13:20*	*1*
Nitrobenzene-d5 (Surr)	*60*		*27 - 120*	*08/26/15 15:47*	*08/27/15 13:20*	*1*
Phenol-d5 (Surr)	*21*		*10 - 120*	*08/26/15 15:47*	*08/27/15 13:20*	*1*
Terphenyl-d14 (Surr)	*71*		*13 - 120*	*08/26/15 15:47*	*08/27/15 13:20*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-276471/2-A
Matrix: Water
Analysis Batch: 276721

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	40.0	32.1		ug/L		80	46 - 120
1,2,4,5-Tetrachlorobenzene	40.0	34.5		ug/L		86	25 - 120
2,3,4,6-Tetrachlorophenol	40.0	37.4		ug/L		93	31 - 148
2,4,5-Trichlorophenol	40.0	34.6		ug/L		87	40 - 129
2,4,6-Trichlorophenol	40.0	34.3		ug/L		86	39 - 135
2,4-Dichlorophenol	40.0	30.6		ug/L		76	38 - 120
2,4-Dimethylphenol	40.0	29.8		ug/L		75	21 - 126
2,4-Dinitrophenol	80.0	37.4		ug/L		47	20 - 150
2,4-Dinitrotoluene	40.0	35.6		ug/L		89	46 - 132
2,6-Dinitrotoluene	40.0	34.0		ug/L		85	54 - 128
2-Chloronaphthalene	40.0	31.7		ug/L		79	39 - 120
2-Chlorophenol	40.0	26.3		ug/L		66	40 - 120
2-Methylnaphthalene	40.0	30.0		ug/L		75	31 - 120
2-Methylphenol	40.0	25.7		ug/L		64	38 - 120
2-Nitroaniline	40.0	34.0		ug/L		85	46 - 131
2-Nitrophenol	40.0	30.9		ug/L		77	32 - 120
3,3'-Dichlorobenzidine	40.0	32.6		ug/L		81	46 - 129
3 & 4 Methylphenol	40.0	20.8		ug/L		52	33 - 120
3-Nitroaniline	40.0	29.5		ug/L		74	54 - 121
4,6-Dinitro-2-methylphenol	80.0	65.4		ug/L		82	19 - 150
4-Bromophenyl phenyl ether	40.0	34.3		ug/L		86	47 - 127
4-Chloro-3-methylphenol	40.0	31.4		ug/L		79	44 - 120
4-Chloroaniline	40.0	26.7		ug/L		67	44 - 120
4-Chlorophenyl phenyl ether	40.0	34.6		ug/L		87	50 - 120
4-Nitroaniline	40.0	32.8		ug/L		82	55 - 123
4-Nitrophenol	80.0	24.8	J	ug/L		31	10 - 120
Acenaphthylene	40.0	31.8		ug/L		80	48 - 120
Acetophenone	40.0	30.2		ug/L		75	52 - 133
Anthracene	40.0	33.3		ug/L		83	58 - 130
Benzaldehyde	40.0	46.8		ug/L		117	34 - 120
Benzo[g,h,i]perylene	40.0	35.6		ug/L		89	51 - 123
Benzo[k]fluoranthene	40.0	30.4		ug/L		76	51 - 120
Bis(2-chloroethoxy)methane	40.0	28.2		ug/L		71	44 - 120
Bis(2-chloroethyl)ether	40.0	25.9		ug/L		65	47 - 120
Butyl benzyl phthalate	40.0	30.0		ug/L		75	51 - 146
Bis(2-ethylhexyl) phthalate	40.0	36.5		ug/L		91	47 - 138
Carbazole	40.0	32.8		ug/L		82	54 - 123
Caprolactam	40.0	7.19	J	ug/L		18	10 - 120
Chrysene	40.0	28.7		ug/L		72	55 - 120
Dibenz(a,h)anthracene	40.0	38.4		ug/L		96	50 - 125
Dibenzofuran	40.0	32.4		ug/L		81	50 - 120
Diethyl phthalate	40.0	36.4		ug/L		91	54 - 128
Dimethyl phthalate	40.0	34.5		ug/L		86	53 - 127
Di-n-butyl phthalate	40.0	36.8		ug/L		92	54 - 140
Fluoranthene	40.0	36.0		ug/L		90	56 - 120
Fluorene	40.0	34.2		ug/L		85	52 - 120
Hexachlorocyclopentadiene	40.0	34.7		ug/L		87	17 - 120
Hexachloroethane	40.0	28.5		ug/L		71	30 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-276471/2-A
Matrix: Water
Analysis Batch: 276721

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Indeno[1,2,3-cd]pyrene	40.0	37.0		ug/L		92	54 - 125
Isophorone	40.0	30.6		ug/L		76	47 - 120
Naphthalene	40.0	29.1		ug/L		73	37 - 120
Nitrobenzene	40.0	29.6		ug/L		74	36 - 120
N-Nitrosodi-n-propylamine	40.0	30.3		ug/L		76	51 - 120
N-Nitrosodiphenylamine	80.0	65.9		ug/L		82	58 - 149
Phenanthrene	40.0	31.6		ug/L		79	56 - 120
Phenol	40.0	11.4		ug/L		29	14 - 120
Pyrene	40.0	28.4		ug/L		71	53 - 129
Diphenyl	40.0	31.9		ug/L		80	10 - 146
Di-n-octyl phthalate	40.0	35.4		ug/L		88	50 - 142
2,2'-oxybis[1-chloropropane]	40.0	25.4		ug/L		63	44 - 120
Atrazine	40.0	35.8		ug/L		90	24 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*93*		*10 - 120*
2-Fluorobiphenyl (Surr)	*76*		*29 - 120*
2-Fluorophenol (Surr)	*38*		*10 - 120*
Nitrobenzene-d5 (Surr)	*70*		*27 - 120*
Phenol-d5 (Surr)	*26*		*10 - 120*
Terphenyl-d14 (Surr)	*69*		*13 - 120*

Lab Sample ID: 490-85780-5 MS
Matrix: Water
Analysis Batch: 276721

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 276471

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*85*		*10 - 120*
2-Fluorobiphenyl (Surr)	*63*		*29 - 120*
2-Fluorophenol (Surr)	*32*		*10 - 120*
Nitrobenzene-d5 (Surr)	*60*		*27 - 120*
Phenol-d5 (Surr)	*21*		*10 - 120*
Terphenyl-d14 (Surr)	*80*		*13 - 120*

Lab Sample ID: 490-85780-5 MSD
Matrix: Water
Analysis Batch: 276721

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 276471

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*89*		*10 - 120*
2-Fluorobiphenyl (Surr)	*64*		*29 - 120*
2-Fluorophenol (Surr)	*31*		*10 - 120*
Nitrobenzene-d5 (Surr)	*63*		*27 - 120*
Phenol-d5 (Surr)	*20*		*10 - 120*
Terphenyl-d14 (Surr)	*76*		*13 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-277998/1-A
Matrix: Water
Analysis Batch: 279300

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277998

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		09/01/15 09:09	09/05/15 02:39	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		09/01/15 09:09	09/05/15 02:39	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		09/01/15 09:09	09/05/15 02:39	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		09/01/15 09:09	09/05/15 02:39	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		09/01/15 09:09	09/05/15 02:39	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		09/01/15 09:09	09/05/15 02:39	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		09/01/15 09:09	09/05/15 02:39	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		09/01/15 09:09	09/05/15 02:39	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		09/01/15 09:09	09/05/15 02:39	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		09/01/15 09:09	09/05/15 02:39	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		09/01/15 09:09	09/05/15 02:39	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		09/01/15 09:09	09/05/15 02:39	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		09/01/15 09:09	09/05/15 02:39	1
2-Methylphenol	2.3	U	10	2.3	ug/L		09/01/15 09:09	09/05/15 02:39	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		09/01/15 09:09	09/05/15 02:39	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		09/01/15 09:09	09/05/15 02:39	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		09/01/15 09:09	09/05/15 02:39	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		09/01/15 09:09	09/05/15 02:39	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		09/01/15 09:09	09/05/15 02:39	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		09/01/15 09:09	09/05/15 02:39	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		09/01/15 09:09	09/05/15 02:39	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		09/01/15 09:09	09/05/15 02:39	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		09/01/15 09:09	09/05/15 02:39	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		09/01/15 09:09	09/05/15 02:39	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		09/01/15 09:09	09/05/15 02:39	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		09/01/15 09:09	09/05/15 02:39	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		09/01/15 09:09	09/05/15 02:39	1
Acetophenone	2.3	U	10	2.3	ug/L		09/01/15 09:09	09/05/15 02:39	1
Anthracene	0.38	U	2.0	0.38	ug/L		09/01/15 09:09	09/05/15 02:39	1
Benzaldehyde	5.7	U	10	5.7	ug/L		09/01/15 09:09	09/05/15 02:39	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		09/01/15 09:09	09/05/15 02:39	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		09/01/15 09:09	09/05/15 02:39	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		09/01/15 09:09	09/05/15 02:39	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		09/01/15 09:09	09/05/15 02:39	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:09	09/05/15 02:39	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		09/01/15 09:09	09/05/15 02:39	1
Carbazole	2.8	U	10	2.8	ug/L		09/01/15 09:09	09/05/15 02:39	1
Caprolactam	2.4	U	10	2.4	ug/L		09/01/15 09:09	09/05/15 02:39	1
Chrysene	0.33	U	2.0	0.33	ug/L		09/01/15 09:09	09/05/15 02:39	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		09/01/15 09:09	09/05/15 02:39	1
Dibenzofuran	2.9	U	10	2.9	ug/L		09/01/15 09:09	09/05/15 02:39	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		09/01/15 09:09	09/05/15 02:39	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		09/01/15 09:09	09/05/15 02:39	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:09	09/05/15 02:39	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		09/01/15 09:09	09/05/15 02:39	1
Fluorene	0.32	U	2.0	0.32	ug/L		09/01/15 09:09	09/05/15 02:39	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		09/01/15 09:09	09/05/15 02:39	1
Hexachloroethane	1.9	U	10	1.9	ug/L		09/01/15 09:09	09/05/15 02:39	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-277998/1-A
Matrix: Water
Analysis Batch: 279300

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277998

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		09/01/15 09:09	09/05/15 02:39	1
Isophorone	3.1	U	10	3.1	ug/L		09/01/15 09:09	09/05/15 02:39	1
Naphthalene	0.37	U	2.0	0.37	ug/L		09/01/15 09:09	09/05/15 02:39	1
Nitrobenzene	2.7	U	10	2.7	ug/L		09/01/15 09:09	09/05/15 02:39	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		09/01/15 09:09	09/05/15 02:39	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		09/01/15 09:09	09/05/15 02:39	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		09/01/15 09:09	09/05/15 02:39	1
Phenol	1.5	U	10	1.5	ug/L		09/01/15 09:09	09/05/15 02:39	1
Pyrene	0.35	U	2.0	0.35	ug/L		09/01/15 09:09	09/05/15 02:39	1
Diphenyl	2.2	U	10	2.2	ug/L		09/01/15 09:09	09/05/15 02:39	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:09	09/05/15 02:39	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		09/01/15 09:09	09/05/15 02:39	1
Atrazine	2.9	U	10	2.9	ug/L		09/01/15 09:09	09/05/15 02:39	1

Tentatively Identified Compound	*Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*09/01/15 09:09*	*09/05/15 02:39*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*120*		*10 - 120*	*09/01/15 09:09*	*09/05/15 02:39*	*1*
2-Fluorobiphenyl (Surr)	*95*		*29 - 120*	*09/01/15 09:09*	*09/05/15 02:39*	*1*
2-Fluorophenol (Surr)	*58*		*10 - 120*	*09/01/15 09:09*	*09/05/15 02:39*	*1*
Nitrobenzene-d5 (Surr)	*96*		*27 - 120*	*09/01/15 09:09*	*09/05/15 02:39*	*1*
Phenol-d5 (Surr)	*40*		*10 - 120*	*09/01/15 09:09*	*09/05/15 02:39*	*1*
Terphenyl-d14 (Surr)	*118*		*13 - 120*	*09/01/15 09:09*	*09/05/15 02:39*	*1*

Lab Sample ID: LCS 490-277998/2-A
Matrix: Water
Analysis Batch: 279300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277998

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	40.0	40.2		ug/L		101	46 - 120
1,2,4,5-Tetrachlorobenzene	40.0	42.3		ug/L		106	25 - 120
2,3,4,6-Tetrachlorophenol	40.0	48.9		ug/L		122	31 - 148
2,4,5-Trichlorophenol	40.0	44.9		ug/L		112	40 - 129
2,4,6-Trichlorophenol	40.0	44.1		ug/L		110	39 - 135
2,4-Dichlorophenol	40.0	41.4		ug/L		103	38 - 120
2,4-Dimethylphenol	40.0	37.9		ug/L		95	21 - 126
2,4-Dinitrophenol	80.0	74.6		ug/L		93	20 - 150
2,4-Dinitrotoluene	40.0	44.3		ug/L		111	46 - 132
2,6-Dinitrotoluene	40.0	43.5		ug/L		109	54 - 128
2-Chloronaphthalene	40.0	39.3		ug/L		98	39 - 120
2-Chlorophenol	40.0	37.3		ug/L		93	40 - 120
2-Methylnaphthalene	40.0	38.6		ug/L		96	31 - 120
2-Methylphenol	40.0	35.0		ug/L		87	38 - 120
2-Nitroaniline	40.0	41.7		ug/L		104	46 - 131
2-Nitrophenol	40.0	42.7		ug/L		107	32 - 120
3,3'-Dichlorobenzidine	40.0	44.8		ug/L		112	46 - 129

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-277998/2-A
Matrix: Water
Analysis Batch: 279300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277998

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3 & 4 Methylphenol	40.0	32.3		ug/L		81	33 - 120
3-Nitroaniline	40.0	39.5		ug/L		99	54 - 121
4,6-Dinitro-2-methylphenol	80.0	87.5		ug/L		109	19 - 150
4-Bromophenyl phenyl ether	40.0	44.0		ug/L		110	47 - 127
4-Chloro-3-methylphenol	40.0	41.1		ug/L		103	44 - 120
4-Chloroaniline	40.0	37.1		ug/L		93	44 - 120
4-Chlorophenyl phenyl ether	40.0	41.8		ug/L		104	50 - 120
4-Nitroaniline	40.0	42.3		ug/L		106	55 - 123
4-Nitrophenol	80.0	42.5		ug/L		53	10 - 120
Acenaphthylene	40.0	39.2		ug/L		98	48 - 120
Acetophenone	40.0	39.1		ug/L		98	52 - 133
Anthracene	40.0	41.0		ug/L		102	58 - 130
Benzaldehyde	40.0	81.2	E *	ug/L		203	34 - 120
Benzo[g,h,i]perylene	40.0	43.2		ug/L		108	51 - 123
Benzo[k]fluoranthene	40.0	41.4		ug/L		103	51 - 120
Bis(2-chloroethoxy)methane	40.0	37.4		ug/L		93	44 - 120
Bis(2-chloroethyl)ether	40.0	29.8		ug/L		75	47 - 120
Butyl benzyl phthalate	40.0	46.0		ug/L		115	51 - 146
Bis(2-ethylhexyl) phthalate	40.0	46.5		ug/L		116	47 - 138
Carbazole	40.0	41.0		ug/L		103	54 - 123
Caprolactam	40.0	11.9		ug/L		30	10 - 120
Chrysene	40.0	41.1		ug/L		103	55 - 120
Dibenz(a,h)anthracene	40.0	46.4		ug/L		116	50 - 125
Dibenzofuran	40.0	39.5		ug/L		99	50 - 120
Diethyl phthalate	40.0	39.2		ug/L		98	54 - 128
Dimethyl phthalate	40.0	40.8		ug/L		102	53 - 127
Di-n-butyl phthalate	40.0	44.2		ug/L		111	54 - 140
Fluoranthene	40.0	41.9		ug/L		105	56 - 120
Fluorene	40.0	40.0		ug/L		100	52 - 120
Hexachlorocyclopentadiene	40.0	41.0		ug/L		103	17 - 120
Hexachloroethane	40.0	37.4		ug/L		94	30 - 120
Indeno[1,2,3-cd]pyrene	40.0	42.6		ug/L		106	54 - 125
Isophorone	40.0	39.2		ug/L		98	47 - 120
Naphthalene	40.0	39.0		ug/L		98	37 - 120
Nitrobenzene	40.0	39.2		ug/L		98	36 - 120
N-Nitrosodi-n-propylamine	40.0	39.0		ug/L		98	51 - 120
N-Nitrosodiphenylamine	80.0	78.6		ug/L		98	58 - 149
Phenanthrene	40.0	38.7		ug/L		97	56 - 120
Phenol	40.0	17.6		ug/L		44	14 - 120
Pyrene	40.0	44.3		ug/L		111	53 - 129
Diphenyl	40.0	38.9		ug/L		97	10 - 146
Di-n-octyl phthalate	40.0	43.6		ug/L		109	50 - 142
2,2'-oxybis[1-chloropropane]	40.0	35.0		ug/L		88	44 - 120
Atrazine	40.0	48.0		ug/L		120	24 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*128*	*X*	*10 - 120*
2-Fluorobiphenyl (Surr)	*104*		*29 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-277998/2-A
Matrix: Water
Analysis Batch: 279300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277998

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol (Surr)	*66*		*10 - 120*
Nitrobenzene-d5 (Surr)	*107*		*27 - 120*
Phenol-d5 (Surr)	*46*		*10 - 120*
Terphenyl-d14 (Surr)	*130*	*X*	*13 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE

Lab Sample ID: 490-85780-5 MS
Matrix: Water
Analysis Batch: 279300

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 277998

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene - RE	0.29	U H	35.7	28.8	H	ug/L		81	46 - 120
1,2,4,5-Tetrachlorobenzene - RE	1.9	U H	35.7	30.4	H	ug/L		85	10 - 200
2,3,4,6-Tetrachlorophenol - RE	6.2	U H	35.7	34.6	H	ug/L		97	10 - 200
2,4,5-Trichlorophenol - RE	6.3	U H	35.7	32.2	H	ug/L		90	40 - 129
2,4,6-Trichlorophenol - RE	6.1	U H	35.7	31.0	H	ug/L		87	39 - 135
2,4-Dichlorophenol - RE	5.0	U H	35.7	29.6	H	ug/L		83	38 - 120
2,4-Dimethylphenol - RE	3.8	U H	35.7	26.8	H	ug/L		75	11 - 130
2,4-Dinitrophenol - RE	5.8	J H	71.4	58.6	H	ug/L		74	10 - 176
2,4-Dinitrotoluene - RE	2.9	U H	35.7	31.4	H	ug/L		88	46 - 134
2,6-Dinitrotoluene - RE	2.1	U H	35.7	30.6	H	ug/L		86	54 - 128
2-Chloronaphthalene - RE	2.5	U H	35.7	27.9	H	ug/L		78	39 - 120
2-Chlorophenol - RE	4.3	U H	35.7	26.2	H	ug/L		73	40 - 120
2-Methylnaphthalene - RE	0.36	U H	35.7	27.9	H	ug/L		78	31 - 120
2-Methylphenol - RE	2.1	U H	35.7	23.9	H	ug/L		67	36 - 120
2-Nitroaniline - RE	3.3	U H	35.7	30.0	H	ug/L		84	46 - 131
2-Nitrophenol - RE	4.7	U H	35.7	30.6	H	ug/L		86	32 - 120
3,3'-Dichlorobenzidine - RE	2.9	U H	35.7	30.0	H	ug/L		84	10 - 130
3 & 4 Methylphenol - RE	2.0	U H	35.7	21.7	H	ug/L		61	32 - 120
3-Nitroaniline - RE	2.4	U H	35.7	27.4	H	ug/L		77	38 - 121
4,6-Dinitro-2-methylphenol - RE	8.3	U H	71.4	65.1	H	ug/L		91	10 - 157
4-Bromophenyl phenyl ether - RE	2.4	U H	35.7	31.0	H	ug/L		87	47 - 127
4-Chloro-3-methylphenol - RE	4.0	U H	35.7	29.1	H	ug/L		81	38 - 120
4-Chloroaniline - RE	3.8	U H	35.7	26.9	H	ug/L		75	35 - 120
4-Chlorophenyl phenyl ether - RE	2.5	U H	35.7	29.6	H	ug/L		83	50 - 120
4-Nitroaniline - RE	2.8	U H	35.7	29.3	H	ug/L		82	47 - 124
4-Nitrophenol - RE	4.8	U H	71.4	28.5	H	ug/L		40	10 - 120
Acenaphthylene - RE	0.31	U H	35.7	27.7	H	ug/L		77	48 - 120
Acetophenone - RE	2.1	U H	35.7	27.5	H	ug/L		77	10 - 200
Anthracene - RE	0.34	U H	35.7	29.9	H	ug/L		84	56 - 130
Benzaldehyde - RE	5.1	U H *	35.7	58.7	H	ug/L		164	10 - 200
Benzo[g,h,i]perylene - RE	0.55	U H	35.7	31.1	H	ug/L		87	48 - 137
Benzo[k]fluoranthene - RE	0.33	U H	35.7	29.3	H	ug/L		82	44 - 134
Bis(2-chloroethoxy)methane - RE	2.8	U H	35.7	26.6	H	ug/L		74	41 - 120
Bis(2-chloroethyl)ether - RE	2.5	U H	35.7	26.5	H	ug/L		74	42 - 120
Butyl benzyl phthalate - RE	2.2	U H	35.7	33.2	H	ug/L		93	51 - 146
Bis(2-ethylhexyl) phthalate - RE	5.4	U H	35.7	33.4	H	ug/L		94	44 - 138

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Lab Sample ID: 490-85780-5 MS
Matrix: Water
Analysis Batch: 279300

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 277998

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbazole - RE	2.5	U H	35.7	29.8	H	ug/L		83	53 - 123
Caprolactam - RE	2.1	U H	35.7	9.14	H	ug/L		26	10 - 200
Chrysene - RE	0.29	U H	35.7	29.1	H	ug/L		82	54 - 123
Dibenz(a,h)anthracene - RE	0.40	U H	35.7	33.8	H	ug/L		95	50 - 136
Dibenzofuran - RE	2.6	U H	35.7	28.1	H	ug/L		79	50 - 120
Diethyl phthalate - RE	2.7	U H	35.7	28.1	H	ug/L		79	53 - 128
Dimethyl phthalate - RE	2.8	U H	35.7	29.0	H	ug/L		81	53 - 127
Di-n-butyl phthalate - RE	2.2	U H	35.7	32.5	H	ug/L		91	54 - 140
Fluoranthene - RE	0.29	U H	35.7	30.7	H	ug/L		86	56 - 120
Fluorene - RE	0.29	U H	35.7	28.7	H	ug/L		80	52 - 120
Hexachlorocyclopentadiene - RE	1.6	U H	35.7	29.7	H	ug/L		83	10 - 120
Hexachloroethane - RE	1.7	U H	35.7	27.5	H	ug/L		77	26 - 120
Indeno[1,2,3-cd]pyrene - RE	0.37	U H	35.7	31.0	H	ug/L		87	50 - 136
Isophorone - RE	2.8	U H	35.7	28.2	H	ug/L		79	42 - 120
Naphthalene - RE	0.33	U H	35.7	28.4	H	ug/L		79	32 - 120
Nitrobenzene - RE	2.4	U H	35.7	28.6	H	ug/L		80	36 - 120
N-Nitrosodi-n-propylamine - RE	3.0	U H	35.7	27.5	H	ug/L		77	50 - 121
N-Nitrosodiphenylamine - RE	3.2	U H	71.4	57.9	H	ug/L		81	45 - 149
Phenanthrene - RE	0.38	U H	35.7	28.2	H	ug/L		79	53 - 120
Phenol - RE	1.3	U H	35.7	11.1	H	ug/L		31	10 - 120
Pyrene - RE	0.31	U H	35.7	32.2	H	ug/L		90	50 - 129
Diphenyl - RE	2.0	U H	35.7	28.0	H	ug/L		78	10 - 200
Di-n-octyl phthalate - RE	2.2	U H	35.7	32.6	H	ug/L		91	50 - 142
2,2'-oxybis[1-chloropropane] - RE	2.5	U H	35.7	24.6	H	ug/L		69	44 - 120
Atrazine - RE	2.6	U H	35.7	34.7	H	ug/L		97	10 - 200

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr) - RE	*104*		*10 - 120*
2-Fluorobiphenyl (Surr) - RE	*86*		*29 - 120*
2-Fluorophenol (Surr) - RE	*49*		*10 - 120*
Nitrobenzene-d5 (Surr) - RE	*90*		*27 - 120*
Phenol-d5 (Surr) - RE	*34*		*10 - 120*
Terphenyl-d14 (Surr) - RE	*108*		*13 - 120*

Lab Sample ID: 490-85780-5 MSD
Matrix: Water
Analysis Batch: 279300

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 277998

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene - RE	0.29	U H	35.7	30.9	H	ug/L		87	46 - 120	7	31
1,2,4,5-Tetrachlorobenzene - RE	1.9	U H	35.7	32.9	H	ug/L		92	10 - 200	8	50
2,3,4,6-Tetrachlorophenol - RE	6.2	U H	35.7	37.6	H	ug/L		105	10 - 200	8	50
2,4,5-Trichlorophenol - RE	6.3	U H	35.7	34.4	H	ug/L		96	40 - 129	7	34
2,4,6-Trichlorophenol - RE	6.1	U H	35.7	33.2	H	ug/L		93	39 - 135	7	40
2,4-Dichlorophenol - RE	5.0	U H	35.7	31.5	H	ug/L		88	38 - 120	6	30
2,4-Dimethylphenol - RE	3.8	U H	35.7	27.1	H	ug/L		76	11 - 130	1	48

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Lab Sample ID: 490-85780-5 MSD
Matrix: Water
Analysis Batch: 279300

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 277998

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrophenol - RE	5.8	J H	71.4	60.3	H	ug/L		76	10 - 176	3	31
2,4-Dinitrotoluene - RE	2.9	U H	35.7	33.6	H	ug/L		94	46 - 134	7	26
2,6-Dinitrotoluene - RE	2.1	U H	35.7	33.0	H	ug/L		92	54 - 128	7	29
2-Chloronaphthalene - RE	2.5	U H	35.7	30.0	H	ug/L		84	39 - 120	7	36
2-Chlorophenol - RE	4.3	U H	35.7	28.7	H	ug/L		80	40 - 120	9	46
2-Methylnaphthalene - RE	0.36	U H	35.7	29.9	H	ug/L		84	31 - 120	7	35
2-Methylphenol - RE	2.1	U H	35.7	26.2	H	ug/L		73	36 - 120	9	32
2-Nitroaniline - RE	3.3	U H	35.7	31.9	H	ug/L		89	46 - 131	6	24
2-Nitrophenol - RE	4.7	U H	35.7	32.8	H	ug/L		92	32 - 120	7	31
3,3'-Dichlorobenzidine - RE	2.9	U H	35.7	32.0	H	ug/L		89	10 - 130	6	30
3 & 4 Methylphenol - RE	2.0	U H	35.7	23.8	H	ug/L		67	32 - 120	9	34
3-Nitroaniline - RE	2.4	U H	35.7	29.3	H	ug/L		82	38 - 121	7	26
4,6-Dinitro-2-methylphenol - RE	8.3	U H	71.4	68.8	H	ug/L		96	10 - 157	6	34
4-Bromophenyl phenyl ether - RE	2.4	U H	35.7	33.6	H	ug/L		94	47 - 127	8	29
4-Chloro-3-methylphenol - RE	4.0	U H	35.7	31.4	H	ug/L		88	38 - 120	8	22
4-Chloroaniline - RE	3.8	U H	35.7	28.4	H	ug/L		80	35 - 120	5	26
4-Chlorophenyl phenyl ether - RE	2.5	U H	35.7	31.7	H	ug/L		89	50 - 120	7	29
4-Nitroaniline - RE	2.8	U H	35.7	31.0	H	ug/L		87	47 - 124	6	26
4-Nitrophenol - RE	4.8	U H	71.4	29.8	H	ug/L		42	10 - 120	4	38
Acenaphthylene - RE	0.31	U H	35.7	29.5	H	ug/L		83	48 - 120	6	31
Acetophenone - RE	2.1	U H	35.7	30.0	H	ug/L		84	10 - 200	9	50
Anthracene - RE	0.34	U H	35.7	32.1	H	ug/L		90	56 - 130	7	28
Benzaldehyde - RE	5.1	U H *	35.7	63.5	H	ug/L		178	10 - 200	8	50
Benzo[g,h,i]perylene - RE	0.55	U H	35.7	33.5	H	ug/L		94	48 - 137	7	27
Benzo[k]fluoranthene - RE	0.33	U H	35.7	31.0	H	ug/L		87	44 - 134	5	32
Bis(2-chloroethoxy)methane - RE	2.8	U H	35.7	28.1	H	ug/L		79	41 - 120	6	31
Bis(2-chloroethyl)ether - RE	2.5	U H	35.7	27.6	H	ug/L		77	42 - 120	4	38
Butyl benzyl phthalate - RE	2.2	U H	35.7	35.4	H	ug/L		99	51 - 146	6	31
Bis(2-ethylhexyl) phthalate - RE	5.4	U H	35.7	35.7	H	ug/L		100	44 - 138	7	28
Carbazole - RE	2.5	U H	35.7	31.5	H	ug/L		88	53 - 123	6	29
Caprolactam - RE	2.1	U H	35.7	9.11	H	ug/L		26	10 - 200	0	50
Chrysene - RE	0.29	U H	35.7	31.3	H	ug/L		88	54 - 123	7	27
Dibenz(a,h)anthracene - RE	0.40	U H	35.7	36.1	H	ug/L		101	50 - 136	7	28
Dibenzofuran - RE	2.6	U H	35.7	30.1	H	ug/L		84	50 - 120	7	29
Diethyl phthalate - RE	2.7	U H	35.7	29.9	H	ug/L		84	53 - 128	6	28
Dimethyl phthalate - RE	2.8	U H	35.7	31.0	H	ug/L		87	53 - 127	7	27
Di-n-butyl phthalate - RE	2.2	U H	35.7	34.6	H	ug/L		97	54 - 140	6	27
Fluoranthene - RE	0.29	U H	35.7	32.3	H	ug/L		90	56 - 120	5	28
Fluorene - RE	0.29	U H	35.7	31.1	H	ug/L		87	52 - 120	8	28
Hexachlorocyclopentadiene - RE	1.6	U H	35.7	31.9	H	ug/L		89	10 - 120	7	43
Hexachloroethane - RE	1.7	U H	35.7	29.7	H	ug/L		83	26 - 120	8	45
Indeno[1,2,3-cd]pyrene - RE	0.37	U H	35.7	33.0	H	ug/L		93	50 - 136	6	27
Isophorone - RE	2.8	U H	35.7	30.1	H	ug/L		84	42 - 120	7	31
Naphthalene - RE	0.33	U H	35.7	30.6	H	ug/L		86	32 - 120	8	37
Nitrobenzene - RE	2.4	U H	35.7	30.4	H	ug/L		85	36 - 120	6	28
N-Nitrosodi-n-propylamine - RE	3.0	U H	35.7	29.8	H	ug/L		83	50 - 121	8	37
N-Nitrosodiphenylamine - RE	3.2	U H	71.4	61.1	H	ug/L		86	45 - 149	5	26
Phenanthrene - RE	0.38	U H	35.7	30.2	H	ug/L		85	53 - 120	7	26

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Lab Sample ID: 490-85780-5 MSD
Matrix: Water
Analysis Batch: 279300

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 277998

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol - RE	1.3	U H	35.7	12.0	H	ug/L		34	10 - 120	8	42
Pyrene - RE	0.31	U H	35.7	34.5	H	ug/L		97	50 - 129	7	29
Diphenyl - RE	2.0	U H	35.7	29.6	H	ug/L		83	10 - 200	6	50
Di-n-octyl phthalate - RE	2.2	U H	35.7	34.1	H	ug/L		95	50 - 142	5	28
2,2'-oxybis[1-chloropropane] - RE	2.5	U H	35.7	26.2	H	ug/L		73	44 - 120	6	36
Atrazine - RE	2.6	U H	35.7	37.3	H	ug/L		105	10 - 200	7	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr) - RE	*112*		*10 - 120*
2-Fluorobiphenyl (Surr) - RE	*92*		*29 - 120*
2-Fluorophenol (Surr) - RE	*54*		*10 - 120*
Nitrobenzene-d5 (Surr) - RE	*96*		*27 - 120*
Phenol-d5 (Surr) - RE	*37*		*10 - 120*
Terphenyl-d14 (Surr) - RE	*117*		*13 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 490-276884/1-A
Matrix: Water
Analysis Batch: 277406

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276884

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 14:48	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 14:48	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/27/15 16:15	08/29/15 14:48	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/27/15 16:15	08/29/15 14:48	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/27/15 16:15	08/29/15 14:48	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/27/15 16:15	08/29/15 14:48	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/27/15 16:15	08/29/15 14:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*95*		*10 - 120*	*08/27/15 16:15*	*08/29/15 14:48*	*1*
2-Fluorobiphenyl (Surr)	*85*		*29 - 120*	*08/27/15 16:15*	*08/29/15 14:48*	*1*
Nitrobenzene-d5	*99*		*27 - 120*	*08/27/15 16:15*	*08/29/15 14:48*	*1*
Terphenyl-d14	*100*		*13 - 120*	*08/27/15 16:15*	*08/29/15 14:48*	*1*
2-Fluorophenol	*63*		*10 - 120*	*08/27/15 16:15*	*08/29/15 14:48*	*1*
Phenol-d5	*44*		*10 - 120*	*08/27/15 16:15*	*08/29/15 14:48*	*1*

Lab Sample ID: LCS 490-276884/2-A
Matrix: Water
Analysis Batch: 277406

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276884

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.816		ug/L		102	57 - 120
Benzo[a]pyrene	0.800	0.720		ug/L		90	57 - 124
Benzo[b]fluoranthene	0.800	0.758		ug/L		95	51 - 125

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 490-276884/2-A
Matrix: Water
Analysis Batch: 277406

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276884

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobenzene	0.800	0.618		ug/L		77	48 - 131
Hexachlorobutadiene	0.800	0.557		ug/L		70	28 - 120
N-Nitrosodimethylamine	0.800	0.390	J	ug/L		49	20 - 120
Pentachlorophenol	1.60	1.11		ug/L		69	21 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*97*		*10 - 120*
2-Fluorobiphenyl (Surr)	*81*		*29 - 120*
Nitrobenzene-d5	*94*		*27 - 120*
Terphenyl-d14	*101*		*13 - 120*
2-Fluorophenol	*59*		*10 - 120*
Phenol-d5	*40*		*10 - 120*

Lab Sample ID: 490-85780-5 MS
Matrix: Water
Analysis Batch: 277406

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 276884

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol	*85*		*10 - 120*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*
Nitrobenzene-d5	*76*		*27 - 120*
Terphenyl-d14	*84*		*13 - 120*
2-Fluorophenol	*46*		*10 - 120*
Phenol-d5	*32*		*10 - 120*

Lab Sample ID: 490-85780-5 MSD
Matrix: Water
Analysis Batch: 277406

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 276884

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*90*		*10 - 120*
2-Fluorobiphenyl (Surr)	*77*		*29 - 120*
Nitrobenzene-d5	*82*		*27 - 120*
Terphenyl-d14	*90*		*13 - 120*
2-Fluorophenol	*49*		*10 - 120*
Phenol-d5	*34*		*10 - 120*

Lab Sample ID: MB 490-277972/1-A
Matrix: Water
Analysis Batch: 278060

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 12:12	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 12:12	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 12:12	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		09/01/15 05:42	09/01/15 12:12	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		09/01/15 05:42	09/01/15 12:12	1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 490-277972/1-A
Matrix: Water
Analysis Batch: 278060

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		09/01/15 05:42	09/01/15 12:12	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		09/01/15 05:42	09/01/15 12:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*63*		*10 - 120*	*09/01/15 05:42*	*09/01/15 12:12*	*1*
2-Fluorobiphenyl (Surr)	*64*		*29 - 120*	*09/01/15 05:42*	*09/01/15 12:12*	*1*
Nitrobenzene-d5	*63*		*27 - 120*	*09/01/15 05:42*	*09/01/15 12:12*	*1*
Terphenyl-d14	*77*		*13 - 120*	*09/01/15 05:42*	*09/01/15 12:12*	*1*
2-Fluorophenol	*50*		*10 - 120*	*09/01/15 05:42*	*09/01/15 12:12*	*1*
Phenol-d5	*34*		*10 - 120*	*09/01/15 05:42*	*09/01/15 12:12*	*1*

Lab Sample ID: LCS 490-277972/2-A
Matrix: Water
Analysis Batch: 278060

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.780		ug/L		97	57 - 120
Benzo[a]pyrene	0.800	0.648		ug/L		81	57 - 124
Benzo[b]fluoranthene	0.800	0.613		ug/L		77	51 - 125
Hexachlorobenzene	0.800	0.573		ug/L		72	48 - 131
Hexachlorobutadiene	0.800	0.570		ug/L		71	28 - 120
N-Nitrosodimethylamine	0.800	0.428	J	ug/L		54	20 - 120
Pentachlorophenol	1.60	1.05		ug/L		66	21 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*81*		*10 - 120*
2-Fluorobiphenyl (Surr)	*74*		*29 - 120*
Nitrobenzene-d5	*85*		*27 - 120*
Terphenyl-d14	*86*		*13 - 120*
2-Fluorophenol	*57*		*10 - 120*
Phenol-d5	*41*		*10 - 120*

Lab Sample ID: LCSD 490-277972/3-A
Matrix: Water
Analysis Batch: 278060

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 277972

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	0.621		ug/L		78	57 - 120	23	27
Benzo[a]pyrene	0.800	0.549		ug/L		69	57 - 124	16	27
Benzo[b]fluoranthene	0.800	0.474		ug/L		59	51 - 125	26	39
Hexachlorobenzene	0.800	0.456		ug/L		57	48 - 131	23	28
Hexachlorobutadiene	0.800	0.423		ug/L		53	28 - 120	30	30
N-Nitrosodimethylamine	0.800	0.310	J	ug/L		39	20 - 120	32	32
Pentachlorophenol	1.60	0.669	*	ug/L		42	21 - 150	44	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*64*		*10 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 490-277972/3-A
Matrix: Water
Analysis Batch: 278060

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 277972

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*55*		*29 - 120*
Nitrobenzene-d5	*65*		*27 - 120*
Terphenyl-d14	*65*		*13 - 120*
2-Fluorophenol	*41*		*10 - 120*
Phenol-d5	*29*		*10 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - RE

Lab Sample ID: 490-85780-5 MS
Matrix: Water
Analysis Batch: 278060

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 277972

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene - RE	0.023	U H	0.690	0.536	H	ug/L		78	57 - 122
Benzo[a]pyrene - RE	0.023	U H	0.690	0.452	H	ug/L		66	46 - 138
Benzo[b]fluoranthene - RE	0.023	U H	0.690	0.433	H	ug/L		63	45 - 138
Hexachlorobenzene - RE	0.013	U H	0.690	0.394	H	ug/L		57	48 - 131
Hexachlorobutadiene - RE	0.19	U H	0.690	0.424	H	ug/L		61	28 - 120
N-Nitrosodimethylamine - RE	0.19	U H	0.690	0.286	J H	ug/L		42	10 - 200
Pentachlorophenol - RE	0.093	U H *	1.38	0.965	H	ug/L		70	21 - 159

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol - RE	*71*		*10 - 120*
2-Fluorobiphenyl (Surr) - RE	*59*		*29 - 120*
Nitrobenzene-d5 - RE	*69*		*27 - 120*
Terphenyl-d14 - RE	*67*		*13 - 120*
2-Fluorophenol - RE	*43*		*10 - 120*
Phenol-d5 - RE	*29*		*10 - 120*

Lab Sample ID: 490-85780-5 MSD
Matrix: Water
Analysis Batch: 278060

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 277972

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene - RE	0.023	U H	0.690	0.609	H	ug/L		88	57 - 122	13	27
Benzo[a]pyrene - RE	0.023	U H	0.690	0.513	H	ug/L		74	46 - 138	13	27
Benzo[b]fluoranthene - RE	0.023	U H	0.690	0.481	H	ug/L		70	45 - 138	10	39
Hexachlorobenzene - RE	0.013	U H	0.690	0.416	H	ug/L		60	48 - 131	5	28
Hexachlorobutadiene - RE	0.19	U H	0.690	0.393	H	ug/L		57	28 - 120	8	30
N-Nitrosodimethylamine - RE	0.19	U H	0.690	0.276	J H	ug/L		40	10 - 200	4	32
Pentachlorophenol - RE	0.093	U H *	1.38	0.997	H	ug/L		72	21 - 159	3	31

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol - RE	*75*		*10 - 120*
2-Fluorobiphenyl (Surr) - RE	*57*		*29 - 120*
Nitrobenzene-d5 - RE	*72*		*27 - 120*
Terphenyl-d14 - RE	*79*		*13 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - RE (Continued)

Lab Sample ID: 490-85780-5 MSD
Matrix: Water
Analysis Batch: 278060

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 277972

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorophenol - RE	*41*		*10 - 120*
Phenol-d5 - RE	*28*		*10 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-278718/1-A
Matrix: Water
Analysis Batch: 279109

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 278718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/03/15 06:55	09/04/15 14:15	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/03/15 06:55	09/04/15 14:15	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/03/15 06:55	09/04/15 14:15	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/03/15 06:55	09/04/15 14:15	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/03/15 06:55	09/04/15 14:15	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/03/15 06:55	09/04/15 14:15	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/03/15 06:55	09/04/15 14:15	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/03/15 06:55	09/04/15 14:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*75*		*10 - 150*	*09/03/15 06:55*	*09/04/15 14:15*	*1*
Tetrachloro-m-xylene	*81*		*10 - 150*	*09/03/15 06:55*	*09/04/15 14:15*	*1*

Lab Sample ID: LCS 490-278718/2-A
Matrix: Water
Analysis Batch: 279109

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 278718

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	3.65		ug/L		91	23 - 139
PCB-1260	4.00	3.36		ug/L		84	36 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*96*		*10 - 150*
Tetrachloro-m-xylene	*94*		*10 - 150*

Lab Sample ID: 490-85780-5 MS
Matrix: Water
Analysis Batch: 279109

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 278718

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.37	U	3.45	2.75		ug/L		80	23 - 139
PCB-1260	0.16	U	3.45	2.54		ug/L		74	36 - 144

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*90*		*10 - 150*
Tetrachloro-m-xylene	*83*		*10 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 490-85780-5 MSD — **Client Sample ID: SW-11-082115**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 279109 — **Prep Batch: 278718**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.37	U	3.70	2.90		ug/L		78	23 - 139	5	50
PCB-1260	0.16	U	3.70	2.90		ug/L		78	36 - 144	14	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*97*		*10 - 150*
Tetrachloro-m-xylene	*80*		*10 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 490-278029/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 278029

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			08/31/15 14:19	1
Sulfate	0.60	U	1.00	0.60	mg/L			08/31/15 14:19	1

Lab Sample ID: LCS 490-278029/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 278029

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	97.02		mg/L		97	80 - 120
Sulfate	100	97.89		mg/L		98	80 - 120

Lab Sample ID: LCSD 490-278029/8 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 278029

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	96.71		mg/L		97	80 - 120	0	20
Sulfate	100	97.70		mg/L		98	80 - 120	0	20

Lab Sample ID: 490-85780-5 MS — **Client Sample ID: SW-11-082115**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 278029

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.08		100	97.38		mg/L		96	80 - 120
Sulfate	7.00		100	104.0		mg/L		97	80 - 120

Lab Sample ID: 490-85780-5 MSD — **Client Sample ID: SW-11-082115**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 278029

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.08		100	96.40		mg/L		95	80 - 120	1	20
Sulfate	7.00		100	102.8		mg/L		96	80 - 120	1	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 490-275892/1-A
Matrix: Water
Analysis Batch: 276615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275892

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/25/15 08:27	08/26/15 19:41	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/25/15 08:27	08/26/15 19:41	1
Calcium	0.13	U	1.0	0.13	mg/L		08/25/15 08:27	08/26/15 19:41	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Iron	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 19:41	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 19:41	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/25/15 08:27	08/26/15 19:41	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Potassium	0.13	U	1.0	0.13	mg/L		08/25/15 08:27	08/26/15 19:41	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/25/15 08:27	08/26/15 19:41	1
Sodium	0.13	U	1.0	0.13	mg/L		08/25/15 08:27	08/26/15 19:41	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/25/15 08:27	08/26/15 19:41	1
Vanadium	0.00145	J	0.0020	0.00010	mg/L		08/25/15 08:27	08/26/15 19:41	1
Zinc	0.010	U	0.025	0.010	mg/L		08/25/15 08:27	08/26/15 19:41	1

Lab Sample ID: MB 490-275892/1-A
Matrix: Water
Analysis Batch: 277043

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275892

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/25/15 08:27	08/27/15 13:51	1

Lab Sample ID: LCS 490-275892/2-A
Matrix: Water
Analysis Batch: 276615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275892

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	0.931		mg/L		93	80 - 120
Antimony	0.100	0.101		mg/L		101	80 - 120
Arsenic	0.100	0.0895		mg/L		89	80 - 120
Barium	0.100	0.0982		mg/L		98	80 - 120
Beryllium	0.100	0.0978		mg/L		98	80 - 120
Cadmium	0.100	0.0972		mg/L		97	80 - 120
Calcium	10.0	9.84		mg/L		98	80 - 120
Chromium	0.100	0.0984		mg/L		98	80 - 120
Cobalt	0.100	0.0999		mg/L		100	80 - 120
Copper	0.100	0.0936		mg/L		94	80 - 120
Iron	1.00	1.08		mg/L		108	80 - 120
Lead	0.100	0.0998		mg/L		100	80 - 120
Magnesium	10.0	9.61		mg/L		96	80 - 120
Manganese	0.100	0.102		mg/L		102	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-275892/2-A
Matrix: Water
Analysis Batch: 276615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275892

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	0.100	0.0980		mg/L		98	80 - 120
Potassium	10.0	10.12		mg/L		101	80 - 120
Silver	0.100	0.100		mg/L		100	80 - 120
Sodium	10.0	9.77		mg/L		98	80 - 120
Thallium	0.100	0.0960		mg/L		96	80 - 120
Vanadium	0.100	0.101		mg/L		101	80 - 120
Zinc	0.100	0.0836		mg/L		84	80 - 120

Lab Sample ID: LCS 490-275892/2-A
Matrix: Water
Analysis Batch: 277043

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275892

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	0.100	0.101		mg/L		101	80 - 120

Lab Sample ID: 490-85780-5 MS
Matrix: Water
Analysis Batch: 276615

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 275892

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.065		1.00	1.03		mg/L		97	75 - 125
Antimony	0.00050	U	0.100	0.101		mg/L		101	75 - 125
Arsenic	0.00050	U	0.100	0.0917		mg/L		92	75 - 125
Barium	0.0081		0.100	0.106		mg/L		98	75 - 125
Beryllium	0.00050	U	0.100	0.0968		mg/L		97	75 - 125
Cadmium	0.00040	U	0.100	0.0975		mg/L		98	75 - 125
Calcium	10.2		10.0	21.54		mg/L		113	75 - 125
Chromium	0.00050	U	0.100	0.102		mg/L		102	75 - 125
Cobalt	0.00050	U	0.100	0.102		mg/L		102	75 - 125
Copper	0.00050	U	0.100	0.0966		mg/L		97	75 - 125
Iron	0.17		1.00	1.30		mg/L		113	75 - 125
Lead	0.00020	U	0.100	0.0991		mg/L		99	75 - 125
Magnesium	2.8		10.0	12.83		mg/L		100	75 - 125
Manganese	0.022		0.100	0.128		mg/L		106	75 - 125
Nickel	0.00050	U	0.100	0.0999		mg/L		100	75 - 125
Potassium	0.58	J	10.0	11.19		mg/L		106	75 - 125
Silver	0.00050	U	0.100	0.0998		mg/L		100	75 - 125
Sodium	3.6		10.0	13.84		mg/L		102	75 - 125
Thallium	0.00079	J	0.100	0.0968		mg/L		96	75 - 125
Vanadium	0.0018	J B	0.100	0.105		mg/L		103	75 - 125
Zinc	0.010	U	0.100	0.0866		mg/L		87	75 - 125

Lab Sample ID: 490-85780-5 MS
Matrix: Water
Analysis Batch: 277043

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 275892

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	0.00060	U	0.100	0.104		mg/L		104	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85780-5 MSD
Matrix: Water
Analysis Batch: 276615

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 275892

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.065		1.00	1.02		mg/L		95	75 - 125	1	20
Antimony	0.00050	U	0.100	0.103		mg/L		103	75 - 125	2	20
Arsenic	0.00050	U	0.100	0.0921		mg/L		92	75 - 125	0	20
Barium	0.0081		0.100	0.108		mg/L		100	75 - 125	2	20
Beryllium	0.00050	U	0.100	0.0975		mg/L		97	75 - 125	1	20
Cadmium	0.00040	U	0.100	0.101		mg/L		101	75 - 125	3	20
Calcium	10.2		10.0	21.25		mg/L		111	75 - 125	1	20
Chromium	0.00050	U	0.100	0.101		mg/L		101	75 - 125	0	20
Cobalt	0.00050	U	0.100	0.104		mg/L		104	75 - 125	2	20
Copper	0.00050	U	0.100	0.0954		mg/L		95	75 - 125	1	20
Iron	0.17		1.00	1.30		mg/L		113	75 - 125	0	20
Lead	0.00020	U	0.100	0.102		mg/L		102	75 - 125	3	20
Magnesium	2.8		10.0	12.77		mg/L		99	75 - 125	0	20
Manganese	0.022		0.100	0.132		mg/L		110	75 - 125	3	20
Nickel	0.00050	U	0.100	0.102		mg/L		102	75 - 125	2	20
Potassium	0.58	J	10.0	11.13		mg/L		105	75 - 125	1	20
Silver	0.00050	U	0.100	0.102		mg/L		102	75 - 125	2	20
Sodium	3.6		10.0	13.70		mg/L		101	75 - 125	1	20
Thallium	0.00079	J	0.100	0.0996		mg/L		99	75 - 125	3	20
Vanadium	0.0018	J B	0.100	0.104		mg/L		102	75 - 125	1	20
Zinc	0.010	U	0.100	0.0889		mg/L		89	75 - 125	3	20

Lab Sample ID: 490-85780-5 MSD
Matrix: Water
Analysis Batch: 277043

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 275892

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium	0.00060	U	0.100	0.0991		mg/L		99	75 - 125	5	20

Lab Sample ID: MB 490-276511/1-B
Matrix: Water
Analysis Batch: 279070

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 276622

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/26/15 17:11	09/03/15 12:33	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/26/15 17:11	09/03/15 12:33	1
Calcium	0.13	U	1.0	0.13	mg/L		08/26/15 17:11	09/03/15 12:33	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Iron	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 12:33	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 12:33	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/26/15 17:11	09/03/15 12:33	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 490-276511/1-B
Matrix: Water
Analysis Batch: 279070

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 276622

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Potassium	0.13	U	1.0	0.13	mg/L		08/26/15 17:11	09/03/15 12:33	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/26/15 17:11	09/03/15 12:33	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/26/15 17:11	09/03/15 12:33	1
Sodium	0.13	U	1.0	0.13	mg/L		08/26/15 17:11	09/03/15 12:33	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/26/15 17:11	09/03/15 12:33	1
Vanadium	0.000637	J	0.0020	0.00010	mg/L		08/26/15 17:11	09/03/15 12:33	1
Zinc	0.010	U	0.025	0.010	mg/L		08/26/15 17:11	09/03/15 12:33	1

Lab Sample ID: LCS 490-276511/2-B
Matrix: Water
Analysis Batch: 279070

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 276622

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	0.973		mg/L		97	80 - 120
Antimony	0.100	0.103		mg/L		103	80 - 120
Arsenic	0.100	0.102		mg/L		102	80 - 120
Barium	0.100	0.101		mg/L		101	80 - 120
Beryllium	0.100	0.101		mg/L		101	80 - 120
Cadmium	0.100	0.100		mg/L		100	80 - 120
Calcium	10.0	10.18		mg/L		102	80 - 120
Chromium	0.100	0.107		mg/L		107	80 - 120
Cobalt	0.100	0.107		mg/L		107	80 - 120
Copper	0.100	0.0977		mg/L		98	80 - 120
Iron	1.00	1.06		mg/L		106	80 - 120
Lead	0.100	0.0979		mg/L		98	80 - 120
Magnesium	10.0	9.72		mg/L		97	80 - 120
Manganese	0.100	0.109		mg/L		109	80 - 120
Nickel	0.100	0.102		mg/L		102	80 - 120
Potassium	10.0	9.69		mg/L		97	80 - 120
Selenium	0.100	0.0988		mg/L		99	80 - 120
Silver	0.100	0.104		mg/L		104	80 - 120
Sodium	10.0	9.75		mg/L		98	80 - 120
Thallium	0.100	0.0993		mg/L		99	80 - 120
Vanadium	0.100	0.0990		mg/L		99	80 - 120
Zinc	0.100	0.0994		mg/L		99	80 - 120

Lab Sample ID: 490-85780-5 MS
Matrix: Water
Analysis Batch: 279070

Client Sample ID: SW-11-082115
Prep Type: Dissolved
Prep Batch: 276622

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.016	J	1.00	0.972		mg/L		96	75 - 125
Antimony	0.0011	J	0.100	0.105		mg/L		103	75 - 125
Arsenic	0.00050	U	0.100	0.0965		mg/L		97	75 - 125
Barium	0.0079		0.100	0.113		mg/L		105	75 - 125
Beryllium	0.00050	U	0.100	0.103		mg/L		103	75 - 125
Cadmium	0.00040	U	0.100	0.100		mg/L		100	75 - 125
Calcium	9.8		10.0	19.22		mg/L		94	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85780-5 MS
Matrix: Water
Analysis Batch: 279070

Client Sample ID: SW-11-082115
Prep Type: Dissolved
Prep Batch: 276622

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.00050	U	0.100	0.0998		mg/L		100	75 - 125
Cobalt	0.00050	U	0.100	0.0996		mg/L		100	75 - 125
Copper	0.00077	J	0.100	0.0976		mg/L		97	75 - 125
Iron	0.063		1.00	1.06		mg/L		99	75 - 125
Lead	0.00020	U	0.100	0.0986		mg/L		99	75 - 125
Magnesium	2.9		10.0	12.24		mg/L		94	75 - 125
Manganese	0.015		0.100	0.115		mg/L		100	75 - 125
Nickel	0.00052	J	0.100	0.0991		mg/L		99	75 - 125
Potassium	0.58	J	10.0	10.06		mg/L		95	75 - 125
Selenium	0.00060	U	0.100	0.0917		mg/L		92	75 - 125
Silver	0.00050	U	0.100	0.103		mg/L		103	75 - 125
Sodium	3.6		10.0	13.07		mg/L		95	75 - 125
Thallium	0.00068	J	0.100	0.102		mg/L		102	75 - 125
Vanadium	0.0011	J B	0.100	0.0980		mg/L		97	75 - 125
Zinc	0.010	U	0.100	0.0942		mg/L		94	75 - 125

Lab Sample ID: 490-85780-5 MSD
Matrix: Water
Analysis Batch: 279070

Client Sample ID: SW-11-082115
Prep Type: Dissolved
Prep Batch: 276622

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.016	J	1.00	1.00		mg/L		99	75 - 125	3	20
Antimony	0.0011	J	0.100	0.0976		mg/L		96	75 - 125	7	20
Arsenic	0.00050	U	0.100	0.0996		mg/L		100	75 - 125	3	20
Barium	0.0079		0.100	0.105		mg/L		97	75 - 125	7	20
Beryllium	0.00050	U	0.100	0.0986		mg/L		99	75 - 125	4	20
Cadmium	0.00040	U	0.100	0.104		mg/L		104	75 - 125	3	20
Calcium	9.8		10.0	19.66		mg/L		98	75 - 125	2	20
Chromium	0.00050	U	0.100	0.102		mg/L		102	75 - 125	2	20
Cobalt	0.00050	U	0.100	0.102		mg/L		102	75 - 125	3	20
Copper	0.00077	J	0.100	0.100		mg/L		99	75 - 125	2	20
Iron	0.063		1.00	1.08		mg/L		101	75 - 125	2	20
Lead	0.00020	U	0.100	0.0918		mg/L		92	75 - 125	7	20
Magnesium	2.9		10.0	12.66		mg/L		98	75 - 125	3	20
Manganese	0.015		0.100	0.118		mg/L		103	75 - 125	2	20
Nickel	0.00052	J	0.100	0.102		mg/L		102	75 - 125	3	20
Potassium	0.58	J	10.0	10.31		mg/L		97	75 - 125	2	20
Selenium	0.00060	U	0.100	0.0941		mg/L		94	75 - 125	3	20
Silver	0.00050	U	0.100	0.108		mg/L		108	75 - 125	4	20
Sodium	3.6		10.0	13.59		mg/L		100	75 - 125	4	20
Thallium	0.00068	J	0.100	0.0970		mg/L		96	75 - 125	5	20
Vanadium	0.0011	J B	0.100	0.102		mg/L		101	75 - 125	4	20
Zinc	0.010	U	0.100	0.0964		mg/L		96	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 490-277871/1-A
Matrix: Water
Analysis Batch: 278012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277871

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:08	08/31/15 21:37	1

Lab Sample ID: LCS 490-277871/2-A
Matrix: Water
Analysis Batch: 278012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277871

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.00100		mg/L		100	80 - 120

Lab Sample ID: 490-85780-1 MS
Matrix: Water
Analysis Batch: 278012

Client Sample ID: SW-PAB-03-082115
Prep Type: Total/NA
Prep Batch: 277871

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000996		mg/L		100	75 - 125

Lab Sample ID: 490-85780-1 MSD
Matrix: Water
Analysis Batch: 278012

Client Sample ID: SW-PAB-03-082115
Prep Type: Total/NA
Prep Batch: 277871

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.00101		mg/L		101	75 - 125	1	20

Lab Sample ID: MB 490-277875/1-A
Matrix: Water
Analysis Batch: 278012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277875

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 16:16	08/31/15 22:45	1

Lab Sample ID: LCS 490-277875/2-A
Matrix: Water
Analysis Batch: 278012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277875

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000991		mg/L		99	80 - 120

Lab Sample ID: 490-85780-5 MS
Matrix: Water
Analysis Batch: 278012

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 277875

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.00103		mg/L		103	75 - 125

Lab Sample ID: 490-85780-5 MSD
Matrix: Water
Analysis Batch: 278012

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 277875

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000982		mg/L		98	75 - 125	5	20

Lab Sample ID: MB 490-276971/1-B
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 277394

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 01:24	1

Lab Sample ID: LCS 490-276971/2-B
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 277394

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000919		mg/L		92	80 - 120

Lab Sample ID: 490-86022-E-1-K MS
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 277394

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000984		mg/L		98	75 - 125

Lab Sample ID: 490-86022-E-1-L MSD
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 277394

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.00102		mg/L		102	75 - 125	3	20

Lab Sample ID: MB 490-276970/1-B
Matrix: Water
Analysis Batch: 277919

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 277396

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 19:51	08/31/15 16:29	1

Lab Sample ID: LCS 490-276970/2-B
Matrix: Water
Analysis Batch: 277919

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 277396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000952		mg/L		95	80 - 120

Lab Sample ID: 490-85780-5 MS
Matrix: Water
Analysis Batch: 277919

Client Sample ID: SW-11-082115
Prep Type: Dissolved
Prep Batch: 277396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000923		mg/L		92	75 - 125

Lab Sample ID: 490-85780-5 MSD
Matrix: Water
Analysis Batch: 277919

Client Sample ID: SW-11-082115
Prep Type: Dissolved
Prep Batch: 277396

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.000913		mg/L		91	75 - 125	1	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 490-276133/1-A
Matrix: Water
Analysis Batch: 276914

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276133

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/25/15 13:44	08/27/15 11:23	1

Lab Sample ID: LCS 490-276133/2-A
Matrix: Water
Analysis Batch: 276914

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276133

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0964		mg/L		96	90 - 110

Lab Sample ID: 490-85779-F-10-C MS
Matrix: Water
Analysis Batch: 276914

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 276133

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1	0.100	0.0685	F1	mg/L		69	70 - 130

Lab Sample ID: 490-85779-F-10-D MSD
Matrix: Water
Analysis Batch: 276914

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 276133

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1	0.100	0.0713		mg/L		71	70 - 130	4	46

Lab Sample ID: 490-85780-5 MS
Matrix: Water
Analysis Batch: 276914

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 276133

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1	0.100	0.0686	F1	mg/L		69	70 - 130

Lab Sample ID: 490-85780-5 MSD
Matrix: Water
Analysis Batch: 276914

Client Sample ID: SW-11-082115
Prep Type: Total/NA
Prep Batch: 276133

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1	0.100	0.0745		mg/L		75	70 - 130	8	46

Lab Sample ID: 490-85779-F-9-B DU
Matrix: Water
Analysis Batch: 276914

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 276133

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.0070	U	0.0070	U	mg/L		NC	20

Lab Sample ID: 490-85780-6 DU
Matrix: Water
Analysis Batch: 276914

Client Sample ID: SW-PAB-00-082115
Prep Type: Total/NA
Prep Batch: 276133

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.0070	U	0.0070	U	mg/L		NC	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 490-276595/16
Matrix: Water
Analysis Batch: 276595

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/25/15 17:40	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/25/15 17:40	1

Lab Sample ID: MB 490-276595/44
Matrix: Water
Analysis Batch: 276595

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/25/15 20:19	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/25/15 20:19	1

Lab Sample ID: LCS 490-276595/17
Matrix: Water
Analysis Batch: 276595

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	100	91.30		mg/L		91	90 - 110

Lab Sample ID: LCS 490-276595/45
Matrix: Water
Analysis Batch: 276595

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	100	93.83		mg/L		94	90 - 110

Lab Sample ID: LCSD 490-276595/46
Matrix: Water
Analysis Batch: 276595

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Alkalinity as CaCO3	100	93.19		mg/L		93	90 - 110	1	20

Lab Sample ID: 490-85673-C-1 DU
Matrix: Water
Analysis Batch: 276595

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	U	mg/L		NC	20
Total Alkalinity as CaCO3	462		465.7		mg/L		0.8	20

Lab Sample ID: 490-85673-D-4 DU
Matrix: Water
Analysis Batch: 276595

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	U	mg/L		NC	20
Total Alkalinity as CaCO3	5.0	U	5.0	U	mg/L		NC	20

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 490-85689-R-1 DU
Matrix: Water
Analysis Batch: 276595

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	751			761.8		mg/L				1	20
Total Alkalinity as CaCO3	751			761.8		mg/L				1	20

Lab Sample ID: 490-85780-5 DU
Matrix: Water
Analysis Batch: 276595

Client Sample ID: SW-11-082115
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	30.6			32.78		mg/L				7	20
Total Alkalinity as CaCO3	30.6			32.78		mg/L				7	20

GC/MS VOA

Analysis Batch: 276673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Total/NA	Water	8260C SIM	
490-85780-2	SW-PAB-02-082115	Total/NA	Water	8260C SIM	
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	8260C SIM	
490-85780-4	SW-PAB-01-082115	Total/NA	Water	8260C SIM	
LCS 490-276673/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-276673/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-276673/7	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 277754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1 - RE	SW-PAB-03-082115	Total/NA	Water	8260C SIM	
490-85780-2 - RE	SW-PAB-02-082115	Total/NA	Water	8260C SIM	
490-85780-3 - RE	SW-PAB-01A-082115	Total/NA	Water	8260C SIM	
490-85780-4 - RE	SW-PAB-01-082115	Total/NA	Water	8260C SIM	
490-85780-5	SW-11-082115	Total/NA	Water	8260C SIM	
490-85780-6	SW-PAB-00-082115	Total/NA	Water	8260C SIM	
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	8260C SIM	
490-85780-9	TB-12-082115	Total/NA	Water	8260C SIM	
LCS 490-277754/10	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-277754/11	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-277754/26	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 278441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-5 MS	SW-11-082115	Total/NA	Water	8260C SIM	
490-85780-5 MSD	SW-11-082115	Total/NA	Water	8260C SIM	
490-85780-8	RW-9 (206-216)-082115	Total/NA	Water	8260C SIM	
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	8260C SIM	
LCS 490-278441/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-278441/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-278441/7	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 278444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Total/NA	Water	8260C	
490-85780-2	SW-PAB-02-082115	Total/NA	Water	8260C	
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	8260C	
490-85780-4	SW-PAB-01-082115	Total/NA	Water	8260C	
490-85780-5	SW-11-082115	Total/NA	Water	8260C	
490-85780-5 MS	SW-11-082115	Total/NA	Water	8260C	
490-85780-5 MSD	SW-11-082115	Total/NA	Water	8260C	
490-85780-6	SW-PAB-00-082115	Total/NA	Water	8260C	
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	8260C	
490-85780-8	RW-9 (206-216)-082115	Total/NA	Water	8260C	
490-85780-9	TB-12-082115	Total/NA	Water	8260C	
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	8260C	
LCS 490-278444/3	Lab Control Sample	Total/NA	Water	8260C	
MB 490-278444/6	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 276471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Total/NA	Water	3510C	
490-85780-2	SW-PAB-02-082115	Total/NA	Water	3510C	
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	3510C	
490-85780-4	SW-PAB-01-082115	Total/NA	Water	3510C	
490-85780-5	SW-11-082115	Total/NA	Water	3510C	
490-85780-5 MS	SW-11-082115	Total/NA	Water	3510C	
490-85780-5 MSD	SW-11-082115	Total/NA	Water	3510C	
490-85780-6	SW-PAB-00-082115	Total/NA	Water	3510C	
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	3510C	
490-85780-8	RW-9 (206-216)-082115	Total/NA	Water	3510C	
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	3510C	
LCS 490-276471/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-276471/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 276721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Total/NA	Water	8270D	276471
490-85780-2	SW-PAB-02-082115	Total/NA	Water	8270D	276471
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	8270D	276471
490-85780-4	SW-PAB-01-082115	Total/NA	Water	8270D	276471
490-85780-5	SW-11-082115	Total/NA	Water	8270D	276471
490-85780-5 MS	SW-11-082115	Total/NA	Water	8270D	276471
490-85780-5 MSD	SW-11-082115	Total/NA	Water	8270D	276471
490-85780-6	SW-PAB-00-082115	Total/NA	Water	8270D	276471
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	8270D	276471
490-85780-8	RW-9 (206-216)-082115	Total/NA	Water	8270D	276471
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	8270D	276471
LCS 490-276471/2-A	Lab Control Sample	Total/NA	Water	8270D	276471
MB 490-276471/1-A	Method Blank	Total/NA	Water	8270D	276471

Prep Batch: 276884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Total/NA	Water	3510C	
490-85780-2	SW-PAB-02-082115	Total/NA	Water	3510C	
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	3510C	
490-85780-4	SW-PAB-01-082115	Total/NA	Water	3510C	
490-85780-5	SW-11-082115	Total/NA	Water	3510C	
490-85780-5 MS	SW-11-082115	Total/NA	Water	3510C	
490-85780-5 MSD	SW-11-082115	Total/NA	Water	3510C	
490-85780-6	SW-PAB-00-082115	Total/NA	Water	3510C	
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	3510C	
490-85780-8	RW-9 (206-216)-082115	Total/NA	Water	3510C	
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	3510C	
LCS 490-276884/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-276884/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 277406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Total/NA	Water	8270D SIM	276884
490-85780-2	SW-PAB-02-082115	Total/NA	Water	8270D SIM	276884
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	8270D SIM	276884

GC/MS Semi VOA (Continued)

Analysis Batch: 277406 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-4	SW-PAB-01-082115	Total/NA	Water	8270D SIM	276884
490-85780-5	SW-11-082115	Total/NA	Water	8270D SIM	276884
490-85780-5 MS	SW-11-082115	Total/NA	Water	8270D SIM	276884
490-85780-5 MSD	SW-11-082115	Total/NA	Water	8270D SIM	276884
490-85780-6	SW-PAB-00-082115	Total/NA	Water	8270D SIM	276884
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	8270D SIM	276884
490-85780-8	RW-9 (206-216)-082115	Total/NA	Water	8270D SIM	276884
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	8270D SIM	276884
LCS 490-276884/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	276884
MB 490-276884/1-A	Method Blank	Total/NA	Water	8270D SIM	276884

Prep Batch: 277972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-4 - RE	SW-PAB-01-082115	Total/NA	Water	3510C	
490-85780-5 - RE	SW-11-082115	Total/NA	Water	3510C	
490-85780-5 MS - RE	SW-11-082115	Total/NA	Water	3510C	
490-85780-5 MSD - RE	SW-11-082115	Total/NA	Water	3510C	
490-85780-8 - RE	RW-9 (206-216)-082115	Total/NA	Water	3510C	
490-85780-10 - RE	RW-2 (279-289)-082115	Total/NA	Water	3510C	
LCS 490-277972/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-277972/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 490-277972/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 277998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-5 - RE	SW-11-082115	Total/NA	Water	3510C	
490-85780-5 MS - RE	SW-11-082115	Total/NA	Water	3510C	
490-85780-5 MSD - RE	SW-11-082115	Total/NA	Water	3510C	
LCS 490-277998/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-277998/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 278060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-4 - RE	SW-PAB-01-082115	Total/NA	Water	8270D SIM	277972
490-85780-5 - RE	SW-11-082115	Total/NA	Water	8270D SIM	277972
490-85780-5 MS - RE	SW-11-082115	Total/NA	Water	8270D SIM	277972
490-85780-5 MSD - RE	SW-11-082115	Total/NA	Water	8270D SIM	277972
490-85780-8 - RE	RW-9 (206-216)-082115	Total/NA	Water	8270D SIM	277972
490-85780-10 - RE	RW-2 (279-289)-082115	Total/NA	Water	8270D SIM	277972
LCS 490-277972/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	277972
LCSD 490-277972/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	277972
MB 490-277972/1-A	Method Blank	Total/NA	Water	8270D SIM	277972

Analysis Batch: 279300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-5 - RE	SW-11-082115	Total/NA	Water	8270D	277998
490-85780-5 MS - RE	SW-11-082115	Total/NA	Water	8270D	277998
490-85780-5 MSD - RE	SW-11-082115	Total/NA	Water	8270D	277998
LCS 490-277998/2-A	Lab Control Sample	Total/NA	Water	8270D	277998
MB 490-277998/1-A	Method Blank	Total/NA	Water	8270D	277998

GC Semi VOA

Prep Batch: 278718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Total/NA	Water	3510C	
490-85780-2	SW-PAB-02-082115	Total/NA	Water	3510C	
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	3510C	
490-85780-4	SW-PAB-01-082115	Total/NA	Water	3510C	
490-85780-5	SW-11-082115	Total/NA	Water	3510C	
490-85780-5 MS	SW-11-082115	Total/NA	Water	3510C	
490-85780-5 MSD	SW-11-082115	Total/NA	Water	3510C	
490-85780-6	SW-PAB-00-082115	Total/NA	Water	3510C	
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	3510C	
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	3510C	
LCS 490-278718/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-278718/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 279109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Total/NA	Water	8082A	278718
490-85780-2	SW-PAB-02-082115	Total/NA	Water	8082A	278718
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	8082A	278718
490-85780-4	SW-PAB-01-082115	Total/NA	Water	8082A	278718
490-85780-5	SW-11-082115	Total/NA	Water	8082A	278718
490-85780-5 MS	SW-11-082115	Total/NA	Water	8082A	278718
490-85780-5 MSD	SW-11-082115	Total/NA	Water	8082A	278718
490-85780-6	SW-PAB-00-082115	Total/NA	Water	8082A	278718
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	8082A	278718
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	8082A	278718
LCS 490-278718/2-A	Lab Control Sample	Total/NA	Water	8082A	278718
MB 490-278718/1-A	Method Blank	Total/NA	Water	8082A	278718

HPLC/IC

Analysis Batch: 278029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Total/NA	Water	9056A	
490-85780-2	SW-PAB-02-082115	Total/NA	Water	9056A	
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	9056A	
490-85780-4	SW-PAB-01-082115	Total/NA	Water	9056A	
490-85780-5	SW-11-082115	Total/NA	Water	9056A	
490-85780-5 MS	SW-11-082115	Total/NA	Water	9056A	
490-85780-5 MSD	SW-11-082115	Total/NA	Water	9056A	
490-85780-6	SW-PAB-00-082115	Total/NA	Water	9056A	
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	9056A	
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	9056A	
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	9056A	
LCS 490-278029/7	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-278029/8	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-278029/6	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 275892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Total/NA	Water	3010A	
490-85780-2	SW-PAB-02-082115	Total/NA	Water	3010A	
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	3010A	
490-85780-4	SW-PAB-01-082115	Total/NA	Water	3010A	
490-85780-5	SW-11-082115	Total/NA	Water	3010A	
490-85780-5 MS	SW-11-082115	Total/NA	Water	3010A	
490-85780-5 MSD	SW-11-082115	Total/NA	Water	3010A	
490-85780-6	SW-PAB-00-082115	Total/NA	Water	3010A	
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	3010A	
490-85780-8	RW-9 (206-216)-082115	Total/NA	Water	3010A	
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	3010A	
LCS 490-275892/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-275892/1-A	Method Blank	Total/NA	Water	3010A	

Filtration Batch: 276511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Dissolved	Water	Filtration	
490-85780-2	SW-PAB-02-082115	Dissolved	Water	Filtration	
490-85780-3	SW-PAB-01A-082115	Dissolved	Water	Filtration	
490-85780-4	SW-PAB-01-082115	Dissolved	Water	Filtration	
490-85780-5	SW-11-082115	Dissolved	Water	Filtration	
490-85780-5 MS	SW-11-082115	Dissolved	Water	Filtration	
490-85780-5 MSD	SW-11-082115	Dissolved	Water	Filtration	
490-85780-6	SW-PAB-00-082115	Dissolved	Water	Filtration	
490-85780-7	RW-9A (85-95)-082115	Dissolved	Water	Filtration	
490-85780-10	RW-2 (279-289)-082115	Dissolved	Water	Filtration	
LCS 490-276511/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-276511/1-B	Method Blank	Dissolved	Water	Filtration	

Analysis Batch: 276615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Total/NA	Water	6020A	275892
490-85780-2	SW-PAB-02-082115	Total/NA	Water	6020A	275892
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	6020A	275892
490-85780-4	SW-PAB-01-082115	Total/NA	Water	6020A	275892
490-85780-5	SW-11-082115	Total/NA	Water	6020A	275892
490-85780-5 MS	SW-11-082115	Total/NA	Water	6020A	275892
490-85780-5 MSD	SW-11-082115	Total/NA	Water	6020A	275892
490-85780-6	SW-PAB-00-082115	Total/NA	Water	6020A	275892
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	6020A	275892
490-85780-8	RW-9 (206-216)-082115	Total/NA	Water	6020A	275892
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	6020A	275892
LCS 490-275892/2-A	Lab Control Sample	Total/NA	Water	6020A	275892
MB 490-275892/1-A	Method Blank	Total/NA	Water	6020A	275892

Prep Batch: 276622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Dissolved	Water	3005A	276511
490-85780-2	SW-PAB-02-082115	Dissolved	Water	3005A	276511
490-85780-3	SW-PAB-01A-082115	Dissolved	Water	3005A	276511
490-85780-4	SW-PAB-01-082115	Dissolved	Water	3005A	276511

Metals (Continued)

Prep Batch: 276622 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-5	SW-11-082115	Dissolved	Water	3005A	276511
490-85780-5 MS	SW-11-082115	Dissolved	Water	3005A	276511
490-85780-5 MSD	SW-11-082115	Dissolved	Water	3005A	276511
490-85780-6	SW-PAB-00-082115	Dissolved	Water	3005A	276511
490-85780-7	RW-9A (85-95)-082115	Dissolved	Water	3005A	276511
490-85780-10	RW-2 (279-289)-082115	Dissolved	Water	3005A	276511
LCS 490-276511/2-B	Lab Control Sample	Dissolved	Water	3005A	276511
MB 490-276511/1-B	Method Blank	Dissolved	Water	3005A	276511

Filtration Batch: 276970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Dissolved	Water	Filtration	
490-85780-2	SW-PAB-02-082115	Dissolved	Water	Filtration	
490-85780-3	SW-PAB-01A-082115	Dissolved	Water	Filtration	
490-85780-4	SW-PAB-01-082115	Dissolved	Water	Filtration	
490-85780-5	SW-11-082115	Dissolved	Water	Filtration	
490-85780-5 MS	SW-11-082115	Dissolved	Water	Filtration	
490-85780-5 MSD	SW-11-082115	Dissolved	Water	Filtration	
490-85780-6	SW-PAB-00-082115	Dissolved	Water	Filtration	
LCS 490-276970/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-276970/1-B	Method Blank	Dissolved	Water	Filtration	

Filtration Batch: 276971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-7	RW-9A (85-95)-082115	Dissolved	Water	Filtration	
490-85780-10	RW-2 (279-289)-082115	Dissolved	Water	Filtration	
490-86022-E-1-K MS	Matrix Spike	Dissolved	Water	Filtration	
490-86022-E-1-L MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	
LCS 490-276971/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-276971/1-B	Method Blank	Dissolved	Water	Filtration	

Analysis Batch: 277043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Total/NA	Water	6020A	275892
490-85780-2	SW-PAB-02-082115	Total/NA	Water	6020A	275892
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	6020A	275892
490-85780-4	SW-PAB-01-082115	Total/NA	Water	6020A	275892
490-85780-5	SW-11-082115	Total/NA	Water	6020A	275892
490-85780-5 MS	SW-11-082115	Total/NA	Water	6020A	275892
490-85780-5 MSD	SW-11-082115	Total/NA	Water	6020A	275892
490-85780-6	SW-PAB-00-082115	Total/NA	Water	6020A	275892
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	6020A	275892
490-85780-8	RW-9 (206-216)-082115	Total/NA	Water	6020A	275892
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	6020A	275892
LCS 490-275892/2-A	Lab Control Sample	Total/NA	Water	6020A	275892
MB 490-275892/1-A	Method Blank	Total/NA	Water	6020A	275892

Prep Batch: 277394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-7	RW-9A (85-95)-082115	Dissolved	Water	7470A	276971
490-85780-10	RW-2 (279-289)-082115	Dissolved	Water	7470A	276971

Metals (Continued)

Prep Batch: 277394 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86022-E-1-K MS	Matrix Spike	Dissolved	Water	7470A	276971
490-86022-E-1-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	276971
LCS 490-276971/2-B	Lab Control Sample	Dissolved	Water	7470A	276971
MB 490-276971/1-B	Method Blank	Dissolved	Water	7470A	276971

Prep Batch: 277396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Dissolved	Water	7470A	276970
490-85780-2	SW-PAB-02-082115	Dissolved	Water	7470A	276970
490-85780-3	SW-PAB-01A-082115	Dissolved	Water	7470A	276970
490-85780-4	SW-PAB-01-082115	Dissolved	Water	7470A	276970
490-85780-5	SW-11-082115	Dissolved	Water	7470A	276970
490-85780-5 MS	SW-11-082115	Dissolved	Water	7470A	276970
490-85780-5 MSD	SW-11-082115	Dissolved	Water	7470A	276970
490-85780-6	SW-PAB-00-082115	Dissolved	Water	7470A	276970
LCS 490-276970/2-B	Lab Control Sample	Dissolved	Water	7470A	276970
MB 490-276970/1-B	Method Blank	Dissolved	Water	7470A	276970

Analysis Batch: 277632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-7	RW-9A (85-95)-082115	Dissolved	Water	7470A	277394
490-85780-10	RW-2 (279-289)-082115	Dissolved	Water	7470A	277394
490-86022-E-1-K MS	Matrix Spike	Dissolved	Water	7470A	277394
490-86022-E-1-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	277394
LCS 490-276971/2-B	Lab Control Sample	Dissolved	Water	7470A	277394
MB 490-276971/1-B	Method Blank	Dissolved	Water	7470A	277394

Prep Batch: 277871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Total/NA	Water	7470A	
490-85780-1 MS	SW-PAB-03-082115	Total/NA	Water	7470A	
490-85780-1 MSD	SW-PAB-03-082115	Total/NA	Water	7470A	
490-85780-2	SW-PAB-02-082115	Total/NA	Water	7470A	
LCS 490-277871/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 490-277871/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 277874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-8	RW-9 (206-216)-082115	Total/NA	Water	6020A	275892
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	6020A	275892

Prep Batch: 277875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	7470A	
490-85780-4	SW-PAB-01-082115	Total/NA	Water	7470A	
490-85780-5	SW-11-082115	Total/NA	Water	7470A	
490-85780-5 MS	SW-11-082115	Total/NA	Water	7470A	
490-85780-5 MSD	SW-11-082115	Total/NA	Water	7470A	
490-85780-6	SW-PAB-00-082115	Total/NA	Water	7470A	
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	7470A	
490-85780-8	RW-9 (206-216)-082115	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 277875 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	7470A	
LCS 490-277875/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 490-277875/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 277919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Dissolved	Water	7470A	277396
490-85780-2	SW-PAB-02-082115	Dissolved	Water	7470A	277396
490-85780-3	SW-PAB-01A-082115	Dissolved	Water	7470A	277396
490-85780-4	SW-PAB-01-082115	Dissolved	Water	7470A	277396
490-85780-5	SW-11-082115	Dissolved	Water	7470A	277396
490-85780-5 MS	SW-11-082115	Dissolved	Water	7470A	277396
490-85780-5 MSD	SW-11-082115	Dissolved	Water	7470A	277396
490-85780-6	SW-PAB-00-082115	Dissolved	Water	7470A	277396
LCS 490-276970/2-B	Lab Control Sample	Dissolved	Water	7470A	277396
MB 490-276970/1-B	Method Blank	Dissolved	Water	7470A	277396

Analysis Batch: 278012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Total/NA	Water	7470A	277871
490-85780-1 MS	SW-PAB-03-082115	Total/NA	Water	7470A	277871
490-85780-1 MSD	SW-PAB-03-082115	Total/NA	Water	7470A	277871
490-85780-2	SW-PAB-02-082115	Total/NA	Water	7470A	277871
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	7470A	277875
490-85780-4	SW-PAB-01-082115	Total/NA	Water	7470A	277875
490-85780-5	SW-11-082115	Total/NA	Water	7470A	277875
490-85780-5 MS	SW-11-082115	Total/NA	Water	7470A	277875
490-85780-5 MSD	SW-11-082115	Total/NA	Water	7470A	277875
490-85780-6	SW-PAB-00-082115	Total/NA	Water	7470A	277875
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	7470A	277875
490-85780-8	RW-9 (206-216)-082115	Total/NA	Water	7470A	277875
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	7470A	277875
LCS 490-277871/2-A	Lab Control Sample	Total/NA	Water	7470A	277871
LCS 490-277875/2-A	Lab Control Sample	Total/NA	Water	7470A	277875
MB 490-277871/1-A	Method Blank	Total/NA	Water	7470A	277871
MB 490-277875/1-A	Method Blank	Total/NA	Water	7470A	277875

Analysis Batch: 279070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-1	SW-PAB-03-082115	Dissolved	Water	6020A	276622
490-85780-2	SW-PAB-02-082115	Dissolved	Water	6020A	276622
490-85780-3	SW-PAB-01A-082115	Dissolved	Water	6020A	276622
490-85780-4	SW-PAB-01-082115	Dissolved	Water	6020A	276622
490-85780-5	SW-11-082115	Dissolved	Water	6020A	276622
490-85780-5 MS	SW-11-082115	Dissolved	Water	6020A	276622
490-85780-5 MSD	SW-11-082115	Dissolved	Water	6020A	276622
490-85780-6	SW-PAB-00-082115	Dissolved	Water	6020A	276622
490-85780-7	RW-9A (85-95)-082115	Dissolved	Water	6020A	276622
490-85780-10	RW-2 (279-289)-082115	Dissolved	Water	6020A	276622
490-85780-10	RW-2 (279-289)-082115	Dissolved	Water	6020A	276622
LCS 490-276511/2-B	Lab Control Sample	Dissolved	Water	6020A	276622

Metals (Continued)

Analysis Batch: 279070 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-276511/1-B	Method Blank	Dissolved	Water	6020A	276622

General Chemistry

Prep Batch: 276133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-F-9-B DU	Duplicate	Total/NA	Water	9012B	
490-85779-F-10-C MS	Matrix Spike	Total/NA	Water	9012B	
490-85779-F-10-D MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	
490-85780-1	SW-PAB-03-082115	Total/NA	Water	9012B	
490-85780-2	SW-PAB-02-082115	Total/NA	Water	9012B	
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	9012B	
490-85780-4	SW-PAB-01-082115	Total/NA	Water	9012B	
490-85780-5	SW-11-082115	Total/NA	Water	9012B	
490-85780-5 MS	SW-11-082115	Total/NA	Water	9012B	
490-85780-5 MSD	SW-11-082115	Total/NA	Water	9012B	
490-85780-6	SW-PAB-00-082115	Total/NA	Water	9012B	
490-85780-6 DU	SW-PAB-00-082115	Total/NA	Water	9012B	
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	9012B	
490-85780-8	RW-9 (206-216)-082115	Total/NA	Water	9012B	
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	9012B	
LCS 490-276133/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 490-276133/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 276595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85673-C-1 DU	Duplicate	Total/NA	Water	SM 2320B	
490-85673-D-4 DU	Duplicate	Total/NA	Water	SM 2320B	
490-85689-R-1 DU	Duplicate	Total/NA	Water	SM 2320B	
490-85780-1	SW-PAB-03-082115	Total/NA	Water	SM 2320B	
490-85780-2	SW-PAB-02-082115	Total/NA	Water	SM 2320B	
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	SM 2320B	
490-85780-4	SW-PAB-01-082115	Total/NA	Water	SM 2320B	
490-85780-5	SW-11-082115	Total/NA	Water	SM 2320B	
490-85780-5 DU	SW-11-082115	Total/NA	Water	SM 2320B	
490-85780-6	SW-PAB-00-082115	Total/NA	Water	SM 2320B	
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	SM 2320B	
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	SM 2320B	
LCS 490-276595/17	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 490-276595/45	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 490-276595/46	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 490-276595/16	Method Blank	Total/NA	Water	SM 2320B	
MB 490-276595/44	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 276914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85779-F-9-B DU	Duplicate	Total/NA	Water	9012B	276133
490-85779-F-10-C MS	Matrix Spike	Total/NA	Water	9012B	276133
490-85779-F-10-D MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	276133
490-85780-1	SW-PAB-03-082115	Total/NA	Water	9012B	276133

General Chemistry (Continued)

Analysis Batch: 276914 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85780-2	SW-PAB-02-082115	Total/NA	Water	9012B	276133
490-85780-3	SW-PAB-01A-082115	Total/NA	Water	9012B	276133
490-85780-4	SW-PAB-01-082115	Total/NA	Water	9012B	276133
490-85780-5	SW-11-082115	Total/NA	Water	9012B	276133
490-85780-5 MS	SW-11-082115	Total/NA	Water	9012B	276133
490-85780-5 MSD	SW-11-082115	Total/NA	Water	9012B	276133
490-85780-6	SW-PAB-00-082115	Total/NA	Water	9012B	276133
490-85780-6 DU	SW-PAB-00-082115	Total/NA	Water	9012B	276133
490-85780-7	RW-9A (85-95)-082115	Total/NA	Water	9012B	276133
490-85780-8	RW-9 (206-216)-082115	Total/NA	Water	9012B	276133
490-85780-10	RW-2 (279-289)-082115	Total/NA	Water	9012B	276133
LCS 490-276133/2-A	Lab Control Sample	Total/NA	Water	9012B	276133
MB 490-276133/1-A	Method Blank	Total/NA	Water	9012B	276133

Client Sample ID: SW-PAB-03-082115

Date Collected: 08/21/15 10:30
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 18:31	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276673	08/27/15 20:07	RP	TAL NSH
Total/NA	Analysis	8260C SIM	RE	1	10 mL	10 mL	277754	08/31/15 20:06	RP	TAL NSH
Total/NA	Prep	3510C			280 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	280 mL	1 mL	276721	08/27/15 18:03	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 20:12	KKH	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	270 mL	1 mL	279109	09/04/15 17:25	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 20:19	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 13:09	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 20:21	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 14:32	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 16:41	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277871	08/31/15 16:08	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 21:42	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 13:44	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:38	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 19:23	BMC	TAL NSH

Client Sample ID: SW-PAB-02-082115

Date Collected: 08/21/15 11:25
Date Received: 08/22/15 10:45

Lab Sample ID: 490-85780-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 18:58	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276673	08/27/15 20:36	RP	TAL NSH
Total/NA	Analysis	8260C SIM	RE	1	10 mL	10 mL	277754	08/31/15 20:34	RP	TAL NSH
Total/NA	Prep	3510C			275 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	275 mL	1 mL	276721	08/27/15 18:27	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 20:39	KKH	TAL NSH
Total/NA	Prep	3510C			280 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	280 mL	1 mL	279109	09/04/15 17:41	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 20:43	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH

Client Sample ID: SW-PAB-02-082115

Lab Sample ID: 490-85780-2

Date Collected: 08/21/15 11:25

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 13:14	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 20:27	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 14:37	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 16:44	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277871	08/31/15 16:08	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 21:54	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 13:44	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:39	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 19:28	BMC	TAL NSH

Client Sample ID: SW-PAB-01A-082115

Lab Sample ID: 490-85780-3

Date Collected: 08/21/15 12:20

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 19:26	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276673	08/27/15 21:04	RP	TAL NSH
Total/NA	Analysis	8260C SIM	RE	1	10 mL	10 mL	277754	08/31/15 21:03	RP	TAL NSH
Total/NA	Prep	3510C			275 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	275 mL	1 mL	276721	08/27/15 18:51	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 21:05	KKH	TAL NSH
Total/NA	Prep	3510C			280 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	280 mL	1 mL	279109	09/04/15 17:56	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 21:07	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 13:19	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 20:33	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 14:43	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 16:46	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277875	08/31/15 16:16	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 23:02	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 13:44	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:40	SDL	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Client Sample ID: SW-PAB-01A-082115

Lab Sample ID: 490-85780-3

Date Collected: 08/21/15 12:20
Matrix: Water
Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 19:33	BMC	TAL NSH

Client Sample ID: SW-PAB-01-082115

Lab Sample ID: 490-85780-4

Date Collected: 08/21/15 12:45
Matrix: Water
Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 19:53	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	276673	08/27/15 21:33	RP	TAL NSH
Total/NA	Analysis	8260C SIM	RE	1	10 mL	10 mL	277754	08/31/15 21:31	RP	TAL NSH
Total/NA	Prep	3510C			285 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	285 mL	1 mL	276721	08/27/15 19:14	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 21:32	KKH	TAL NSH
Total/NA	Prep	3510C	RE		280 mL	1 mL	277972	09/01/15 05:42	ET	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	280 mL	1 mL	278060	09/01/15 21:19	BES	TAL NSH
Total/NA	Prep	3510C			290 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	290 mL	1 mL	279109	09/04/15 18:12	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 21:31	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 13:35	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 20:50	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 15:01	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 16:53	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277875	08/31/15 16:16	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 23:05	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 13:44	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:40	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 19:38	BMC	TAL NSH

Client Sample ID: SW-11-082115

Lab Sample ID: 490-85780-5

Date Collected: 08/21/15 13:10
Matrix: Water
Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 18:04	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	277754	08/31/15 22:00	RP	TAL NSH
Total/NA	Prep	3510C			275 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH

Client Sample ID: SW-11-082115

Lab Sample ID: 490-85780-5

Date Collected: 08/21/15 13:10

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D		1	275 mL	1 mL	276721	08/27/15 19:38	BES	TAL NSH
Total/NA	Prep	3510C	RE		280 mL	1 mL	277998	09/01/15 09:09	MRM	TAL NSH
Total/NA	Analysis	8270D	RE	1	280 mL	1 mL	279300	09/05/15 03:31	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 21:59	KKH	TAL NSH
Total/NA	Prep	3510C	RE		270 mL	1 mL	277972	09/01/15 05:42	ET	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	270 mL	1 mL	278060	09/01/15 19:57	BES	TAL NSH
Total/NA	Prep	3510C			290 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	290 mL	1 mL	279109	09/04/15 18:28	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 21:55	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 12:43	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 19:52	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 14:03	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 16:34	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277875	08/31/15 16:16	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 22:55	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 16:32	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:41	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 19:44	BMC	TAL NSH

Client Sample ID: SW-PAB-00-082115

Lab Sample ID: 490-85780-6

Date Collected: 08/21/15 13:50

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 20:20	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	277754	08/31/15 22:29	RP	TAL NSH
Total/NA	Prep	3510C			285 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	285 mL	1 mL	276721	08/27/15 20:49	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 23:18	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	279109	09/04/15 19:15	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 23:07	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 13:40	KKK	TAL NSH

Client Sample ID: SW-PAB-00-082115

Lab Sample ID: 490-85780-6

Date Collected: 08/21/15 13:50

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 20:56	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 15:06	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277396	08/27/15 19:51	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276970	08/27/15 19:51	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277919	08/31/15 16:56	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277875	08/31/15 16:16	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 23:07	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 16:32	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:44	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 21:48	BMC	TAL NSH

Client Sample ID: RW-9A (85-95)-082115

Lab Sample ID: 490-85780-7

Date Collected: 08/21/15 10:45

Matrix: Water

Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 20:47	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	277754	08/31/15 22:57	RP	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	270 mL	1 mL	276721	08/27/15 21:12	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/29/15 23:44	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	279109	09/04/15 19:31	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 23:31	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 13:45	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 21:02	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 15:12	LEG	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277394	08/27/15 21:10	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276971	08/27/15 21:10	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277632	08/30/15 02:27	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277875	08/31/15 16:16	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 23:10	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 17:05	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:45	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 19:54	BMC	TAL NSH

Client Sample ID: RW-9 (206-216)-082115

Lab Sample ID: 490-85780-8

Date Collected: 08/21/15 09:25
Matrix: Water
Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 21:15	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278441	09/02/15 15:34	RP	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	276721	08/27/15 21:35	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/30/15 00:11	KKH	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	277972	09/01/15 05:42	ET	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	278060	09/01/15 22:13	BES	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 21:07	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 15:18	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		20	50 mL	50 mL	277874	08/31/15 15:14	KKK	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277875	08/31/15 16:16	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 23:12	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 17:05	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:46	SDL	TAL NSH

Client Sample ID: TB-12-082115

Lab Sample ID: 490-85780-9

Date Collected: 08/21/15 01:00
Matrix: Water
Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 21:42	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	277754	08/31/15 17:14	RP	TAL NSH

Client Sample ID: RW-2 (279-289)-082115

Lab Sample ID: 490-85780-10

Date Collected: 08/21/15 13:45
Matrix: Water
Date Received: 08/22/15 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278444	09/02/15 22:09	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278441	09/02/15 16:02	RP	TAL NSH
Total/NA	Prep	3510C			255 mL	1 mL	276471	08/26/15 15:47	BGD	TAL NSH
Total/NA	Analysis	8270D		1	255 mL	1 mL	276721	08/27/15 21:59	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	276884	08/27/15 16:15	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	277406	08/30/15 00:37	KKH	TAL NSH
Total/NA	Prep	3510C	RE		250 mL	1 mL	277972	09/01/15 05:42	ET	TAL NSH
Total/NA	Analysis	8270D SIM	RE	1	250 mL	1 mL	278060	09/01/15 21:46	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	278718	09/03/15 06:55	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	279109	09/04/15 19:47	MGH	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278029	08/31/15 23:55	JHS	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	10 mL		278029	09/01/15 00:19	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 13:50	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	276622	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	276511	08/26/15 17:11	ZLN	TAL NSH
Dissolved	Analysis	6020A		5	50 mL	50 mL	279070	09/03/15 13:55	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	276615	08/26/15 21:13	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277043	08/27/15 15:24	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	275892	08/25/15 08:27	ZLN	TAL NSH
Total/NA	Analysis	6020A		20	50 mL	50 mL	277874	08/31/15 15:20	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277394	08/27/15 21:10	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276971	08/27/15 21:10	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277632	08/30/15 02:35	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	277875	08/31/15 16:16	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278012	08/31/15 23:14	BLG	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276133	08/25/15 17:05	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	276914	08/27/15 11:47	SDL	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	276595	08/25/15 20:02	BMC	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
9056A	Anions, Ion Chromatography	SW846	TAL NSH
6020A	Metals (ICP/MS)	SW846	TAL NSH
7470A	Mercury (CVAA)	SW846	TAL NSH
9012B	Cyanide, Total andor Amenable	SW846	TAL NSH
SM 2320B	Alkalinity	SM	TAL NSH

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85780-1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	TN965	09-30-15

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
8270D	3510C	Water	1,4-Dioxane
8270D	3510C	Water	1-Chloronaphthalene
8270D	3510C	Water	4,4'-DDD
8270D	3510C	Water	4,4'-DDE
8270D	3510C	Water	4,4'-DDT
8270D	3510C	Water	Alpha-Terpineol
8270D	3510C	Water	Dibenz[a,j]acridine
8270D	3510C	Water	Famphur
8270D	3510C	Water	Pentachloroethane
8270D	3510C	Water	p-Phenylene diamine

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total
8260C		Water	Dichlorobromomethane
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	1,4-Dioxane
8260C SIM		Water	Ethylene Dibromide
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-85780 Chain of Custody

Cooler Received/Opened On 8/22/2015 @ 10:45

1. Tracking # 3320 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 5.9 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) AOH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all *containers arrive in good condition (unbroken)*? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO..#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
85780

Cooler Received/Opened On 8/22/2015 @ 1045

1. Tracking # 3331 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960357

2. Temperature of rep. sample or temp blank when opened: 2.5 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO (NA)

4. Were custody seals on outside of cooler? YES (NO) NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? YES...(NO)...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...(NO)...NA

14. Was there a Trip Blank in this cooler? (YES)...NO...NA 8/22/15 HKG If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES...NO...(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES...(NO) Was a NCM generated? YES...(NO)...#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
85780
#1
A

Cooler Received/Opened On 8/22/2015 @ 10:45

1. Tracking # 3310 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 5.6 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO (NA)

4. Were custody seals on outside of cooler? YES (NO) NA

If yes, how many and where:

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) AOH 8/22/15

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...(NO)...NA

14. Was there a Trip Blank in this cooler? YES...(NO)...NA If multiple coolers, sequence # 3

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES...NO...(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES...(NO) Was a NCM generated? YES...(NO)...#

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
85780
#1
B

TestAmerica

9/21/2015

Client Information	Sampler: Robert Lautenberg	Lab PM: Brown, Shali	Carr	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
	Preservation Code:																					
1	SW-PAB-03-082115	8/21/15	10:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
2	SW-PAB-02-082115	8/21/15	11:25	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
3	SW-PAB-01A-082115	8/21/15	12:20	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
4	SW-PAB-01-082115	8/21/15	12:45	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
5	SW-11-082115 MS/MSD	8/21/15	13:10	G	Water	N	Y	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
6	SW-PAB-00-082115	8/21/15	13:50	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
7	RW-9A (85-95)-082115	8/21/15	10:45	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
8	RW-9 (206-216)-082115	8/21/15	09:25	G	Water	N	N	✓	✓	✓	✓	H	✓	H	✓	H	H					Limited sample volume, Please analyze if volume adequate
9	TB-12-082115	8/21/15	—	—	Water	N	N	✓	✓													
10	RW-2 (279-289)-082115	8/21/15	13:45	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
					Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/21/15 1440			8/21/15 1440	TA
2		8/21/15 1800	TA		8/21/15	TA
3		8/21/15	TA	5.9/2.5/5.8	8/22/15 0945	TAN

Custody Seals Intact: △ Yes △ No

Custody Seal No.: 3 Coolers

Cooler Temperature(s) °C and Other Remarks:

Brown, Shali

From: Roeper, Tim [Tim.Roeper@Cornerstoneeg.com]
Sent: Friday, September 04, 2015 6:19 AM
To: Brown, Shali
Subject: RE: 490-85780-1 sample 8 RW-9 (206-216)-082115 limited sample

Shali: Thanks for the heads up. We had difficulty getting sufficient volume from several of the wells and understood that this was a possibility.

Thanks again.

Tim

Timothy R. Roeper, P.G.
Cornerstone Environmental Group
P: 845.695.0252 | **M:** 845.216.9630

From: Brown, Shali [mailto:Shali.Brown@testamericainc.com]
Sent: Thursday, September 3, 2015 6:47 PM
To: Roeper, Tim <Tim.Roeper@Cornerstoneeg.com>
Subject: 490-85780-1 sample 8 RW-9 (206-216)-082115 limited sample

Hi Tim,

The lab has informed me that they did not have sufficient sample to run the 8082 for 490-85780-1 sample 8 RW-9 (206-216)-082115. We received 3 250mL containers and ran 8270 and 8270 SIM then had to re-extract for 8270 SIM which consumed the sample we had.

This will be noted in the case narrative of the report but I wanted to give you a heads up now so it would not be a surprise.

Shali

As we approach the upcoming Labor Day Holiday observed on Monday, September 7th, we want you to know that FedEx and UPS will not have scheduled service on this day so please plan accordingly. Despite this logistics challenge please let us know how we can extend solutions to best support your analytical needs over this holiday period. Please note that if you have BODs that will be sampled on Monday August 31st or have short hold samples that will arrive on Saturday September 5th we ask that you communicate and make any necessary confirmed arrangements with your Project Manager in advance to ensure your samples meet all holding time criteria.

We are thankful for your business and hope that you have a wonderful and safe holiday.

Announcing TotalAccess 4.0 – Online access to your data. New homepage with easier access to your data, multiple search criteria including sampling date and much more! Contact your Account Executive or Project Manager today to arrange for a live demonstration

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

SHALI BROWN
Project Manager
TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Drive
Nashville, TN 37204
Tel 615.301.5031(direct) Fax 615.276.3404
Main 1-615-726-0177 x212
www.testamericainc.com

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 490-85780-1

Login Number: 85780
List Number: 1
Creator: Gundi, Hozar K

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-85948-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Tim Roeper

Authorized for release by:
9/21/2015 11:37:12 AM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-85948-1	OB-15B-082415	Water	08/24/15 11:15	08/26/15 11:53
490-85948-2	RW-13 (71-91)-082415	Water	08/24/15 13:35	08/26/15 11:53
490-85948-3	FB-01-082415	Water	08/24/15 07:30	08/26/15 11:53
490-85948-4	RW-5A-082415	Water	08/24/15 10:25	08/26/15 11:53
490-85948-5	OB-7-082415	Water	08/24/15 12:50	08/26/15 11:53
490-85948-6	RW-4A (113-123)-082415	Water	08/24/15 09:35	08/26/15 11:53
490-85948-7	RW-4 (333-343)-082415	Water	08/24/15 11:25	08/26/15 11:53
490-85948-8	TB-13-082515	Water	08/25/15 01:00	08/26/15 11:53

Job ID: 490-85948-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 490-85948-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/26/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.3º C, 1.2º C and 1.8º C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples OB-15B-082415 (490-85948-1), RW-13 (71-91)-082415 (490-85948-2), FB-01-082415 (490-85948-3), RW-5A-082415 (490-85948-4), OB-7-082415 (490-85948-5), RW-4A (113-123)-082415 (490-85948-6), RW-4 (333-343)-082415 (490-85948-7) and TB-13-082515 (490-85948-8) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 09/03/2015.

Methylene Chloride was detected in method blank MB 490-278804/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Cyclohexane failed the recovery criteria high for LCS 490-278804/3. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Job ID: 490-85948-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

1,1-Dichloroethene failed the recovery criteria low for the MS of sample OB-15B-082415MS (490-85948-1) in batch 490-278804. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS SIM)

Samples OB-15B-082415 (490-85948-1), RW-13 (71-91)-082415 (490-85948-2), FB-01-082415 (490-85948-3), RW-5A-082415 (490-85948-4), OB-7-082415 (490-85948-5), RW-4A (113-123)-082415 (490-85948-6), RW-4 (333-343)-082415 (490-85948-7) and TB-13-082515 (490-85948-8) were analyzed for volatile organic compounds (GC-MS SIM) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 09/03/2015.

The continuing calibration verification (CCV) associated with batch 490-278757 recovered marginally above the upper control limit for 1,4-Dioxane and 4-Bromofluorobenzene (Surr). The samples associated with this CCV have been reported. The following samples are impacted: (CCVIS 490-278757/2)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GC MS)

Samples OB-15B-082415 (490-85948-1), RW-13 (71-91)-082415 (490-85948-2), FB-01-082415 (490-85948-3), RW-5A-082415 (490-85948-4), OB-7-082415 (490-85948-5), RW-4A (113-123)-082415 (490-85948-6) and RW-4 (333-343)-082415 (490-85948-7) were analyzed for semivolatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/30/2015 and analyzed on 08/31/2015.

2,4,6-Tribromophenol (Surr) failed the surrogate recovery criteria high for MB 490-277572/1-A. 2,4,6-Tribromophenol (Surr) failed the surrogate recovery criteria high for LCS 490-277572/2-A. All associated sample surrogates fell within acceptance criteria; therefore, the data has been reported.

Benzaldehyde failed the recovery criteria high for LCS 490-277572/2-A. Refer to the QC report for details.

The continuing calibration verification (CCV) associated with batch 490-277755 recovered above the upper control limit for several analytes. The samples associated with this CCV were non-detect for the affected analytes; therefore, the data has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples OB-15B-082415 (490-85948-1), RW-13 (71-91)-082415 (490-85948-2), FB-01-082415 (490-85948-3), RW-5A-082415 (490-85948-4), OB-7-082415 (490-85948-5), RW-4A (113-123)-082415 (490-85948-6) and RW-4 (333-343)-082415 (490-85948-7) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 09/08/2015 and analyzed on 09/09/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

Samples OB-15B-082415 (490-85948-1), RW-13 (71-91)-082415 (490-85948-2), FB-01-082415 (490-85948-3), RW-5A-082415 (490-85948-4), OB-7-082415 (490-85948-5), RW-4A (113-123)-082415 (490-85948-6) and RW-4 (333-343)-082415 (490-85948-7) were analyzed for polycyclic aromatic hydrocarbons (PAHs) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/30/2015 and analyzed on 08/31/2015.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-277571 and analytical batch 490-277738.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED METALS (ICPMS)

Samples OB-15B-082415 (490-85948-1), RW-13 (71-91)-082415 (490-85948-2), FB-01-082415 (490-85948-3), RW-5A-082415

Job ID: 490-85948-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

(490-85948-4), OB-7-082415 (490-85948-5), RW-4A (113-123)-082415 (490-85948-6) and RW-4 (333-343)-082415 (490-85948-7) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/28/2015 and 08/30/2015 and analyzed on 09/02/2015, 09/03/2015 and 09/04/2015.

Manganese and Vanadium were detected in method blank MB 490-277068/1-B at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Vanadium was detected in method blank MB 490-277682/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

METALS (ICPMS)

Samples OB-15B-082415 (490-85948-1), RW-13 (71-91)-082415 (490-85948-2), FB-01-082415 (490-85948-3), RW-5A-082415 (490-85948-4), OB-7-082415 (490-85948-5), RW-4A (113-123)-082415 (490-85948-6) and RW-4 (333-343)-082415 (490-85948-7) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/27/2015 and 09/09/2015 and analyzed on 08/28/2015, 08/31/2015 and 09/11/2015.

Silver and Vanadium were detected in method blank MB 490-276608/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Manganese failed the recovery criteria low for the MSD of sample OB-15B-082415MSD (490-85948-1) in batch 490-278204. Refer to the QC report for details.

Samples OB-15B-082415 (490-85948-1)[10X] and OB-7-082415 (490-85948-5)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED MERCURY (CVAA)

Samples OB-15B-082415 (490-85948-1), RW-13 (71-91)-082415 (490-85948-2), FB-01-082415 (490-85948-3), RW-5A-082415 (490-85948-4), OB-7-082415 (490-85948-5), RW-4A (113-123)-082415 (490-85948-6) and RW-4 (333-343)-082415 (490-85948-7) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/27/2015 and analyzed on 08/30/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples OB-15B-082415 (490-85948-1), RW-13 (71-91)-082415 (490-85948-2), FB-01-082415 (490-85948-3), RW-5A-082415 (490-85948-4), OB-7-082415 (490-85948-5), RW-4A (113-123)-082415 (490-85948-6) and RW-4 (333-343)-082415 (490-85948-7) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 09/01/2015 and analyzed on 09/02/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ALKALINITY

Samples OB-15B-082415 (490-85948-1), RW-13 (71-91)-082415 (490-85948-2), FB-01-082415 (490-85948-3), RW-5A-082415 (490-85948-4), OB-7-082415 (490-85948-5), RW-4A (113-123)-082415 (490-85948-6) and RW-4 (333-343)-082415 (490-85948-7) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/27/2015.

Job ID: 490-85948-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL CYANIDE

Samples OB-15B-082415 (490-85948-1), RW-13 (71-91)-082415 (490-85948-2), FB-01-082415 (490-85948-3), RW-5A-082415 (490-85948-4), OB-7-082415 (490-85948-5), RW-4A (113-123)-082415 (490-85948-6) and RW-4 (333-343)-082415 (490-85948-7) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared on 08/27/2015 and analyzed on 08/28/2015.

Cyanide, Total failed the recovery criteria low for the MSD of sample RW-5A-082415MSD (490-85948-4) in batch 490-277612. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS

Samples OB-15B-082415 (490-85948-1), RW-13 (71-91)-082415 (490-85948-2), FB-01-082415 (490-85948-3), RW-5A-082415 (490-85948-4), OB-7-082415 (490-85948-5), RW-4A (113-123)-082415 (490-85948-6) and RW-4 (333-343)-082415 (490-85948-7) were analyzed for anions in accordance with SW-846 Method 9056. The samples were analyzed on 09/02/2015 and 09/03/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: OB-15B-082415
Date Collected: 08/24/15 11:15
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-1
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/03/15 14:28	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/03/15 14:28	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/03/15 14:28	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/03/15 14:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*09/03/15 14:28*	*1*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*		*09/03/15 14:28*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/03/15 14:28*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/03/15 14:28*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 19:05	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/03/15 19:05	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 19:05	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 19:05	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/03/15 19:05	1
1,1-Dichloroethene	0.25	U F1	1.0	0.25	ug/L			09/03/15 19:05	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/03/15 19:05	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/03/15 19:05	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/03/15 19:05	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/03/15 19:05	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 19:05	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/03/15 19:05	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/03/15 19:05	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/03/15 19:05	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/03/15 19:05	1
Acetone	2.7	U	25	2.7	ug/L			09/03/15 19:05	1
Benzene	0.20	U	1.0	0.20	ug/L			09/03/15 19:05	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/03/15 19:05	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/03/15 19:05	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/03/15 19:05	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/03/15 19:05	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 19:05	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/03/15 19:05	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/03/15 19:05	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/03/15 19:05	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/03/15 19:05	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/03/15 19:05	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 19:05	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/03/15 19:05	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/03/15 19:05	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/03/15 19:05	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/03/15 19:05	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/03/15 19:05	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/03/15 19:05	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/03/15 19:05	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/03/15 19:05	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/03/15 19:05	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: OB-15B-082415
Date Collected: 08/24/15 11:15
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/03/15 19:05	1
Styrene	0.28	U	1.0	0.28	ug/L			09/03/15 19:05	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/03/15 19:05	1
Toluene	0.17	U	1.0	0.17	ug/L			09/03/15 19:05	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/03/15 19:05	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 19:05	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/03/15 19:05	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/03/15 19:05	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/03/15 19:05	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/03/15 19:05	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/03/15 19:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/03/15 19:05*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/03/15 19:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*09/03/15 19:05*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*09/03/15 19:05*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/03/15 19:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*		*09/03/15 19:05*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.023	U	0.046	0.023	ug/L		08/30/15 07:54	08/31/15 14:54	1
Benzo[a]pyrene	0.023	U	0.046	0.023	ug/L		08/30/15 07:54	08/31/15 14:54	1
Benzo[b]fluoranthene	0.023	U	0.046	0.023	ug/L		08/30/15 07:54	08/31/15 14:54	1
Hexachlorobenzene	0.013	U	0.019	0.013	ug/L		08/30/15 07:54	08/31/15 14:54	1
Hexachlorobutadiene	0.19	U	0.37	0.19	ug/L		08/30/15 07:54	08/31/15 14:54	1
N-Nitrosodimethylamine	0.19	U	0.74	0.19	ug/L		08/30/15 07:54	08/31/15 14:54	1
Pentachlorophenol	0.093	U	0.28	0.093	ug/L		08/30/15 07:54	08/31/15 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*90*		*10 - 120*	*08/30/15 07:54*	*08/31/15 14:54*	*1*
2-Fluorobiphenyl (Surr)	*94*		*29 - 120*	*08/30/15 07:54*	*08/31/15 14:54*	*1*
Nitrobenzene-d5	*115*		*27 - 120*	*08/30/15 07:54*	*08/31/15 14:54*	*1*
Terphenyl-d14	*110*		*13 - 120*	*08/30/15 07:54*	*08/31/15 14:54*	*1*
2-Fluorophenol	*46*		*10 - 120*	*08/30/15 07:54*	*08/31/15 14:54*	*1*
Phenol-d5	*25*		*10 - 120*	*08/30/15 07:54*	*08/31/15 14:54*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.28	U	1.7	0.28	ug/L		08/30/15 07:58	08/31/15 16:32	1
1,2,4,5-Tetrachlorobenzene	1.8	U	8.6	1.8	ug/L		08/30/15 07:58	08/31/15 16:32	1
2,3,4,6-Tetrachlorophenol	5.9	U	8.6	5.9	ug/L		08/30/15 07:58	08/31/15 16:32	1
2,4,5-Trichlorophenol	6.1	U	8.6	6.1	ug/L		08/30/15 07:58	08/31/15 16:32	1
2,4,6-Trichlorophenol	5.9	U	8.6	5.9	ug/L		08/30/15 07:58	08/31/15 16:32	1
2,4-Dichlorophenol	4.8	U	8.6	4.8	ug/L		08/30/15 07:58	08/31/15 16:32	1
2,4-Dimethylphenol	3.6	U	8.6	3.6	ug/L		08/30/15 07:58	08/31/15 16:32	1
2,4-Dinitrophenol	5.1	U	22	5.1	ug/L		08/30/15 07:58	08/31/15 16:32	1
2,4-Dinitrotoluene	2.8	U	8.6	2.8	ug/L		08/30/15 07:58	08/31/15 16:32	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: OB-15B-082415
Date Collected: 08/24/15 11:15
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.0	U	8.6	2.0	ug/L		08/30/15 07:58	08/31/15 16:32	1
2-Chloronaphthalene	2.4	U	8.6	2.4	ug/L		08/30/15 07:58	08/31/15 16:32	1
2-Chlorophenol	4.1	U	8.6	4.1	ug/L		08/30/15 07:58	08/31/15 16:32	1
2-Methylnaphthalene	0.34	U	1.7	0.34	ug/L		08/30/15 07:58	08/31/15 16:32	1
2-Methylphenol	2.0	U	8.6	2.0	ug/L		08/30/15 07:58	08/31/15 16:32	1
2-Nitroaniline	3.2	U	22	3.2	ug/L		08/30/15 07:58	08/31/15 16:32	1
2-Nitrophenol	4.6	U	8.6	4.6	ug/L		08/30/15 07:58	08/31/15 16:32	1
3,3'-Dichlorobenzidine	2.8	U	8.6	2.8	ug/L		08/30/15 07:58	08/31/15 16:32	1
3 & 4 Methylphenol	1.9	U	8.6	1.9	ug/L		08/30/15 07:58	08/31/15 16:32	1
3-Nitroaniline	2.3	U	22	2.3	ug/L		08/30/15 07:58	08/31/15 16:32	1
4,6-Dinitro-2-methylphenol	8.0	U	22	8.0	ug/L		08/30/15 07:58	08/31/15 16:32	1
4-Bromophenyl phenyl ether	2.3	U	8.6	2.3	ug/L		08/30/15 07:58	08/31/15 16:32	1
4-Chloro-3-methylphenol	3.9	U	8.6	3.9	ug/L		08/30/15 07:58	08/31/15 16:32	1
4-Chloroaniline	3.6	U	8.6	3.6	ug/L		08/30/15 07:58	08/31/15 16:32	1
4-Chlorophenyl phenyl ether	2.4	U	8.6	2.4	ug/L		08/30/15 07:58	08/31/15 16:32	1
4-Nitroaniline	2.7	U	22	2.7	ug/L		08/30/15 07:58	08/31/15 16:32	1
4-Nitrophenol	4.7	U	22	4.7	ug/L		08/30/15 07:58	08/31/15 16:32	1
Acenaphthylene	0.30	U	1.7	0.30	ug/L		08/30/15 07:58	08/31/15 16:32	1
Acetophenone	2.0	U	8.6	2.0	ug/L		08/30/15 07:58	08/31/15 16:32	1
Anthracene	0.33	U	1.7	0.33	ug/L		08/30/15 07:58	08/31/15 16:32	1
Benzaldehyde	4.9	U *	8.6	4.9	ug/L		08/30/15 07:58	08/31/15 16:32	1
Benzo[g,h,i]perylene	0.53	U	1.7	0.53	ug/L		08/30/15 07:58	08/31/15 16:32	1
Benzo[k]fluoranthene	0.32	U	1.7	0.32	ug/L		08/30/15 07:58	08/31/15 16:32	1
Bis(2-chloroethoxy)methane	2.7	U	8.6	2.7	ug/L		08/30/15 07:58	08/31/15 16:32	1
Bis(2-chloroethyl)ether	2.4	U	8.6	2.4	ug/L		08/30/15 07:58	08/31/15 16:32	1
Butyl benzyl phthalate	2.2	U	8.6	2.2	ug/L		08/30/15 07:58	08/31/15 16:32	1
Bis(2-ethylhexyl) phthalate	5.2	U	8.6	5.2	ug/L		08/30/15 07:58	08/31/15 16:32	1
Carbazole	2.4	U	8.6	2.4	ug/L		08/30/15 07:58	08/31/15 16:32	1
Caprolactam	2.1	U	8.6	2.1	ug/L		08/30/15 07:58	08/31/15 16:32	1
Chrysene	0.28	U	1.7	0.28	ug/L		08/30/15 07:58	08/31/15 16:32	1
Dibenz(a,h)anthracene	0.39	U	1.7	0.39	ug/L		08/30/15 07:58	08/31/15 16:32	1
Dibenzofuran	2.5	U	8.6	2.5	ug/L		08/30/15 07:58	08/31/15 16:32	1
Diethyl phthalate	2.6	U	8.6	2.6	ug/L		08/30/15 07:58	08/31/15 16:32	1
Dimethyl phthalate	2.7	U	8.6	2.7	ug/L		08/30/15 07:58	08/31/15 16:32	1
Di-n-butyl phthalate	2.2	U	8.6	2.2	ug/L		08/30/15 07:58	08/31/15 16:32	1
Fluoranthene	0.28	U	1.7	0.28	ug/L		08/30/15 07:58	08/31/15 16:32	1
Fluorene	0.28	U	1.7	0.28	ug/L		08/30/15 07:58	08/31/15 16:32	1
Hexachlorocyclopentadiene	1.6	U	8.6	1.6	ug/L		08/30/15 07:58	08/31/15 16:32	1
Hexachloroethane	1.6	U	8.6	1.6	ug/L		08/30/15 07:58	08/31/15 16:32	1
Indeno[1,2,3-cd]pyrene	0.35	U	1.7	0.35	ug/L		08/30/15 07:58	08/31/15 16:32	1
Isophorone	2.7	U	8.6	2.7	ug/L		08/30/15 07:58	08/31/15 16:32	1
Naphthalene	0.32	U	1.7	0.32	ug/L		08/30/15 07:58	08/31/15 16:32	1
Nitrobenzene	2.3	U	8.6	2.3	ug/L		08/30/15 07:58	08/31/15 16:32	1
N-Nitrosodi-n-propylamine	2.9	U	8.6	2.9	ug/L		08/30/15 07:58	08/31/15 16:32	1
N-Nitrosodiphenylamine	3.1	U	8.6	3.1	ug/L		08/30/15 07:58	08/31/15 16:32	1
Phenanthrene	0.36	U	1.7	0.36	ug/L		08/30/15 07:58	08/31/15 16:32	1
Phenol	1.3	U	8.6	1.3	ug/L		08/30/15 07:58	08/31/15 16:32	1
Pyrene	0.30	U	1.7	0.30	ug/L		08/30/15 07:58	08/31/15 16:32	1
Diphenyl	1.9	U	8.6	1.9	ug/L		08/30/15 07:58	08/31/15 16:32	1

Client Sample ID: OB-15B-082415

Date Collected: 08/24/15 11:15
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-1

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.2	U	8.6	2.2	ug/L		08/30/15 07:58	08/31/15 16:32	1
2,2'-oxybis[1-chloropropane]	2.4	U	8.6	2.4	ug/L		08/30/15 07:58	08/31/15 16:32	1
Atrazine	2.5	U	8.6	2.5	ug/L		08/30/15 07:58	08/31/15 16:32	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
p-Benzoquinone	*7.0*	*J N*	*ug/L*		*3.75*	*106-51-4*	*08/30/15 07:58*	*08/31/15 16:32*	*1*
Oleic Acid	*3.1*	*J N*	*ug/L*		*8.42*	*112-80-1*	*08/30/15 07:58*	*08/31/15 16:32*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*92*		*10 - 120*	*08/30/15 07:58*	*08/31/15 16:32*	*1*
2-Fluorobiphenyl (Surr)	*75*		*29 - 120*	*08/30/15 07:58*	*08/31/15 16:32*	*1*
2-Fluorophenol (Surr)	*26*		*10 - 120*	*08/30/15 07:58*	*08/31/15 16:32*	*1*
Nitrobenzene-d5 (Surr)	*80*		*27 - 120*	*08/30/15 07:58*	*08/31/15 16:32*	*1*
Phenol-d5 (Surr)	*15*		*10 - 120*	*08/30/15 07:58*	*08/31/15 16:32*	*1*
Terphenyl-d14 (Surr)	*79*		*13 - 120*	*08/30/15 07:58*	*08/31/15 16:32*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.37	U	0.43	0.37	ug/L		09/08/15 08:10	09/09/15 20:32	1
PCB-1221	0.29	U	0.43	0.29	ug/L		09/08/15 08:10	09/09/15 20:32	1
PCB-1232	0.34	U	0.43	0.34	ug/L		09/08/15 08:10	09/09/15 20:32	1
PCB-1242	0.19	U	0.43	0.19	ug/L		09/08/15 08:10	09/09/15 20:32	1
PCB-1248	0.13	U	0.43	0.13	ug/L		09/08/15 08:10	09/09/15 20:32	1
PCB-1254	0.15	U	0.43	0.15	ug/L		09/08/15 08:10	09/09/15 20:32	1
PCB-1260	0.16	U	0.43	0.16	ug/L		09/08/15 08:10	09/09/15 20:32	1
Polychlorinated biphenyls, Total	0.37	U	0.43	0.37	ug/L		09/08/15 08:10	09/09/15 20:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*51*		*10 - 150*	*09/08/15 08:10*	*09/09/15 20:32*	*1*
Tetrachloro-m-xylene	*49*		*10 - 150*	*09/08/15 08:10*	*09/09/15 20:32*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.53**		1.00	0.70	mg/L			09/02/15 20:55	1
Sulfate	**10.8**		1.00	0.60	mg/L			09/02/15 20:55	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.89**		0.020	0.0096	mg/L		08/27/15 09:38	08/28/15 13:22	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:22	1
Arsenic	**0.0014**	**J**	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:22	1
Barium	**0.041**		0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:22	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:22	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/27/15 09:38	08/28/15 13:22	1
Calcium	**23.0**		1.0	0.13	mg/L		08/27/15 09:38	08/28/15 13:22	1
Chromium	**0.0022**		0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:22	1
Cobalt	**0.00082**	**J**	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:22	1
Copper	**0.0019**	**J**	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:22	1
Iron	**1.6**		0.025	0.010	mg/L		08/27/15 09:38	08/28/15 13:22	1
Lead	**0.00063**	**J**	0.0020	0.00020	mg/L		08/27/15 09:38	08/28/15 13:22	1
Magnesium	**5.8**		1.0	0.13	mg/L		08/27/15 09:38	08/28/15 13:22	1

Client Sample ID: OB-15B-082415

Date Collected: 08/24/15 11:15
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-1

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**4.0**		0.020	0.0050	mg/L		08/27/15 09:38	08/31/15 14:02	10
Nickel	**0.015**		0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:22	1
Potassium	**0.90**	**J**	1.0	0.13	mg/L		08/27/15 09:38	08/28/15 13:22	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		09/09/15 14:34	09/11/15 14:54	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:22	1
Sodium	**4.0**		1.0	0.13	mg/L		08/27/15 09:38	08/28/15 13:22	1
Thallium	**0.0011**	**J**	0.0020	0.00020	mg/L		08/27/15 09:38	08/28/15 13:22	1
Vanadium	**0.0054**	**B**	0.0020	0.00010	mg/L		08/27/15 09:38	08/28/15 13:22	1
Zinc	0.010	U	0.025	0.010	mg/L		08/27/15 09:38	08/28/15 13:22	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.17**		0.020	0.0096	mg/L		08/28/15 10:18	09/03/15 11:51	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:45	1
Arsenic	**0.0011**	**J**	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:45	1
Barium	**0.0016**	**J**	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:45	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 11:51	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/28/15 10:18	09/02/15 22:45	1
Calcium	**21.7**		1.0	0.13	mg/L		08/28/15 10:18	09/03/15 11:51	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:45	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:45	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:45	1
Iron	**0.21**		0.025	0.010	mg/L		08/28/15 10:18	09/02/15 22:45	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/28/15 10:18	09/02/15 22:45	1
Magnesium	**5.7**		1.0	0.13	mg/L		08/28/15 10:18	09/03/15 11:51	1
Manganese	**0.42**	**B**	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:45	1
Nickel	**0.0012**	**J**	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 11:51	1
Potassium	**0.74**	**J**	1.0	0.13	mg/L		08/28/15 10:18	09/03/15 11:51	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/28/15 10:18	09/02/15 22:45	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:45	1
Sodium	**3.9**		1.0	0.13	mg/L		08/28/15 10:18	09/03/15 11:51	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/28/15 10:18	09/02/15 22:45	1
Vanadium	**0.0024**	**B**	0.0020	0.00010	mg/L		08/28/15 10:18	09/02/15 22:45	1
Zinc	0.010	U	0.025	0.010	mg/L		08/28/15 10:18	09/02/15 22:45	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/01/15 16:15	09/02/15 16:55	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 01:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.0098**	**J**	0.010	0.0070	mg/L		08/27/15 16:19	08/28/15 12:07	1
Bicarbonate Alkalinity as CaCO3	**66.9**		10.0	5.0	mg/L			08/27/15 18:00	1
Total Alkalinity as CaCO3	**66.9**		10.0	5.0	mg/L			08/27/15 18:00	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: RW-13 (71-91)-082415
Date Collected: 08/24/15 13:35
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-2
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/03/15 14:57	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/03/15 14:57	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/03/15 14:57	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/03/15 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*09/03/15 14:57*	*1*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*		*09/03/15 14:57*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/03/15 14:57*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/03/15 14:57*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 19:32	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/03/15 19:32	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 19:32	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 19:32	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/03/15 19:32	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/03/15 19:32	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/03/15 19:32	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/03/15 19:32	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/03/15 19:32	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/03/15 19:32	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 19:32	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/03/15 19:32	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/03/15 19:32	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/03/15 19:32	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/03/15 19:32	1
Acetone	2.7	U	25	2.7	ug/L			09/03/15 19:32	1
Benzene	0.20	U	1.0	0.20	ug/L			09/03/15 19:32	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/03/15 19:32	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/03/15 19:32	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/03/15 19:32	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/03/15 19:32	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 19:32	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/03/15 19:32	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/03/15 19:32	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/03/15 19:32	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/03/15 19:32	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/03/15 19:32	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 19:32	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/03/15 19:32	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/03/15 19:32	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/03/15 19:32	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/03/15 19:32	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/03/15 19:32	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/03/15 19:32	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/03/15 19:32	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/03/15 19:32	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/03/15 19:32	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: RW-13 (71-91)-082415
Date Collected: 08/24/15 13:35
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/03/15 19:32	1
Styrene	0.28	U	1.0	0.28	ug/L			09/03/15 19:32	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/03/15 19:32	1
Toluene	0.17	U	1.0	0.17	ug/L			09/03/15 19:32	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/03/15 19:32	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 19:32	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/03/15 19:32	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/03/15 19:32	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/03/15 19:32	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/03/15 19:32	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/03/15 19:32	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrahydrofuran	*0.98*	*J*	*ug/L*		*3.12*	*109-99-9*		*09/03/15 19:32*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/03/15 19:32*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*09/03/15 19:32*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*09/03/15 19:32*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/03/15 19:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*09/03/15 19:32*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.022	U	0.043	0.022	ug/L		08/30/15 07:54	08/31/15 15:21	1
Benzo[a]pyrene	0.022	U	0.043	0.022	ug/L		08/30/15 07:54	08/31/15 15:21	1
Benzo[b]fluoranthene	0.022	U	0.043	0.022	ug/L		08/30/15 07:54	08/31/15 15:21	1
Hexachlorobenzene	0.012	U	0.017	0.012	ug/L		08/30/15 07:54	08/31/15 15:21	1
Hexachlorobutadiene	0.17	U	0.34	0.17	ug/L		08/30/15 07:54	08/31/15 15:21	1
N-Nitrosodimethylamine	0.17	U	0.69	0.17	ug/L		08/30/15 07:54	08/31/15 15:21	1
Pentachlorophenol	0.086	U	0.26	0.086	ug/L		08/30/15 07:54	08/31/15 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*71*		*10 - 120*	*08/30/15 07:54*	*08/31/15 15:21*	*1*
2-Fluorobiphenyl (Surr)	*66*		*29 - 120*	*08/30/15 07:54*	*08/31/15 15:21*	*1*
Nitrobenzene-d5	*71*		*27 - 120*	*08/30/15 07:54*	*08/31/15 15:21*	*1*
Terphenyl-d14	*77*		*13 - 120*	*08/30/15 07:54*	*08/31/15 15:21*	*1*
2-Fluorophenol	*46*		*10 - 120*	*08/30/15 07:54*	*08/31/15 15:21*	*1*
Phenol-d5	*31*		*10 - 120*	*08/30/15 07:54*	*08/31/15 15:21*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.30	U	1.9	0.30	ug/L		08/30/15 07:58	08/31/15 16:55	1
1,2,4,5-Tetrachlorobenzene	1.9	U	9.3	1.9	ug/L		08/30/15 07:58	08/31/15 16:55	1
2,3,4,6-Tetrachlorophenol	6.4	U	9.3	6.4	ug/L		08/30/15 07:58	08/31/15 16:55	1
2,4,5-Trichlorophenol	6.6	U	9.3	6.6	ug/L		08/30/15 07:58	08/31/15 16:55	1
2,4,6-Trichlorophenol	6.3	U	9.3	6.3	ug/L		08/30/15 07:58	08/31/15 16:55	1
2,4-Dichlorophenol	5.2	U	9.3	5.2	ug/L		08/30/15 07:58	08/31/15 16:55	1
2,4-Dimethylphenol	3.9	U	9.3	3.9	ug/L		08/30/15 07:58	08/31/15 16:55	1
2,4-Dinitrophenol	5.5	U	23	5.5	ug/L		08/30/15 07:58	08/31/15 16:55	1
2,4-Dinitrotoluene	3.0	U	9.3	3.0	ug/L		08/30/15 07:58	08/31/15 16:55	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: RW-13 (71-91)-082415
Date Collected: 08/24/15 13:35
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.1	U	9.3	2.1	ug/L		08/30/15 07:58	08/31/15 16:55	1
2-Chloronaphthalene	2.6	U	9.3	2.6	ug/L		08/30/15 07:58	08/31/15 16:55	1
2-Chlorophenol	4.4	U	9.3	4.4	ug/L		08/30/15 07:58	08/31/15 16:55	1
2-Methylnaphthalene	0.37	U	1.9	0.37	ug/L		08/30/15 07:58	08/31/15 16:55	1
2-Methylphenol	2.1	U	9.3	2.1	ug/L		08/30/15 07:58	08/31/15 16:55	1
2-Nitroaniline	3.4	U	23	3.4	ug/L		08/30/15 07:58	08/31/15 16:55	1
2-Nitrophenol	4.9	U	9.3	4.9	ug/L		08/30/15 07:58	08/31/15 16:55	1
3,3'-Dichlorobenzidine	3.1	U	9.3	3.1	ug/L		08/30/15 07:58	08/31/15 16:55	1
3 & 4 Methylphenol	2.0	U	9.3	2.0	ug/L		08/30/15 07:58	08/31/15 16:55	1
3-Nitroaniline	2.5	U	23	2.5	ug/L		08/30/15 07:58	08/31/15 16:55	1
4,6-Dinitro-2-methylphenol	8.6	U	23	8.6	ug/L		08/30/15 07:58	08/31/15 16:55	1
4-Bromophenyl phenyl ether	2.5	U	9.3	2.5	ug/L		08/30/15 07:58	08/31/15 16:55	1
4-Chloro-3-methylphenol	4.2	U	9.3	4.2	ug/L		08/30/15 07:58	08/31/15 16:55	1
4-Chloroaniline	3.9	U	9.3	3.9	ug/L		08/30/15 07:58	08/31/15 16:55	1
4-Chlorophenyl phenyl ether	2.6	U	9.3	2.6	ug/L		08/30/15 07:58	08/31/15 16:55	1
4-Nitroaniline	2.9	U	23	2.9	ug/L		08/30/15 07:58	08/31/15 16:55	1
4-Nitrophenol	5.0	U	23	5.0	ug/L		08/30/15 07:58	08/31/15 16:55	1
Acenaphthylene	0.32	U	1.9	0.32	ug/L		08/30/15 07:58	08/31/15 16:55	1
Acetophenone	2.1	U	9.3	2.1	ug/L		08/30/15 07:58	08/31/15 16:55	1
Anthracene	0.35	U	1.9	0.35	ug/L		08/30/15 07:58	08/31/15 16:55	1
Benzaldehyde	5.3	U *	9.3	5.3	ug/L		08/30/15 07:58	08/31/15 16:55	1
Benzo[g,h,i]perylene	0.57	U	1.9	0.57	ug/L		08/30/15 07:58	08/31/15 16:55	1
Benzo[k]fluoranthene	0.34	U	1.9	0.34	ug/L		08/30/15 07:58	08/31/15 16:55	1
Bis(2-chloroethoxy)methane	2.9	U	9.3	2.9	ug/L		08/30/15 07:58	08/31/15 16:55	1
Bis(2-chloroethyl)ether	2.6	U	9.3	2.6	ug/L		08/30/15 07:58	08/31/15 16:55	1
Butyl benzyl phthalate	2.3	U	9.3	2.3	ug/L		08/30/15 07:58	08/31/15 16:55	1
Bis(2-ethylhexyl) phthalate	5.6	U	9.3	5.6	ug/L		08/30/15 07:58	08/31/15 16:55	1
Carbazole	2.6	U	9.3	2.6	ug/L		08/30/15 07:58	08/31/15 16:55	1
Caprolactam	2.2	U	9.3	2.2	ug/L		08/30/15 07:58	08/31/15 16:55	1
Chrysene	0.31	U	1.9	0.31	ug/L		08/30/15 07:58	08/31/15 16:55	1
Dibenz(a,h)anthracene	0.42	U	1.9	0.42	ug/L		08/30/15 07:58	08/31/15 16:55	1
Dibenzofuran	2.7	U	9.3	2.7	ug/L		08/30/15 07:58	08/31/15 16:55	1
Diethyl phthalate	2.8	U	9.3	2.8	ug/L		08/30/15 07:58	08/31/15 16:55	1
Dimethyl phthalate	2.9	U	9.3	2.9	ug/L		08/30/15 07:58	08/31/15 16:55	1
Di-n-butyl phthalate	2.3	U	9.3	2.3	ug/L		08/30/15 07:58	08/31/15 16:55	1
Fluoranthene	0.30	U	1.9	0.30	ug/L		08/30/15 07:58	08/31/15 16:55	1
Fluorene	0.30	U	1.9	0.30	ug/L		08/30/15 07:58	08/31/15 16:55	1
Hexachlorocyclopentadiene	1.7	U	9.3	1.7	ug/L		08/30/15 07:58	08/31/15 16:55	1
Hexachloroethane	1.8	U	9.3	1.8	ug/L		08/30/15 07:58	08/31/15 16:55	1
Indeno[1,2,3-cd]pyrene	0.38	U	1.9	0.38	ug/L		08/30/15 07:58	08/31/15 16:55	1
Isophorone	2.9	U	9.3	2.9	ug/L		08/30/15 07:58	08/31/15 16:55	1
Naphthalene	0.34	U	1.9	0.34	ug/L		08/30/15 07:58	08/31/15 16:55	1
Nitrobenzene	2.5	U	9.3	2.5	ug/L		08/30/15 07:58	08/31/15 16:55	1
N-Nitrosodi-n-propylamine	3.1	U	9.3	3.1	ug/L		08/30/15 07:58	08/31/15 16:55	1
N-Nitrosodiphenylamine	3.3	U	9.3	3.3	ug/L		08/30/15 07:58	08/31/15 16:55	1
Phenanthrene	0.39	U	1.9	0.39	ug/L		08/30/15 07:58	08/31/15 16:55	1
Phenol	1.4	U	9.3	1.4	ug/L		08/30/15 07:58	08/31/15 16:55	1
Pyrene	0.32	U	1.9	0.32	ug/L		08/30/15 07:58	08/31/15 16:55	1
Diphenyl	2.0	U	9.3	2.0	ug/L		08/30/15 07:58	08/31/15 16:55	1

Client Sample ID: RW-13 (71-91)-082415

Date Collected: 08/24/15 13:35
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-2

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.3	U	9.3	2.3	ug/L		08/30/15 07:58	08/31/15 16:55	1
2,2'-oxybis[1-chloropropane]	2.6	U	9.3	2.6	ug/L		08/30/15 07:58	08/31/15 16:55	1
Atrazine	2.7	U	9.3	2.7	ug/L		08/30/15 07:58	08/31/15 16:55	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tetradecane	*3.0*	*J N*	*ug/L*		*5.85*	*629-59-4*	*08/30/15 07:58*	*08/31/15 16:55*	*1*
3H-Benz[e]indene, 2-methyl-	*4.6*	*J N*	*ug/L*		*6.08*	*150096-60-9*	*08/30/15 07:58*	*08/31/15 16:55*	*1*
Benzenamine, N,N-dimethyl-4-nitro-	*7.5*	*J N*	*ug/L*		*7.17*	*100-23-2*	*08/30/15 07:58*	*08/31/15 16:55*	*1*
n-Hexadecanoic acid	*3.4*	*J N*	*ug/L*		*7.84*	*57-10-3*	*08/30/15 07:58*	*08/31/15 16:55*	*1*
Oleic Acid	*5.7*	*J N*	*ug/L*		*8.42*	*112-80-1*	*08/30/15 07:58*	*08/31/15 16:55*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*88*		*10 - 120*	*08/30/15 07:58*	*08/31/15 16:55*	*1*
2-Fluorobiphenyl (Surr)	*66*		*29 - 120*	*08/30/15 07:58*	*08/31/15 16:55*	*1*
2-Fluorophenol (Surr)	*30*		*10 - 120*	*08/30/15 07:58*	*08/31/15 16:55*	*1*
Nitrobenzene-d5 (Surr)	*66*		*27 - 120*	*08/30/15 07:58*	*08/31/15 16:55*	*1*
Phenol-d5 (Surr)	*19*		*10 - 120*	*08/30/15 07:58*	*08/31/15 16:55*	*1*
Terphenyl-d14 (Surr)	*75*		*13 - 120*	*08/30/15 07:58*	*08/31/15 16:55*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.41	U	0.48	0.41	ug/L		09/08/15 08:10	09/09/15 20:48	1
PCB-1221	0.33	U	0.48	0.33	ug/L		09/08/15 08:10	09/09/15 20:48	1
PCB-1232	0.38	U	0.48	0.38	ug/L		09/08/15 08:10	09/09/15 20:48	1
PCB-1242	0.21	U	0.48	0.21	ug/L		09/08/15 08:10	09/09/15 20:48	1
PCB-1248	0.14	U	0.48	0.14	ug/L		09/08/15 08:10	09/09/15 20:48	1
PCB-1254	0.16	U	0.48	0.16	ug/L		09/08/15 08:10	09/09/15 20:48	1
PCB-1260	0.17	U	0.48	0.17	ug/L		09/08/15 08:10	09/09/15 20:48	1
Polychlorinated biphenyls, Total	0.41	U	0.48	0.41	ug/L		09/08/15 08:10	09/09/15 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*72*		*10 - 150*	*09/08/15 08:10*	*09/09/15 20:48*	*1*
Tetrachloro-m-xylene	*85*		*10 - 150*	*09/08/15 08:10*	*09/09/15 20:48*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37.7**		1.00	0.70	mg/L			09/02/15 22:07	1
Sulfate	**63.0**		1.00	0.60	mg/L			09/02/15 22:07	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1.7**		0.020	0.0096	mg/L		08/27/15 09:38	08/28/15 14:20	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:20	1
Arsenic	**0.0029**		0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:20	1
Barium	**0.059**		0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:20	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:20	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/27/15 09:38	08/28/15 14:20	1
Calcium	**49.6**		1.0	0.13	mg/L		08/27/15 09:38	08/28/15 14:20	1
Chromium	**0.0080**		0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:20	1
Cobalt	**0.00059**	**J**	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:20	1
Copper	**0.0048**		0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:20	1

Client Sample ID: RW-13 (71-91)-082415
Date Collected: 08/24/15 13:35
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-2
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	4.3		0.025	0.010	mg/L		08/27/15 09:38	08/28/15 14:20	1
Lead	0.0023		0.0020	0.00020	mg/L		08/27/15 09:38	08/28/15 14:20	1
Magnesium	14.8		1.0	0.13	mg/L		08/27/15 09:38	08/28/15 14:20	1
Manganese	0.056		0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:20	1
Nickel	0.0030		0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:20	1
Potassium	47.5		1.0	0.13	mg/L		08/27/15 09:38	08/28/15 14:20	1
Selenium	0.0031		0.0020	0.00060	mg/L		09/09/15 14:34	09/11/15 14:29	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:20	1
Sodium	19.4		1.0	0.13	mg/L		08/27/15 09:38	08/28/15 14:20	1
Thallium	0.00020	J	0.0020	0.00020	mg/L		08/27/15 09:38	08/28/15 14:20	1
Vanadium	0.0067	B	0.0020	0.00010	mg/L		08/27/15 09:38	08/28/15 14:20	1
Zinc	0.010	U	0.025	0.010	mg/L		08/27/15 09:38	08/28/15 14:20	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.038		0.020	0.0096	mg/L		08/28/15 10:18	09/03/15 11:56	1
Antimony	0.00075	J	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:51	1
Arsenic	0.0020		0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:51	1
Barium	0.046		0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:51	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 11:56	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/28/15 10:18	09/02/15 22:51	1
Calcium	47.9		1.0	0.13	mg/L		08/28/15 10:18	09/03/15 11:56	1
Chromium	0.00052	J	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:51	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:51	1
Copper	0.0011	J	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:51	1
Iron	0.041		0.025	0.010	mg/L		08/28/15 10:18	09/02/15 22:51	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/28/15 10:18	09/02/15 22:51	1
Magnesium	15.3		1.0	0.13	mg/L		08/28/15 10:18	09/03/15 11:56	1
Manganese	0.036	B	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:51	1
Nickel	0.0011	J	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 11:56	1
Potassium	48.6		1.0	0.13	mg/L		08/28/15 10:18	09/03/15 11:56	1
Selenium	0.0030		0.0020	0.00060	mg/L		08/28/15 10:18	09/02/15 22:51	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:51	1
Sodium	20.3		1.0	0.13	mg/L		08/28/15 10:18	09/03/15 11:56	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/28/15 10:18	09/02/15 22:51	1
Vanadium	0.0022	B	0.0020	0.00010	mg/L		08/28/15 10:18	09/02/15 22:51	1
Zinc	0.010	U	0.025	0.010	mg/L		08/28/15 10:18	09/02/15 22:51	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/01/15 16:15	09/02/15 16:52	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 01:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0072	J	0.010	0.0070	mg/L		08/27/15 16:19	08/28/15 12:08	1
Bicarbonate Alkalinity as CaCO3	146		10.0	5.0	mg/L			08/27/15 18:06	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: RW-13 (71-91)-082415
Date Collected: 08/24/15 13:35
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	146		10.0	5.0	mg/L			08/27/15 18:06	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: FB-01-082415
Date Collected: 08/24/15 07:30
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-3
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/03/15 15:25	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/03/15 15:25	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/03/15 15:25	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/03/15 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*09/03/15 15:25*	*1*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*		*09/03/15 15:25*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/03/15 15:25*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/03/15 15:25*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 19:59	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/03/15 19:59	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 19:59	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 19:59	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/03/15 19:59	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/03/15 19:59	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/03/15 19:59	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/03/15 19:59	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/03/15 19:59	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/03/15 19:59	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 19:59	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/03/15 19:59	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/03/15 19:59	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/03/15 19:59	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/03/15 19:59	1
Acetone	**35**		25	2.7	ug/L			09/03/15 19:59	1
Benzene	0.20	U	1.0	0.20	ug/L			09/03/15 19:59	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/03/15 19:59	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/03/15 19:59	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/03/15 19:59	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/03/15 19:59	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 19:59	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/03/15 19:59	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/03/15 19:59	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/03/15 19:59	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/03/15 19:59	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/03/15 19:59	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 19:59	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/03/15 19:59	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/03/15 19:59	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/03/15 19:59	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/03/15 19:59	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/03/15 19:59	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/03/15 19:59	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/03/15 19:59	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/03/15 19:59	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/03/15 19:59	1

Client Sample ID: FB-01-082415

Date Collected: 08/24/15 07:30
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	**0.53**	**J B**	5.0	0.22	ug/L			09/03/15 19:59	1
Styrene	0.28	U	1.0	0.28	ug/L			09/03/15 19:59	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/03/15 19:59	1
Toluene	0.17	U	1.0	0.17	ug/L			09/03/15 19:59	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/03/15 19:59	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 19:59	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/03/15 19:59	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/03/15 19:59	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/03/15 19:59	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/03/15 19:59	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/03/15 19:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/03/15 19:59*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/03/15 19:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*09/03/15 19:59*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*09/03/15 19:59*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/03/15 19:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*128*		*70 - 130*		*09/03/15 19:59*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.023	U	0.046	0.023	ug/L		08/30/15 07:54	08/31/15 16:15	1
Benzo[a]pyrene	0.023	U	0.046	0.023	ug/L		08/30/15 07:54	08/31/15 16:15	1
Benzo[b]fluoranthene	0.023	U	0.046	0.023	ug/L		08/30/15 07:54	08/31/15 16:15	1
Hexachlorobenzene	0.013	U	0.019	0.013	ug/L		08/30/15 07:54	08/31/15 16:15	1
Hexachlorobutadiene	0.19	U	0.37	0.19	ug/L		08/30/15 07:54	08/31/15 16:15	1
N-Nitrosodimethylamine	0.19	U	0.74	0.19	ug/L		08/30/15 07:54	08/31/15 16:15	1
Pentachlorophenol	0.093	U	0.28	0.093	ug/L		08/30/15 07:54	08/31/15 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*63*		*10 - 120*	*08/30/15 07:54*	*08/31/15 16:15*	*1*
2-Fluorobiphenyl (Surr)	*60*		*29 - 120*	*08/30/15 07:54*	*08/31/15 16:15*	*1*
Nitrobenzene-d5	*79*		*27 - 120*	*08/30/15 07:54*	*08/31/15 16:15*	*1*
Terphenyl-d14	*69*		*13 - 120*	*08/30/15 07:54*	*08/31/15 16:15*	*1*
2-Fluorophenol	*45*		*10 - 120*	*08/30/15 07:54*	*08/31/15 16:15*	*1*
Phenol-d5	*31*		*10 - 120*	*08/30/15 07:54*	*08/31/15 16:15*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.28	U	1.7	0.28	ug/L		08/30/15 07:58	08/31/15 17:19	1
1,2,4,5-Tetrachlorobenzene	1.8	U	8.6	1.8	ug/L		08/30/15 07:58	08/31/15 17:19	1
2,3,4,6-Tetrachlorophenol	5.9	U	8.6	5.9	ug/L		08/30/15 07:58	08/31/15 17:19	1
2,4,5-Trichlorophenol	6.1	U	8.6	6.1	ug/L		08/30/15 07:58	08/31/15 17:19	1
2,4,6-Trichlorophenol	5.9	U	8.6	5.9	ug/L		08/30/15 07:58	08/31/15 17:19	1
2,4-Dichlorophenol	4.8	U	8.6	4.8	ug/L		08/30/15 07:58	08/31/15 17:19	1
2,4-Dimethylphenol	3.6	U	8.6	3.6	ug/L		08/30/15 07:58	08/31/15 17:19	1
2,4-Dinitrophenol	5.1	U	22	5.1	ug/L		08/30/15 07:58	08/31/15 17:19	1
2,4-Dinitrotoluene	2.8	U	8.6	2.8	ug/L		08/30/15 07:58	08/31/15 17:19	1

Client Sample ID: FB-01-082415
Date Collected: 08/24/15 07:30
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.0	U	8.6	2.0	ug/L		08/30/15 07:58	08/31/15 17:19	1
2-Chloronaphthalene	2.4	U	8.6	2.4	ug/L		08/30/15 07:58	08/31/15 17:19	1
2-Chlorophenol	4.1	U	8.6	4.1	ug/L		08/30/15 07:58	08/31/15 17:19	1
2-Methylnaphthalene	0.34	U	1.7	0.34	ug/L		08/30/15 07:58	08/31/15 17:19	1
2-Methylphenol	2.0	U	8.6	2.0	ug/L		08/30/15 07:58	08/31/15 17:19	1
2-Nitroaniline	3.2	U	22	3.2	ug/L		08/30/15 07:58	08/31/15 17:19	1
2-Nitrophenol	4.6	U	8.6	4.6	ug/L		08/30/15 07:58	08/31/15 17:19	1
3,3'-Dichlorobenzidine	2.8	U	8.6	2.8	ug/L		08/30/15 07:58	08/31/15 17:19	1
3 & 4 Methylphenol	1.9	U	8.6	1.9	ug/L		08/30/15 07:58	08/31/15 17:19	1
3-Nitroaniline	2.3	U	22	2.3	ug/L		08/30/15 07:58	08/31/15 17:19	1
4,6-Dinitro-2-methylphenol	8.0	U	22	8.0	ug/L		08/30/15 07:58	08/31/15 17:19	1
4-Bromophenyl phenyl ether	2.3	U	8.6	2.3	ug/L		08/30/15 07:58	08/31/15 17:19	1
4-Chloro-3-methylphenol	3.9	U	8.6	3.9	ug/L		08/30/15 07:58	08/31/15 17:19	1
4-Chloroaniline	3.6	U	8.6	3.6	ug/L		08/30/15 07:58	08/31/15 17:19	1
4-Chlorophenyl phenyl ether	2.4	U	8.6	2.4	ug/L		08/30/15 07:58	08/31/15 17:19	1
4-Nitroaniline	2.7	U	22	2.7	ug/L		08/30/15 07:58	08/31/15 17:19	1
4-Nitrophenol	4.7	U	22	4.7	ug/L		08/30/15 07:58	08/31/15 17:19	1
Acenaphthylene	0.30	U	1.7	0.30	ug/L		08/30/15 07:58	08/31/15 17:19	1
Acetophenone	2.0	U	8.6	2.0	ug/L		08/30/15 07:58	08/31/15 17:19	1
Anthracene	0.33	U	1.7	0.33	ug/L		08/30/15 07:58	08/31/15 17:19	1
Benzaldehyde	4.9	U *	8.6	4.9	ug/L		08/30/15 07:58	08/31/15 17:19	1
Benzo[g,h,i]perylene	0.53	U	1.7	0.53	ug/L		08/30/15 07:58	08/31/15 17:19	1
Benzo[k]fluoranthene	0.32	U	1.7	0.32	ug/L		08/30/15 07:58	08/31/15 17:19	1
Bis(2-chloroethoxy)methane	2.7	U	8.6	2.7	ug/L		08/30/15 07:58	08/31/15 17:19	1
Bis(2-chloroethyl)ether	2.4	U	8.6	2.4	ug/L		08/30/15 07:58	08/31/15 17:19	1
Butyl benzyl phthalate	2.2	U	8.6	2.2	ug/L		08/30/15 07:58	08/31/15 17:19	1
Bis(2-ethylhexyl) phthalate	5.2	U	8.6	5.2	ug/L		08/30/15 07:58	08/31/15 17:19	1
Carbazole	2.4	U	8.6	2.4	ug/L		08/30/15 07:58	08/31/15 17:19	1
Caprolactam	2.1	U	8.6	2.1	ug/L		08/30/15 07:58	08/31/15 17:19	1
Chrysene	0.28	U	1.7	0.28	ug/L		08/30/15 07:58	08/31/15 17:19	1
Dibenz(a,h)anthracene	0.39	U	1.7	0.39	ug/L		08/30/15 07:58	08/31/15 17:19	1
Dibenzofuran	2.5	U	8.6	2.5	ug/L		08/30/15 07:58	08/31/15 17:19	1
Diethyl phthalate	2.6	U	8.6	2.6	ug/L		08/30/15 07:58	08/31/15 17:19	1
Dimethyl phthalate	2.7	U	8.6	2.7	ug/L		08/30/15 07:58	08/31/15 17:19	1
Di-n-butyl phthalate	2.2	U	8.6	2.2	ug/L		08/30/15 07:58	08/31/15 17:19	1
Fluoranthene	0.28	U	1.7	0.28	ug/L		08/30/15 07:58	08/31/15 17:19	1
Fluorene	0.28	U	1.7	0.28	ug/L		08/30/15 07:58	08/31/15 17:19	1
Hexachlorocyclopentadiene	1.6	U	8.6	1.6	ug/L		08/30/15 07:58	08/31/15 17:19	1
Hexachloroethane	1.6	U	8.6	1.6	ug/L		08/30/15 07:58	08/31/15 17:19	1
Indeno[1,2,3-cd]pyrene	0.35	U	1.7	0.35	ug/L		08/30/15 07:58	08/31/15 17:19	1
Isophorone	2.7	U	8.6	2.7	ug/L		08/30/15 07:58	08/31/15 17:19	1
Naphthalene	0.32	U	1.7	0.32	ug/L		08/30/15 07:58	08/31/15 17:19	1
Nitrobenzene	2.3	U	8.6	2.3	ug/L		08/30/15 07:58	08/31/15 17:19	1
N-Nitrosodi-n-propylamine	2.9	U	8.6	2.9	ug/L		08/30/15 07:58	08/31/15 17:19	1
N-Nitrosodiphenylamine	3.1	U	8.6	3.1	ug/L		08/30/15 07:58	08/31/15 17:19	1
Phenanthrene	0.36	U	1.7	0.36	ug/L		08/30/15 07:58	08/31/15 17:19	1
Phenol	1.3	U	8.6	1.3	ug/L		08/30/15 07:58	08/31/15 17:19	1
Pyrene	0.30	U	1.7	0.30	ug/L		08/30/15 07:58	08/31/15 17:19	1
Diphenyl	1.9	U	8.6	1.9	ug/L		08/30/15 07:58	08/31/15 17:19	1

Client Sample ID: FB-01-082415
Date Collected: 08/24/15 07:30
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.2	U	8.6	2.2	ug/L		08/30/15 07:58	08/31/15 17:19	1
2,2'-oxybis[1-chloropropane]	2.4	U	8.6	2.4	ug/L		08/30/15 07:58	08/31/15 17:19	1
Atrazine	2.5	U	8.6	2.5	ug/L		08/30/15 07:58	08/31/15 17:19	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Diethyltoluamide	*11*	*J N*	*ug/L*		*6.53*	*134-62-3*	*08/30/15 07:58*	*08/31/15 17:19*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*98*		*10 - 120*	*08/30/15 07:58*	*08/31/15 17:19*	*1*
2-Fluorobiphenyl (Surr)	*74*		*29 - 120*	*08/30/15 07:58*	*08/31/15 17:19*	*1*
2-Fluorophenol (Surr)	*32*		*10 - 120*	*08/30/15 07:58*	*08/31/15 17:19*	*1*
Nitrobenzene-d5 (Surr)	*74*		*27 - 120*	*08/30/15 07:58*	*08/31/15 17:19*	*1*
Phenol-d5 (Surr)	*21*		*10 - 120*	*08/30/15 07:58*	*08/31/15 17:19*	*1*
Terphenyl-d14 (Surr)	*87*		*13 - 120*	*08/30/15 07:58*	*08/31/15 17:19*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/08/15 08:10	09/09/15 21:03	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/08/15 08:10	09/09/15 21:03	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/08/15 08:10	09/09/15 21:03	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/08/15 08:10	09/09/15 21:03	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/08/15 08:10	09/09/15 21:03	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/08/15 08:10	09/09/15 21:03	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/08/15 08:10	09/09/15 21:03	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/08/15 08:10	09/09/15 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*95*		*10 - 150*	*09/08/15 08:10*	*09/09/15 21:03*	*1*
Tetrachloro-m-xylene	*104*		*10 - 150*	*09/08/15 08:10*	*09/09/15 21:03*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			09/02/15 22:31	1
Sulfate	0.60	U	1.00	0.60	mg/L			09/02/15 22:31	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/27/15 09:38	08/28/15 14:26	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:26	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:26	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:26	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:26	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/27/15 09:38	08/28/15 14:26	1
Calcium	0.13	U	1.0	0.13	mg/L		08/27/15 09:38	08/28/15 14:26	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:26	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:26	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:26	1
Iron	0.010	U	0.025	0.010	mg/L		08/27/15 09:38	08/28/15 14:26	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/27/15 09:38	08/28/15 14:26	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/27/15 09:38	08/28/15 14:26	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:26	1

Client Sample ID: FB-01-082415
Date Collected: 08/24/15 07:30
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-3
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:26	1
Potassium	0.13	U	1.0	0.13	mg/L		08/27/15 09:38	08/28/15 14:26	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		09/09/15 14:34	09/11/15 15:00	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 14:26	1
Sodium	0.13	U	1.0	0.13	mg/L		08/27/15 09:38	08/28/15 14:26	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/27/15 09:38	08/28/15 14:26	1
Vanadium	**0.0013**	**J B**	0.0020	0.00010	mg/L		08/27/15 09:38	08/28/15 14:26	1
Zinc	0.010	U	0.025	0.010	mg/L		08/27/15 09:38	08/28/15 14:26	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/28/15 10:18	09/03/15 12:01	1
Antimony	**0.0011**	**J**	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:56	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:56	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:56	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 12:01	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/28/15 10:18	09/02/15 22:56	1
Calcium	0.13	U	1.0	0.13	mg/L		08/28/15 10:18	09/03/15 12:01	1
Chromium	**0.0013**	**J**	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:56	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:56	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:56	1
Iron	0.010	U	0.025	0.010	mg/L		08/28/15 10:18	09/02/15 22:56	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/28/15 10:18	09/02/15 22:56	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/28/15 10:18	09/03/15 12:01	1
Manganese	**0.00059**	**J B**	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:56	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 12:01	1
Potassium	0.13	U	1.0	0.13	mg/L		08/28/15 10:18	09/03/15 12:01	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/28/15 10:18	09/02/15 22:56	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 22:56	1
Sodium	0.13	U	1.0	0.13	mg/L		08/28/15 10:18	09/03/15 12:01	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/28/15 10:18	09/02/15 22:56	1
Vanadium	**0.00095**	**J B**	0.0020	0.00010	mg/L		08/28/15 10:18	09/02/15 22:56	1
Zinc	0.010	U	0.025	0.010	mg/L		08/28/15 10:18	09/02/15 22:56	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/01/15 16:15	09/02/15 16:57	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 01:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/27/15 16:19	08/28/15 12:09	1
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/27/15 18:10	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/27/15 18:10	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: RW-5A-082415
Date Collected: 08/24/15 10:25
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-4
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/03/15 15:54	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/03/15 15:54	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/03/15 15:54	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/03/15 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*09/03/15 15:54*	*1*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*		*09/03/15 15:54*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/03/15 15:54*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/03/15 15:54*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 20:27	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/03/15 20:27	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 20:27	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 20:27	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/03/15 20:27	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/03/15 20:27	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/03/15 20:27	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/03/15 20:27	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/03/15 20:27	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/03/15 20:27	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 20:27	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/03/15 20:27	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/03/15 20:27	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/03/15 20:27	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/03/15 20:27	1
Acetone	2.7	U	25	2.7	ug/L			09/03/15 20:27	1
Benzene	**0.22**	**J**	1.0	0.20	ug/L			09/03/15 20:27	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/03/15 20:27	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/03/15 20:27	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/03/15 20:27	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/03/15 20:27	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 20:27	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/03/15 20:27	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/03/15 20:27	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/03/15 20:27	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/03/15 20:27	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/03/15 20:27	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 20:27	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/03/15 20:27	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/03/15 20:27	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/03/15 20:27	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/03/15 20:27	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/03/15 20:27	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/03/15 20:27	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/03/15 20:27	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/03/15 20:27	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/03/15 20:27	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: RW-5A-082415
Date Collected: 08/24/15 10:25
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/03/15 20:27	1
Styrene	0.28	U	1.0	0.28	ug/L			09/03/15 20:27	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/03/15 20:27	1
Toluene	0.17	U	1.0	0.17	ug/L			09/03/15 20:27	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/03/15 20:27	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 20:27	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/03/15 20:27	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/03/15 20:27	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/03/15 20:27	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/03/15 20:27	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/03/15 20:27	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/03/15 20:27*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/03/15 20:27*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*09/03/15 20:27*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*09/03/15 20:27*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/03/15 20:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*128*		*70 - 130*		*09/03/15 20:27*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.022	U	0.045	0.022	ug/L		08/30/15 07:54	08/31/15 16:43	1
Benzo[a]pyrene	0.022	U	0.045	0.022	ug/L		08/30/15 07:54	08/31/15 16:43	1
Benzo[b]fluoranthene	0.022	U	0.045	0.022	ug/L		08/30/15 07:54	08/31/15 16:43	1
Hexachlorobenzene	0.013	U	0.018	0.013	ug/L		08/30/15 07:54	08/31/15 16:43	1
Hexachlorobutadiene	0.18	U	0.36	0.18	ug/L		08/30/15 07:54	08/31/15 16:43	1
N-Nitrosodimethylamine	0.18	U	0.71	0.18	ug/L		08/30/15 07:54	08/31/15 16:43	1
Pentachlorophenol	0.089	U	0.27	0.089	ug/L		08/30/15 07:54	08/31/15 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*66*		*10 - 120*	*08/30/15 07:54*	*08/31/15 16:43*	*1*
2-Fluorobiphenyl (Surr)	*66*		*29 - 120*	*08/30/15 07:54*	*08/31/15 16:43*	*1*
Nitrobenzene-d5	*87*		*27 - 120*	*08/30/15 07:54*	*08/31/15 16:43*	*1*
Terphenyl-d14	*75*		*13 - 120*	*08/30/15 07:54*	*08/31/15 16:43*	*1*
2-Fluorophenol	*49*		*10 - 120*	*08/30/15 07:54*	*08/31/15 16:43*	*1*
Phenol-d5	*32*		*10 - 120*	*08/30/15 07:54*	*08/31/15 16:43*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.28	U	1.7	0.28	ug/L		08/30/15 07:58	08/31/15 17:43	1
1,2,4,5-Tetrachlorobenzene	1.8	U	8.6	1.8	ug/L		08/30/15 07:58	08/31/15 17:43	1
2,3,4,6-Tetrachlorophenol	5.9	U	8.6	5.9	ug/L		08/30/15 07:58	08/31/15 17:43	1
2,4,5-Trichlorophenol	6.1	U	8.6	6.1	ug/L		08/30/15 07:58	08/31/15 17:43	1
2,4,6-Trichlorophenol	5.9	U	8.6	5.9	ug/L		08/30/15 07:58	08/31/15 17:43	1
2,4-Dichlorophenol	4.8	U	8.6	4.8	ug/L		08/30/15 07:58	08/31/15 17:43	1
2,4-Dimethylphenol	3.6	U	8.6	3.6	ug/L		08/30/15 07:58	08/31/15 17:43	1
2,4-Dinitrophenol	5.1	U	22	5.1	ug/L		08/30/15 07:58	08/31/15 17:43	1
2,4-Dinitrotoluene	2.8	U	8.6	2.8	ug/L		08/30/15 07:58	08/31/15 17:43	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: RW-5A-082415
Date Collected: 08/24/15 10:25
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.0	U	8.6	2.0	ug/L		08/30/15 07:58	08/31/15 17:43	1
2-Chloronaphthalene	2.4	U	8.6	2.4	ug/L		08/30/15 07:58	08/31/15 17:43	1
2-Chlorophenol	4.1	U	8.6	4.1	ug/L		08/30/15 07:58	08/31/15 17:43	1
2-Methylnaphthalene	0.34	U	1.7	0.34	ug/L		08/30/15 07:58	08/31/15 17:43	1
2-Methylphenol	2.0	U	8.6	2.0	ug/L		08/30/15 07:58	08/31/15 17:43	1
2-Nitroaniline	3.2	U	22	3.2	ug/L		08/30/15 07:58	08/31/15 17:43	1
2-Nitrophenol	4.6	U	8.6	4.6	ug/L		08/30/15 07:58	08/31/15 17:43	1
3,3'-Dichlorobenzidine	2.8	U	8.6	2.8	ug/L		08/30/15 07:58	08/31/15 17:43	1
3 & 4 Methylphenol	1.9	U	8.6	1.9	ug/L		08/30/15 07:58	08/31/15 17:43	1
3-Nitroaniline	2.3	U	22	2.3	ug/L		08/30/15 07:58	08/31/15 17:43	1
4,6-Dinitro-2-methylphenol	8.0	U	22	8.0	ug/L		08/30/15 07:58	08/31/15 17:43	1
4-Bromophenyl phenyl ether	2.3	U	8.6	2.3	ug/L		08/30/15 07:58	08/31/15 17:43	1
4-Chloro-3-methylphenol	3.9	U	8.6	3.9	ug/L		08/30/15 07:58	08/31/15 17:43	1
4-Chloroaniline	3.6	U	8.6	3.6	ug/L		08/30/15 07:58	08/31/15 17:43	1
4-Chlorophenyl phenyl ether	2.4	U	8.6	2.4	ug/L		08/30/15 07:58	08/31/15 17:43	1
4-Nitroaniline	2.7	U	22	2.7	ug/L		08/30/15 07:58	08/31/15 17:43	1
4-Nitrophenol	4.7	U	22	4.7	ug/L		08/30/15 07:58	08/31/15 17:43	1
Acenaphthylene	0.30	U	1.7	0.30	ug/L		08/30/15 07:58	08/31/15 17:43	1
Acetophenone	2.0	U	8.6	2.0	ug/L		08/30/15 07:58	08/31/15 17:43	1
Anthracene	0.33	U	1.7	0.33	ug/L		08/30/15 07:58	08/31/15 17:43	1
Benzaldehyde	4.9	U *	8.6	4.9	ug/L		08/30/15 07:58	08/31/15 17:43	1
Benzo[g,h,i]perylene	0.53	U	1.7	0.53	ug/L		08/30/15 07:58	08/31/15 17:43	1
Benzo[k]fluoranthene	0.32	U	1.7	0.32	ug/L		08/30/15 07:58	08/31/15 17:43	1
Bis(2-chloroethoxy)methane	2.7	U	8.6	2.7	ug/L		08/30/15 07:58	08/31/15 17:43	1
Bis(2-chloroethyl)ether	2.4	U	8.6	2.4	ug/L		08/30/15 07:58	08/31/15 17:43	1
Butyl benzyl phthalate	2.2	U	8.6	2.2	ug/L		08/30/15 07:58	08/31/15 17:43	1
Bis(2-ethylhexyl) phthalate	5.2	U	8.6	5.2	ug/L		08/30/15 07:58	08/31/15 17:43	1
Carbazole	2.4	U	8.6	2.4	ug/L		08/30/15 07:58	08/31/15 17:43	1
Caprolactam	2.1	U	8.6	2.1	ug/L		08/30/15 07:58	08/31/15 17:43	1
Chrysene	0.28	U	1.7	0.28	ug/L		08/30/15 07:58	08/31/15 17:43	1
Dibenz(a,h)anthracene	0.39	U	1.7	0.39	ug/L		08/30/15 07:58	08/31/15 17:43	1
Dibenzofuran	2.5	U	8.6	2.5	ug/L		08/30/15 07:58	08/31/15 17:43	1
Diethyl phthalate	2.6	U	8.6	2.6	ug/L		08/30/15 07:58	08/31/15 17:43	1
Dimethyl phthalate	2.7	U	8.6	2.7	ug/L		08/30/15 07:58	08/31/15 17:43	1
Di-n-butyl phthalate	2.2	U	8.6	2.2	ug/L		08/30/15 07:58	08/31/15 17:43	1
Fluoranthene	0.28	U	1.7	0.28	ug/L		08/30/15 07:58	08/31/15 17:43	1
Fluorene	0.28	U	1.7	0.28	ug/L		08/30/15 07:58	08/31/15 17:43	1
Hexachlorocyclopentadiene	1.6	U	8.6	1.6	ug/L		08/30/15 07:58	08/31/15 17:43	1
Hexachloroethane	1.6	U	8.6	1.6	ug/L		08/30/15 07:58	08/31/15 17:43	1
Indeno[1,2,3-cd]pyrene	0.35	U	1.7	0.35	ug/L		08/30/15 07:58	08/31/15 17:43	1
Isophorone	2.7	U	8.6	2.7	ug/L		08/30/15 07:58	08/31/15 17:43	1
Naphthalene	0.32	U	1.7	0.32	ug/L		08/30/15 07:58	08/31/15 17:43	1
Nitrobenzene	2.3	U	8.6	2.3	ug/L		08/30/15 07:58	08/31/15 17:43	1
N-Nitrosodi-n-propylamine	2.9	U	8.6	2.9	ug/L		08/30/15 07:58	08/31/15 17:43	1
N-Nitrosodiphenylamine	3.1	U	8.6	3.1	ug/L		08/30/15 07:58	08/31/15 17:43	1
Phenanthrene	0.36	U	1.7	0.36	ug/L		08/30/15 07:58	08/31/15 17:43	1
Phenol	1.3	U	8.6	1.3	ug/L		08/30/15 07:58	08/31/15 17:43	1
Pyrene	0.30	U	1.7	0.30	ug/L		08/30/15 07:58	08/31/15 17:43	1
Diphenyl	1.9	U	8.6	1.9	ug/L		08/30/15 07:58	08/31/15 17:43	1

Client Sample ID: RW-5A-082415

Date Collected: 08/24/15 10:25
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-4

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.2	U	8.6	2.2	ug/L		08/30/15 07:58	08/31/15 17:43	1
2,2'-oxybis[1-chloropropane]	2.4	U	8.6	2.4	ug/L		08/30/15 07:58	08/31/15 17:43	1
Atrazine	2.5	U	8.6	2.5	ug/L		08/30/15 07:58	08/31/15 17:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Diethyltoluamide	*5.4*	*J N*	*ug/L*		*6.53*	*134-62-3*	*08/30/15 07:58*	*08/31/15 17:43*	*1*
Oleic Acid	*6.6*	*J N*	*ug/L*		*8.42*	*112-80-1*	*08/30/15 07:58*	*08/31/15 17:43*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*97*		*10 - 120*	*08/30/15 07:58*	*08/31/15 17:43*	*1*
2-Fluorobiphenyl (Surr)	*73*		*29 - 120*	*08/30/15 07:58*	*08/31/15 17:43*	*1*
2-Fluorophenol (Surr)	*35*		*10 - 120*	*08/30/15 07:58*	*08/31/15 17:43*	*1*
Nitrobenzene-d5 (Surr)	*75*		*27 - 120*	*08/30/15 07:58*	*08/31/15 17:43*	*1*
Phenol-d5 (Surr)	*22*		*10 - 120*	*08/30/15 07:58*	*08/31/15 17:43*	*1*
Terphenyl-d14 (Surr)	*79*		*13 - 120*	*08/30/15 07:58*	*08/31/15 17:43*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/08/15 08:10	09/09/15 21:19	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/08/15 08:10	09/09/15 21:19	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/08/15 08:10	09/09/15 21:19	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/08/15 08:10	09/09/15 21:19	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/08/15 08:10	09/09/15 21:19	1
PCB-1254	**0.18**	**J**	0.50	0.17	ug/L		09/08/15 08:10	09/09/15 21:19	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/08/15 08:10	09/09/15 21:19	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/08/15 08:10	09/09/15 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*89*		*10 - 150*	*09/08/15 08:10*	*09/09/15 21:19*	*1*
Tetrachloro-m-xylene	*103*		*10 - 150*	*09/08/15 08:10*	*09/09/15 21:19*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.53**		1.00	0.70	mg/L			09/02/15 22:55	1
Sulfate	**9.23**		1.00	0.60	mg/L			09/02/15 22:55	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.055**		0.020	0.0096	mg/L		08/27/15 09:42	08/28/15 14:32	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:32	1
Arsenic	**0.0033**		0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:32	1
Barium	**0.025**		0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:32	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:32	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/27/15 09:42	08/28/15 14:32	1
Calcium	**76.3**		1.0	0.13	mg/L		08/27/15 09:42	08/28/15 14:32	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:32	1
Cobalt	**0.0012**	**J**	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:32	1
Copper	**0.00050**	**J**	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:32	1
Iron	**4.3**		0.025	0.010	mg/L		08/27/15 09:42	08/28/15 14:32	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/27/15 09:42	08/28/15 14:32	1
Magnesium	**8.4**		1.0	0.13	mg/L		08/27/15 09:42	08/28/15 14:32	1

Client Sample ID: RW-5A-082415

Date Collected: 08/24/15 10:25
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-4

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.0**		0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:32	1
Nickel	**0.00085**	**J**	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:32	1
Potassium	**10.9**		1.0	0.13	mg/L		08/27/15 09:42	08/28/15 14:32	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		09/09/15 14:34	09/11/15 15:15	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:32	1
Sodium	**7.7**		1.0	0.13	mg/L		08/27/15 09:42	08/28/15 14:32	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/27/15 09:42	08/28/15 14:32	1
Vanadium	**0.0022**	**B**	0.0020	0.00010	mg/L		08/27/15 09:42	08/28/15 14:32	1
Zinc	0.010	U	0.025	0.010	mg/L		08/27/15 09:42	08/28/15 14:32	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/28/15 10:18	09/03/15 12:07	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 23:01	1
Arsenic	**0.0011**	**J**	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 23:01	1
Barium	**0.025**		0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 23:01	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 12:07	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/28/15 10:18	09/02/15 23:01	1
Calcium	**69.7**		1.0	0.13	mg/L		08/28/15 10:18	09/03/15 12:07	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 23:01	1
Cobalt	**0.0011**	**J**	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 23:01	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 23:01	1
Iron	**0.14**		0.025	0.010	mg/L		08/28/15 10:18	09/02/15 23:01	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/28/15 10:18	09/02/15 23:01	1
Magnesium	**8.3**		1.0	0.13	mg/L		08/28/15 10:18	09/03/15 12:07	1
Manganese	**1.0**	**B**	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 23:01	1
Nickel	**0.0012**	**J**	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 12:07	1
Potassium	**10.3**		1.0	0.13	mg/L		08/28/15 10:18	09/03/15 12:07	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/28/15 10:18	09/02/15 23:01	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 23:01	1
Sodium	**7.3**		1.0	0.13	mg/L		08/28/15 10:18	09/03/15 12:07	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/28/15 10:18	09/02/15 23:01	1
Vanadium	**0.00087**	**J B**	0.0020	0.00010	mg/L		08/28/15 10:18	09/02/15 23:01	1
Zinc	0.010	U	0.025	0.010	mg/L		08/28/15 10:18	09/02/15 23:01	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/01/15 16:15	09/02/15 17:00	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 01:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U F1	0.010	0.0070	mg/L		08/27/15 16:19	08/28/15 12:09	1
Bicarbonate Alkalinity as CaCO3	**221**		10.0	5.0	mg/L			08/27/15 18:15	1
Total Alkalinity as CaCO3	**221**		10.0	5.0	mg/L			08/27/15 18:15	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: OB-7-082415
Date Collected: 08/24/15 12:50
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-5
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/03/15 16:23	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/03/15 16:23	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/03/15 16:23	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/03/15 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*09/03/15 16:23*	*1*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*		*09/03/15 16:23*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*09/03/15 16:23*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/03/15 16:23*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 20:54	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/03/15 20:54	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 20:54	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 20:54	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/03/15 20:54	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/03/15 20:54	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/03/15 20:54	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/03/15 20:54	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/03/15 20:54	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/03/15 20:54	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 20:54	1
1,4-Dichlorobenzene	**0.18**	**J**	1.0	0.17	ug/L			09/03/15 20:54	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/03/15 20:54	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/03/15 20:54	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/03/15 20:54	1
Acetone	2.7	U	25	2.7	ug/L			09/03/15 20:54	1
Benzene	0.20	U	1.0	0.20	ug/L			09/03/15 20:54	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/03/15 20:54	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/03/15 20:54	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/03/15 20:54	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/03/15 20:54	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 20:54	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/03/15 20:54	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/03/15 20:54	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/03/15 20:54	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/03/15 20:54	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/03/15 20:54	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 20:54	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/03/15 20:54	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/03/15 20:54	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/03/15 20:54	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/03/15 20:54	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/03/15 20:54	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/03/15 20:54	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/03/15 20:54	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/03/15 20:54	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/03/15 20:54	1

Client Sample ID: OB-7-082415

Date Collected: 08/24/15 12:50
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/03/15 20:54	1
Styrene	0.28	U	1.0	0.28	ug/L			09/03/15 20:54	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/03/15 20:54	1
Toluene	0.17	U	1.0	0.17	ug/L			09/03/15 20:54	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/03/15 20:54	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 20:54	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/03/15 20:54	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/03/15 20:54	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/03/15 20:54	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/03/15 20:54	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/03/15 20:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethyl ether	*0.28*	*J*	*ug/L*		*1.82*	*60-29-7*		*09/03/15 20:54*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/03/15 20:54*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*09/03/15 20:54*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*09/03/15 20:54*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/03/15 20:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*09/03/15 20:54*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.023	U	0.046	0.023	ug/L		08/30/15 07:54	08/31/15 17:10	1
Benzo[a]pyrene	0.023	U	0.046	0.023	ug/L		08/30/15 07:54	08/31/15 17:10	1
Benzo[b]fluoranthene	0.023	U	0.046	0.023	ug/L		08/30/15 07:54	08/31/15 17:10	1
Hexachlorobenzene	0.013	U	0.019	0.013	ug/L		08/30/15 07:54	08/31/15 17:10	1
Hexachlorobutadiene	0.19	U	0.37	0.19	ug/L		08/30/15 07:54	08/31/15 17:10	1
N-Nitrosodimethylamine	0.19	U	0.74	0.19	ug/L		08/30/15 07:54	08/31/15 17:10	1
Pentachlorophenol	0.093	U	0.28	0.093	ug/L		08/30/15 07:54	08/31/15 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*74*		*10 - 120*	*08/30/15 07:54*	*08/31/15 17:10*	*1*
2-Fluorobiphenyl (Surr)	*70*		*29 - 120*	*08/30/15 07:54*	*08/31/15 17:10*	*1*
Nitrobenzene-d5	*72*		*27 - 120*	*08/30/15 07:54*	*08/31/15 17:10*	*1*
Terphenyl-d14	*80*		*13 - 120*	*08/30/15 07:54*	*08/31/15 17:10*	*1*
2-Fluorophenol	*50*		*10 - 120*	*08/30/15 07:54*	*08/31/15 17:10*	*1*
Phenol-d5	*33*		*10 - 120*	*08/30/15 07:54*	*08/31/15 17:10*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.30	U	1.9	0.30	ug/L		08/30/15 07:58	08/31/15 18:07	1
1,2,4,5-Tetrachlorobenzene	1.9	U	9.3	1.9	ug/L		08/30/15 07:58	08/31/15 18:07	1
2,3,4,6-Tetrachlorophenol	6.4	U	9.3	6.4	ug/L		08/30/15 07:58	08/31/15 18:07	1
2,4,5-Trichlorophenol	6.6	U	9.3	6.6	ug/L		08/30/15 07:58	08/31/15 18:07	1
2,4,6-Trichlorophenol	6.3	U	9.3	6.3	ug/L		08/30/15 07:58	08/31/15 18:07	1
2,4-Dichlorophenol	5.2	U	9.3	5.2	ug/L		08/30/15 07:58	08/31/15 18:07	1
2,4-Dimethylphenol	3.9	U	9.3	3.9	ug/L		08/30/15 07:58	08/31/15 18:07	1
2,4-Dinitrophenol	5.5	U	23	5.5	ug/L		08/30/15 07:58	08/31/15 18:07	1
2,4-Dinitrotoluene	3.0	U	9.3	3.0	ug/L		08/30/15 07:58	08/31/15 18:07	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: OB-7-082415
Date Collected: 08/24/15 12:50
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.1	U	9.3	2.1	ug/L		08/30/15 07:58	08/31/15 18:07	1
2-Chloronaphthalene	2.6	U	9.3	2.6	ug/L		08/30/15 07:58	08/31/15 18:07	1
2-Chlorophenol	4.4	U	9.3	4.4	ug/L		08/30/15 07:58	08/31/15 18:07	1
2-Methylnaphthalene	0.37	U	1.9	0.37	ug/L		08/30/15 07:58	08/31/15 18:07	1
2-Methylphenol	2.1	U	9.3	2.1	ug/L		08/30/15 07:58	08/31/15 18:07	1
2-Nitroaniline	3.4	U	23	3.4	ug/L		08/30/15 07:58	08/31/15 18:07	1
2-Nitrophenol	4.9	U	9.3	4.9	ug/L		08/30/15 07:58	08/31/15 18:07	1
3,3'-Dichlorobenzidine	3.1	U	9.3	3.1	ug/L		08/30/15 07:58	08/31/15 18:07	1
3 & 4 Methylphenol	2.0	U	9.3	2.0	ug/L		08/30/15 07:58	08/31/15 18:07	1
3-Nitroaniline	2.5	U	23	2.5	ug/L		08/30/15 07:58	08/31/15 18:07	1
4,6-Dinitro-2-methylphenol	8.6	U	23	8.6	ug/L		08/30/15 07:58	08/31/15 18:07	1
4-Bromophenyl phenyl ether	2.5	U	9.3	2.5	ug/L		08/30/15 07:58	08/31/15 18:07	1
4-Chloro-3-methylphenol	4.2	U	9.3	4.2	ug/L		08/30/15 07:58	08/31/15 18:07	1
4-Chloroaniline	3.9	U	9.3	3.9	ug/L		08/30/15 07:58	08/31/15 18:07	1
4-Chlorophenyl phenyl ether	2.6	U	9.3	2.6	ug/L		08/30/15 07:58	08/31/15 18:07	1
4-Nitroaniline	2.9	U	23	2.9	ug/L		08/30/15 07:58	08/31/15 18:07	1
4-Nitrophenol	5.0	U	23	5.0	ug/L		08/30/15 07:58	08/31/15 18:07	1
Acenaphthylene	0.32	U	1.9	0.32	ug/L		08/30/15 07:58	08/31/15 18:07	1
Acetophenone	2.1	U	9.3	2.1	ug/L		08/30/15 07:58	08/31/15 18:07	1
Anthracene	0.35	U	1.9	0.35	ug/L		08/30/15 07:58	08/31/15 18:07	1
Benzaldehyde	5.3	U *	9.3	5.3	ug/L		08/30/15 07:58	08/31/15 18:07	1
Benzo[g,h,i]perylene	0.57	U	1.9	0.57	ug/L		08/30/15 07:58	08/31/15 18:07	1
Benzo[k]fluoranthene	0.34	U	1.9	0.34	ug/L		08/30/15 07:58	08/31/15 18:07	1
Bis(2-chloroethoxy)methane	2.9	U	9.3	2.9	ug/L		08/30/15 07:58	08/31/15 18:07	1
Bis(2-chloroethyl)ether	2.6	U	9.3	2.6	ug/L		08/30/15 07:58	08/31/15 18:07	1
Butyl benzyl phthalate	2.3	U	9.3	2.3	ug/L		08/30/15 07:58	08/31/15 18:07	1
Bis(2-ethylhexyl) phthalate	5.6	U	9.3	5.6	ug/L		08/30/15 07:58	08/31/15 18:07	1
Carbazole	2.6	U	9.3	2.6	ug/L		08/30/15 07:58	08/31/15 18:07	1
Caprolactam	2.2	U	9.3	2.2	ug/L		08/30/15 07:58	08/31/15 18:07	1
Chrysene	0.31	U	1.9	0.31	ug/L		08/30/15 07:58	08/31/15 18:07	1
Dibenz(a,h)anthracene	0.42	U	1.9	0.42	ug/L		08/30/15 07:58	08/31/15 18:07	1
Dibenzofuran	2.7	U	9.3	2.7	ug/L		08/30/15 07:58	08/31/15 18:07	1
Diethyl phthalate	2.8	U	9.3	2.8	ug/L		08/30/15 07:58	08/31/15 18:07	1
Dimethyl phthalate	2.9	U	9.3	2.9	ug/L		08/30/15 07:58	08/31/15 18:07	1
Di-n-butyl phthalate	2.3	U	9.3	2.3	ug/L		08/30/15 07:58	08/31/15 18:07	1
Fluoranthene	0.30	U	1.9	0.30	ug/L		08/30/15 07:58	08/31/15 18:07	1
Fluorene	0.30	U	1.9	0.30	ug/L		08/30/15 07:58	08/31/15 18:07	1
Hexachlorocyclopentadiene	1.7	U	9.3	1.7	ug/L		08/30/15 07:58	08/31/15 18:07	1
Hexachloroethane	1.8	U	9.3	1.8	ug/L		08/30/15 07:58	08/31/15 18:07	1
Indeno[1,2,3-cd]pyrene	0.38	U	1.9	0.38	ug/L		08/30/15 07:58	08/31/15 18:07	1
Isophorone	2.9	U	9.3	2.9	ug/L		08/30/15 07:58	08/31/15 18:07	1
Naphthalene	0.34	U	1.9	0.34	ug/L		08/30/15 07:58	08/31/15 18:07	1
Nitrobenzene	2.5	U	9.3	2.5	ug/L		08/30/15 07:58	08/31/15 18:07	1
N-Nitrosodi-n-propylamine	3.1	U	9.3	3.1	ug/L		08/30/15 07:58	08/31/15 18:07	1
N-Nitrosodiphenylamine	3.3	U	9.3	3.3	ug/L		08/30/15 07:58	08/31/15 18:07	1
Phenanthrene	0.39	U	1.9	0.39	ug/L		08/30/15 07:58	08/31/15 18:07	1
Phenol	1.4	U	9.3	1.4	ug/L		08/30/15 07:58	08/31/15 18:07	1
Pyrene	0.32	U	1.9	0.32	ug/L		08/30/15 07:58	08/31/15 18:07	1
Diphenyl	2.0	U	9.3	2.0	ug/L		08/30/15 07:58	08/31/15 18:07	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: OB-7-082415
Date Collected: 08/24/15 12:50
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.3	U	9.3	2.3	ug/L		08/30/15 07:58	08/31/15 18:07	1
2,2'-oxybis[1-chloropropane]	2.6	U	9.3	2.6	ug/L		08/30/15 07:58	08/31/15 18:07	1
Atrazine	2.7	U	9.3	2.7	ug/L		08/30/15 07:58	08/31/15 18:07	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tridecanoic acid	*3.5*	*J N*	*ug/L*		*7.84*	*638-53-9*	*08/30/15 07:58*	*08/31/15 18:07*	*1*
Oleic Acid	*17*	*J N*	*ug/L*		*8.42*	*112-80-1*	*08/30/15 07:58*	*08/31/15 18:07*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*107*		*10 - 120*	*08/30/15 07:58*	*08/31/15 18:07*	*1*
2-Fluorobiphenyl (Surr)	*83*		*29 - 120*	*08/30/15 07:58*	*08/31/15 18:07*	*1*
2-Fluorophenol (Surr)	*44*		*10 - 120*	*08/30/15 07:58*	*08/31/15 18:07*	*1*
Nitrobenzene-d5 (Surr)	*87*		*27 - 120*	*08/30/15 07:58*	*08/31/15 18:07*	*1*
Phenol-d5 (Surr)	*27*		*10 - 120*	*08/30/15 07:58*	*08/31/15 18:07*	*1*
Terphenyl-d14 (Surr)	*85*		*13 - 120*	*08/30/15 07:58*	*08/31/15 18:07*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/08/15 08:10	09/09/15 21:35	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/08/15 08:10	09/09/15 21:35	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/08/15 08:10	09/09/15 21:35	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/08/15 08:10	09/09/15 21:35	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/08/15 08:10	09/09/15 21:35	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/08/15 08:10	09/09/15 21:35	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/08/15 08:10	09/09/15 21:35	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/08/15 08:10	09/09/15 21:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*107*		*10 - 150*	*09/08/15 08:10*	*09/09/15 21:35*	*1*
Tetrachloro-m-xylene	*114*		*10 - 150*	*09/08/15 08:10*	*09/09/15 21:35*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.06**		1.00	0.70	mg/L			09/02/15 23:19	1
Sulfate	**7.39**		1.00	0.60	mg/L			09/02/15 23:19	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/27/15 09:42	08/28/15 14:37	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:37	1
Arsenic	**0.00057**	**J**	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:37	1
Barium	**0.018**		0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:37	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:37	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/27/15 09:42	08/28/15 14:37	1
Calcium	**76.5**		1.0	0.13	mg/L		08/27/15 09:42	08/28/15 14:37	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:37	1
Cobalt	**0.0032**		0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:37	1
Copper	**0.0030**		0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:37	1
Iron	**1.7**		0.025	0.010	mg/L		08/27/15 09:42	08/28/15 14:37	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/27/15 09:42	08/28/15 14:37	1
Magnesium	**28.0**		1.0	0.13	mg/L		08/27/15 09:42	08/28/15 14:37	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: OB-7-082415
Date Collected: 08/24/15 12:50
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-5
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	2.7		0.020	0.0050	mg/L		08/27/15 09:42	08/31/15 14:31	10
Nickel	0.0019	J	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:37	1
Potassium	2.8		1.0	0.13	mg/L		08/27/15 09:42	08/28/15 14:37	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		09/09/15 14:34	09/11/15 15:20	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:37	1
Sodium	10.2		1.0	0.13	mg/L		08/27/15 09:42	08/28/15 14:37	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/27/15 09:42	08/28/15 14:37	1
Vanadium	0.0017	J B	0.0020	0.00010	mg/L		08/27/15 09:42	08/28/15 14:37	1
Zinc	0.010	U	0.025	0.010	mg/L		08/27/15 09:42	08/28/15 14:37	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/30/15 13:22	09/03/15 12:31	1
Antimony	0.00050	J	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:31	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:31	1
Barium	0.017		0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:31	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:31	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/30/15 13:22	09/03/15 12:31	1
Calcium	78.1		1.0	0.13	mg/L		08/30/15 13:22	09/03/15 12:31	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:31	1
Cobalt	0.0033		0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:31	1
Copper	0.0012	J	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:31	1
Iron	0.013	J	0.025	0.010	mg/L		08/30/15 13:22	09/03/15 12:31	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/30/15 13:22	09/03/15 12:31	1
Magnesium	30.7		1.0	0.13	mg/L		08/30/15 13:22	09/03/15 12:31	1
Manganese	2.7		0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:31	1
Nickel	0.0022		0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:31	1
Potassium	2.9		1.0	0.13	mg/L		08/30/15 13:22	09/03/15 12:31	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/30/15 13:22	09/03/15 12:31	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:31	1
Sodium	11.1		1.0	0.13	mg/L		08/30/15 13:22	09/03/15 12:31	1
Thallium	0.00059	J	0.0020	0.00020	mg/L		08/30/15 13:22	09/03/15 12:31	1
Vanadium	0.0019	J B	0.0020	0.00010	mg/L		08/30/15 13:22	09/03/15 12:31	1
Zinc	0.010	U	0.025	0.010	mg/L		08/30/15 13:22	09/04/15 19:38	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/01/15 16:15	09/02/15 17:02	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 01:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0095	J	0.010	0.0070	mg/L		08/27/15 16:19	08/28/15 12:11	1
Bicarbonate Alkalinity as CaCO3	297		10.0	5.0	mg/L			08/27/15 18:20	1
Total Alkalinity as CaCO3	297		10.0	5.0	mg/L			08/27/15 18:20	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: RW-4A (113-123)-082415
Date Collected: 08/24/15 09:35
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-6
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/03/15 16:52	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/03/15 16:52	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/03/15 16:52	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/03/15 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*09/03/15 16:52*	*1*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*		*09/03/15 16:52*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/03/15 16:52*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/03/15 16:52*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 21:21	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/03/15 21:21	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 21:21	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 21:21	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/03/15 21:21	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/03/15 21:21	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/03/15 21:21	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/03/15 21:21	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/03/15 21:21	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/03/15 21:21	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 21:21	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/03/15 21:21	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/03/15 21:21	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/03/15 21:21	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/03/15 21:21	1
Acetone	2.7	U	25	2.7	ug/L			09/03/15 21:21	1
Benzene	0.20	U	1.0	0.20	ug/L			09/03/15 21:21	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/03/15 21:21	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/03/15 21:21	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/03/15 21:21	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/03/15 21:21	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 21:21	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/03/15 21:21	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/03/15 21:21	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/03/15 21:21	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/03/15 21:21	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/03/15 21:21	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 21:21	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/03/15 21:21	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/03/15 21:21	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/03/15 21:21	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/03/15 21:21	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/03/15 21:21	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/03/15 21:21	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/03/15 21:21	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/03/15 21:21	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/03/15 21:21	1

Client Sample ID: RW-4A (113-123)-082415

Lab Sample ID: 490-85948-6

Date Collected: 08/24/15 09:35

Matrix: Water

Date Received: 08/26/15 11:53

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/03/15 21:21	1
Styrene	0.28	U	1.0	0.28	ug/L			09/03/15 21:21	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/03/15 21:21	1
Toluene	0.17	U	1.0	0.17	ug/L			09/03/15 21:21	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/03/15 21:21	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 21:21	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/03/15 21:21	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/03/15 21:21	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/03/15 21:21	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/03/15 21:21	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/03/15 21:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
tert-Butyldimethylsilanol	*3.1*	*J N*	*ug/L*		*2.89*	*18173-64-3*		*09/03/15 21:21*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/03/15 21:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*09/03/15 21:21*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*09/03/15 21:21*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/03/15 21:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*129*		*70 - 130*		*09/03/15 21:21*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.023	U	0.046	0.023	ug/L		08/30/15 07:54	08/31/15 17:37	1
Benzo[a]pyrene	0.023	U	0.046	0.023	ug/L		08/30/15 07:54	08/31/15 17:37	1
Benzo[b]fluoranthene	0.023	U	0.046	0.023	ug/L		08/30/15 07:54	08/31/15 17:37	1
Hexachlorobenzene	0.013	U	0.019	0.013	ug/L		08/30/15 07:54	08/31/15 17:37	1
Hexachlorobutadiene	0.19	U	0.37	0.19	ug/L		08/30/15 07:54	08/31/15 17:37	1
N-Nitrosodimethylamine	0.19	U	0.74	0.19	ug/L		08/30/15 07:54	08/31/15 17:37	1
Pentachlorophenol	0.093	U	0.28	0.093	ug/L		08/30/15 07:54	08/31/15 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*65*		*10 - 120*	*08/30/15 07:54*	*08/31/15 17:37*	*1*
2-Fluorobiphenyl (Surr)	*62*		*29 - 120*	*08/30/15 07:54*	*08/31/15 17:37*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*08/30/15 07:54*	*08/31/15 17:37*	*1*
Terphenyl-d14	*72*		*13 - 120*	*08/30/15 07:54*	*08/31/15 17:37*	*1*
2-Fluorophenol	*48*		*10 - 120*	*08/30/15 07:54*	*08/31/15 17:37*	*1*
Phenol-d5	*32*		*10 - 120*	*08/30/15 07:54*	*08/31/15 17:37*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/30/15 07:58	08/31/15 18:30	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/30/15 07:58	08/31/15 18:30	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/30/15 07:58	08/31/15 18:30	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/30/15 07:58	08/31/15 18:30	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/30/15 07:58	08/31/15 18:30	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/30/15 07:58	08/31/15 18:30	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/30/15 07:58	08/31/15 18:30	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/30/15 07:58	08/31/15 18:30	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/30/15 07:58	08/31/15 18:30	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: RW-4A (113-123)-082415
Date Collected: 08/24/15 09:35
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-6
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/30/15 07:58	08/31/15 18:30	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/30/15 07:58	08/31/15 18:30	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/30/15 07:58	08/31/15 18:30	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/30/15 07:58	08/31/15 18:30	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/30/15 07:58	08/31/15 18:30	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/30/15 07:58	08/31/15 18:30	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/30/15 07:58	08/31/15 18:30	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/30/15 07:58	08/31/15 18:30	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/30/15 07:58	08/31/15 18:30	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/30/15 07:58	08/31/15 18:30	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/30/15 07:58	08/31/15 18:30	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/30/15 07:58	08/31/15 18:30	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/30/15 07:58	08/31/15 18:30	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/30/15 07:58	08/31/15 18:30	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/30/15 07:58	08/31/15 18:30	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/30/15 07:58	08/31/15 18:30	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/30/15 07:58	08/31/15 18:30	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/30/15 07:58	08/31/15 18:30	1
Acetophenone	2.3	U	10	2.3	ug/L		08/30/15 07:58	08/31/15 18:30	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/30/15 07:58	08/31/15 18:30	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/30/15 07:58	08/31/15 18:30	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/30/15 07:58	08/31/15 18:30	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/30/15 07:58	08/31/15 18:30	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/30/15 07:58	08/31/15 18:30	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/30/15 07:58	08/31/15 18:30	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/30/15 07:58	08/31/15 18:30	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/30/15 07:58	08/31/15 18:30	1
Carbazole	2.8	U	10	2.8	ug/L		08/30/15 07:58	08/31/15 18:30	1
Caprolactam	2.4	U	10	2.4	ug/L		08/30/15 07:58	08/31/15 18:30	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/30/15 07:58	08/31/15 18:30	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/30/15 07:58	08/31/15 18:30	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/30/15 07:58	08/31/15 18:30	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/30/15 07:58	08/31/15 18:30	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/30/15 07:58	08/31/15 18:30	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/30/15 07:58	08/31/15 18:30	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/30/15 07:58	08/31/15 18:30	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/30/15 07:58	08/31/15 18:30	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/30/15 07:58	08/31/15 18:30	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/30/15 07:58	08/31/15 18:30	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/30/15 07:58	08/31/15 18:30	1
Isophorone	3.1	U	10	3.1	ug/L		08/30/15 07:58	08/31/15 18:30	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/30/15 07:58	08/31/15 18:30	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/30/15 07:58	08/31/15 18:30	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/30/15 07:58	08/31/15 18:30	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/30/15 07:58	08/31/15 18:30	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/30/15 07:58	08/31/15 18:30	1
Phenol	1.5	U	10	1.5	ug/L		08/30/15 07:58	08/31/15 18:30	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/30/15 07:58	08/31/15 18:30	1
Diphenyl	2.2	U	10	2.2	ug/L		08/30/15 07:58	08/31/15 18:30	1

Client Sample ID: RW-4A (113-123)-082415

Lab Sample ID: 490-85948-6

Date Collected: 08/24/15 09:35

Matrix: Water

Date Received: 08/26/15 11:53

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/30/15 07:58	08/31/15 18:30	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/30/15 07:58	08/31/15 18:30	1
Atrazine	2.9	U	10	2.9	ug/L		08/30/15 07:58	08/31/15 18:30	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
n-Hexadecanoic acid	*4.8*	*J N*	*ug/L*		*7.84*	*57-10-3*	*08/30/15 07:58*	*08/31/15 18:30*	*1*
Oleic Acid	*15*	*J N*	*ug/L*		*8.42*	*112-80-1*	*08/30/15 07:58*	*08/31/15 18:30*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*78*		*10 - 120*	*08/30/15 07:58*	*08/31/15 18:30*	*1*
2-Fluorobiphenyl (Surr)	*54*		*29 - 120*	*08/30/15 07:58*	*08/31/15 18:30*	*1*
2-Fluorophenol (Surr)	*29*		*10 - 120*	*08/30/15 07:58*	*08/31/15 18:30*	*1*
Nitrobenzene-d5 (Surr)	*53*		*27 - 120*	*08/30/15 07:58*	*08/31/15 18:30*	*1*
Phenol-d5 (Surr)	*19*		*10 - 120*	*08/30/15 07:58*	*08/31/15 18:30*	*1*
Terphenyl-d14 (Surr)	*66*		*13 - 120*	*08/30/15 07:58*	*08/31/15 18:30*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/08/15 08:10	09/09/15 21:50	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/08/15 08:10	09/09/15 21:50	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/08/15 08:10	09/09/15 21:50	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/08/15 08:10	09/09/15 21:50	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/08/15 08:10	09/09/15 21:50	1
PCB-1254	**1.3**		0.50	0.17	ug/L		09/08/15 08:10	09/09/15 21:50	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/08/15 08:10	09/09/15 21:50	1
Polychlorinated biphenyls, Total	**1.3**		0.50	0.43	ug/L		09/08/15 08:10	09/09/15 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*91*		*10 - 150*	*09/08/15 08:10*	*09/09/15 21:50*	*1*
Tetrachloro-m-xylene	*114*		*10 - 150*	*09/08/15 08:10*	*09/09/15 21:50*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.54**		1.00	0.70	mg/L			09/02/15 23:43	1
Sulfate	**14.7**		1.00	0.60	mg/L			09/02/15 23:43	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.016**	**J**	0.020	0.0096	mg/L		08/27/15 09:42	08/28/15 14:43	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:43	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:43	1
Barium	**0.014**		0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:43	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:43	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/27/15 09:42	08/28/15 14:43	1
Calcium	**12.9**		1.0	0.13	mg/L		08/27/15 09:42	08/28/15 14:43	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:43	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:43	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:43	1
Iron	**0.028**		0.025	0.010	mg/L		08/27/15 09:42	08/28/15 14:43	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/27/15 09:42	08/28/15 14:43	1
Magnesium	**4.7**		1.0	0.13	mg/L		08/27/15 09:42	08/28/15 14:43	1

Client Sample ID: RW-4A (113-123)-082415

Lab Sample ID: 490-85948-6

Date Collected: 08/24/15 09:35

Matrix: Water

Date Received: 08/26/15 11:53

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.0016**	**J**	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:43	1
Nickel	**0.015**	**B**	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:43	1
Potassium	**1.4**		1.0	0.13	mg/L		08/27/15 09:42	08/28/15 14:43	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		09/09/15 14:34	09/11/15 15:26	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:43	1
Sodium	**5.7**		1.0	0.13	mg/L		08/27/15 09:42	08/28/15 14:43	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/27/15 09:42	08/28/15 14:43	1
Vanadium	**0.0019**	**J B**	0.0020	0.00010	mg/L		08/27/15 09:42	08/28/15 14:43	1
Zinc	0.010	U	0.025	0.010	mg/L		08/27/15 09:42	08/28/15 14:43	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/30/15 13:22	09/03/15 12:36	1
Antimony	**0.00063**	**J**	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:36	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:36	1
Barium	**0.015**		0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:36	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:36	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/30/15 13:22	09/03/15 12:36	1
Calcium	**13.4**		1.0	0.13	mg/L		08/30/15 13:22	09/03/15 12:36	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:36	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:36	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:36	1
Iron	0.010	U	0.025	0.010	mg/L		08/30/15 13:22	09/03/15 12:36	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/30/15 13:22	09/03/15 12:36	1
Magnesium	**5.1**		1.0	0.13	mg/L		08/30/15 13:22	09/03/15 12:36	1
Manganese	**0.0013**	**J**	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:36	1
Nickel	**0.017**		0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:36	1
Potassium	**1.5**		1.0	0.13	mg/L		08/30/15 13:22	09/03/15 12:36	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/30/15 13:22	09/03/15 12:36	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:36	1
Sodium	**6.4**		1.0	0.13	mg/L		08/30/15 13:22	09/03/15 12:36	1
Thallium	**0.00037**	**J**	0.0020	0.00020	mg/L		08/30/15 13:22	09/03/15 12:36	1
Vanadium	**0.0025**	**B**	0.0020	0.00010	mg/L		08/30/15 13:22	09/03/15 12:36	1
Zinc	0.010	U	0.025	0.010	mg/L		08/30/15 13:22	09/04/15 19:44	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/01/15 16:15	09/02/15 17:04	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 02:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.016**		0.010	0.0070	mg/L		08/27/15 16:19	08/28/15 12:12	1
Bicarbonate Alkalinity as CaCO3	**44.4**		10.0	5.0	mg/L			08/27/15 18:26	1
Total Alkalinity as CaCO3	**44.4**		10.0	5.0	mg/L			08/27/15 18:26	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: RW-4 (333-343)-082415
Date Collected: 08/24/15 11:25
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-7
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/03/15 17:21	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/03/15 17:21	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/03/15 17:21	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/03/15 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*09/03/15 17:21*	*1*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*		*09/03/15 17:21*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/03/15 17:21*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/03/15 17:21*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 21:48	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/03/15 21:48	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 21:48	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 21:48	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/03/15 21:48	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/03/15 21:48	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/03/15 21:48	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/03/15 21:48	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/03/15 21:48	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/03/15 21:48	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 21:48	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/03/15 21:48	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/03/15 21:48	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/03/15 21:48	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/03/15 21:48	1
Acetone	2.7	U	25	2.7	ug/L			09/03/15 21:48	1
Benzene	0.20	U	1.0	0.20	ug/L			09/03/15 21:48	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/03/15 21:48	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/03/15 21:48	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/03/15 21:48	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/03/15 21:48	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 21:48	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/03/15 21:48	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/03/15 21:48	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/03/15 21:48	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/03/15 21:48	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/03/15 21:48	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 21:48	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/03/15 21:48	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/03/15 21:48	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/03/15 21:48	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/03/15 21:48	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/03/15 21:48	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/03/15 21:48	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/03/15 21:48	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/03/15 21:48	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/03/15 21:48	1

Client Sample ID: RW-4 (333-343)-082415
Date Collected: 08/24/15 11:25
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/03/15 21:48	1
Styrene	0.28	U	1.0	0.28	ug/L			09/03/15 21:48	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/03/15 21:48	1
Toluene	0.17	U	1.0	0.17	ug/L			09/03/15 21:48	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/03/15 21:48	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 21:48	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/03/15 21:48	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/03/15 21:48	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/03/15 21:48	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/03/15 21:48	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/03/15 21:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/03/15 21:48*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/03/15 21:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*09/03/15 21:48*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*09/03/15 21:48*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/03/15 21:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*120*		*70 - 130*		*09/03/15 21:48*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.023	U	0.046	0.023	ug/L		08/30/15 07:54	08/31/15 18:05	1
Benzo[a]pyrene	0.023	U	0.046	0.023	ug/L		08/30/15 07:54	08/31/15 18:05	1
Benzo[b]fluoranthene	0.023	U	0.046	0.023	ug/L		08/30/15 07:54	08/31/15 18:05	1
Hexachlorobenzene	0.013	U	0.019	0.013	ug/L		08/30/15 07:54	08/31/15 18:05	1
Hexachlorobutadiene	0.19	U	0.37	0.19	ug/L		08/30/15 07:54	08/31/15 18:05	1
N-Nitrosodimethylamine	0.19	U	0.74	0.19	ug/L		08/30/15 07:54	08/31/15 18:05	1
Pentachlorophenol	0.093	U	0.28	0.093	ug/L		08/30/15 07:54	08/31/15 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*72*		*10 - 120*	*08/30/15 07:54*	*08/31/15 18:05*	*1*
2-Fluorobiphenyl (Surr)	*70*		*29 - 120*	*08/30/15 07:54*	*08/31/15 18:05*	*1*
Nitrobenzene-d5	*78*		*27 - 120*	*08/30/15 07:54*	*08/31/15 18:05*	*1*
Terphenyl-d14	*76*		*13 - 120*	*08/30/15 07:54*	*08/31/15 18:05*	*1*
2-Fluorophenol	*50*		*10 - 120*	*08/30/15 07:54*	*08/31/15 18:05*	*1*
Phenol-d5	*34*		*10 - 120*	*08/30/15 07:54*	*08/31/15 18:05*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/30/15 07:58	08/31/15 18:54	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/30/15 07:58	08/31/15 18:54	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/30/15 07:58	08/31/15 18:54	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/30/15 07:58	08/31/15 18:54	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/30/15 07:58	08/31/15 18:54	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/30/15 07:58	08/31/15 18:54	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/30/15 07:58	08/31/15 18:54	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/30/15 07:58	08/31/15 18:54	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/30/15 07:58	08/31/15 18:54	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: RW-4 (333-343)-082415
Date Collected: 08/24/15 11:25
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-7
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/30/15 07:58	08/31/15 18:54	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/30/15 07:58	08/31/15 18:54	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/30/15 07:58	08/31/15 18:54	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/30/15 07:58	08/31/15 18:54	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/30/15 07:58	08/31/15 18:54	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/30/15 07:58	08/31/15 18:54	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/30/15 07:58	08/31/15 18:54	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/30/15 07:58	08/31/15 18:54	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/30/15 07:58	08/31/15 18:54	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/30/15 07:58	08/31/15 18:54	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/30/15 07:58	08/31/15 18:54	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/30/15 07:58	08/31/15 18:54	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/30/15 07:58	08/31/15 18:54	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/30/15 07:58	08/31/15 18:54	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/30/15 07:58	08/31/15 18:54	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/30/15 07:58	08/31/15 18:54	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/30/15 07:58	08/31/15 18:54	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/30/15 07:58	08/31/15 18:54	1
Acetophenone	2.3	U	10	2.3	ug/L		08/30/15 07:58	08/31/15 18:54	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/30/15 07:58	08/31/15 18:54	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		08/30/15 07:58	08/31/15 18:54	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/30/15 07:58	08/31/15 18:54	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/30/15 07:58	08/31/15 18:54	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/30/15 07:58	08/31/15 18:54	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/30/15 07:58	08/31/15 18:54	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/30/15 07:58	08/31/15 18:54	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/30/15 07:58	08/31/15 18:54	1
Carbazole	2.8	U	10	2.8	ug/L		08/30/15 07:58	08/31/15 18:54	1
Caprolactam	2.4	U	10	2.4	ug/L		08/30/15 07:58	08/31/15 18:54	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/30/15 07:58	08/31/15 18:54	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/30/15 07:58	08/31/15 18:54	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/30/15 07:58	08/31/15 18:54	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/30/15 07:58	08/31/15 18:54	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/30/15 07:58	08/31/15 18:54	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/30/15 07:58	08/31/15 18:54	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/30/15 07:58	08/31/15 18:54	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/30/15 07:58	08/31/15 18:54	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/30/15 07:58	08/31/15 18:54	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/30/15 07:58	08/31/15 18:54	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/30/15 07:58	08/31/15 18:54	1
Isophorone	3.1	U	10	3.1	ug/L		08/30/15 07:58	08/31/15 18:54	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/30/15 07:58	08/31/15 18:54	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/30/15 07:58	08/31/15 18:54	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/30/15 07:58	08/31/15 18:54	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/30/15 07:58	08/31/15 18:54	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/30/15 07:58	08/31/15 18:54	1
Phenol	1.5	U	10	1.5	ug/L		08/30/15 07:58	08/31/15 18:54	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/30/15 07:58	08/31/15 18:54	1
Diphenyl	2.2	U	10	2.2	ug/L		08/30/15 07:58	08/31/15 18:54	1

Client Sample ID: RW-4 (333-343)-082415

Date Collected: 08/24/15 11:25
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-7

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/30/15 07:58	08/31/15 18:54	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/30/15 07:58	08/31/15 18:54	1
Atrazine	2.9	U	10	2.9	ug/L		08/30/15 07:58	08/31/15 18:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
n-Hexadecanoic acid	*5.4*	*J N*	*ug/L*		*7.84*	*57-10-3*	*08/30/15 07:58*	*08/31/15 18:54*	*1*
Oleic Acid	*5.5*	*J N*	*ug/L*		*8.41*	*112-80-1*	*08/30/15 07:58*	*08/31/15 18:54*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*111*		*10 - 120*	*08/30/15 07:58*	*08/31/15 18:54*	*1*
2-Fluorobiphenyl (Surr)	*87*		*29 - 120*	*08/30/15 07:58*	*08/31/15 18:54*	*1*
2-Fluorophenol (Surr)	*46*		*10 - 120*	*08/30/15 07:58*	*08/31/15 18:54*	*1*
Nitrobenzene-d5 (Surr)	*88*		*27 - 120*	*08/30/15 07:58*	*08/31/15 18:54*	*1*
Phenol-d5 (Surr)	*30*		*10 - 120*	*08/30/15 07:58*	*08/31/15 18:54*	*1*
Terphenyl-d14 (Surr)	*93*		*13 - 120*	*08/30/15 07:58*	*08/31/15 18:54*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/08/15 08:10	09/09/15 22:06	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/08/15 08:10	09/09/15 22:06	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/08/15 08:10	09/09/15 22:06	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/08/15 08:10	09/09/15 22:06	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/08/15 08:10	09/09/15 22:06	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/08/15 08:10	09/09/15 22:06	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/08/15 08:10	09/09/15 22:06	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/08/15 08:10	09/09/15 22:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*86*		*10 - 150*	*09/08/15 08:10*	*09/09/15 22:06*	*1*
Tetrachloro-m-xylene	*82*		*10 - 150*	*09/08/15 08:10*	*09/09/15 22:06*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.76**		1.00	0.70	mg/L			09/03/15 00:07	1
Sulfate	**21.2**		1.00	0.60	mg/L			09/03/15 00:07	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.86**		0.020	0.0096	mg/L		08/27/15 09:42	08/28/15 14:49	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:49	1
Arsenic	**0.00090**	**J**	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:49	1
Barium	**0.019**		0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:49	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:49	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/27/15 09:42	08/28/15 14:49	1
Calcium	**51.4**		1.0	0.13	mg/L		08/27/15 09:42	08/28/15 14:49	1
Chromium	**0.036**		0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:49	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:49	1
Copper	**0.0011**	**J**	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:49	1
Iron	0.010	U	0.025	0.010	mg/L		08/27/15 09:42	08/28/15 14:49	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/27/15 09:42	08/28/15 14:49	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/27/15 09:42	08/28/15 14:49	1

Client Sample ID: RW-4 (333-343)-082415

Date Collected: 08/24/15 11:25
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-7

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:49	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:49	1
Potassium	**4.5**		1.0	0.13	mg/L		08/27/15 09:42	08/28/15 14:49	1
Selenium	**0.00080**	**J**	0.0020	0.00060	mg/L		09/09/15 14:34	09/11/15 15:31	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:42	08/28/15 14:49	1
Sodium	**15.8**		1.0	0.13	mg/L		08/27/15 09:42	08/28/15 14:49	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/27/15 09:42	08/28/15 14:49	1
Vanadium	**0.012**	**B**	0.0020	0.00010	mg/L		08/27/15 09:42	08/28/15 14:49	1
Zinc	0.010	U	0.025	0.010	mg/L		08/27/15 09:42	08/28/15 14:49	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1.0**		0.020	0.0096	mg/L		08/30/15 13:22	09/03/15 12:53	1
Antimony	**0.00055**	**J**	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:53	1
Arsenic	**0.0011**	**J**	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:53	1
Barium	**0.022**		0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:53	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:53	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/30/15 13:22	09/03/15 12:53	1
Calcium	**59.8**		1.0	0.13	mg/L		08/30/15 13:22	09/03/15 12:53	1
Chromium	**0.043**		0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:53	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:53	1
Copper	**0.0015**	**J**	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:53	1
Iron	0.010	U	0.025	0.010	mg/L		08/30/15 13:22	09/03/15 12:53	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/30/15 13:22	09/03/15 12:53	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/30/15 13:22	09/03/15 12:53	1
Manganese	**0.00052**	**J**	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:53	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:53	1
Potassium	**5.4**		1.0	0.13	mg/L		08/30/15 13:22	09/03/15 12:53	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/30/15 13:22	09/03/15 12:53	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 12:53	1
Sodium	**18.8**		1.0	0.13	mg/L		08/30/15 13:22	09/03/15 12:53	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/30/15 13:22	09/03/15 12:53	1
Vanadium	**0.013**	**B**	0.0020	0.00010	mg/L		08/30/15 13:22	09/03/15 12:53	1
Zinc	0.010	U	0.025	0.010	mg/L		08/30/15 13:22	09/04/15 20:01	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/01/15 16:15	09/02/15 17:07	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 02:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/27/15 16:19	08/28/15 12:13	1
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/27/15 18:33	1
Total Alkalinity as CaCO3	**128**		10.0	5.0	mg/L			08/27/15 18:33	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: TB-13-082515
Date Collected: 08/25/15 01:00
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-8
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/03/15 13:31	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/03/15 13:31	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/03/15 13:31	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/03/15 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*09/03/15 13:31*	*1*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*		*09/03/15 13:31*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*09/03/15 13:31*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/03/15 13:31*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 17:43	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/03/15 17:43	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 17:43	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 17:43	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/03/15 17:43	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/03/15 17:43	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/03/15 17:43	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/03/15 17:43	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/03/15 17:43	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/03/15 17:43	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 17:43	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/03/15 17:43	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/03/15 17:43	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/03/15 17:43	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/03/15 17:43	1
Acetone	2.7	U	25	2.7	ug/L			09/03/15 17:43	1
Benzene	0.20	U	1.0	0.20	ug/L			09/03/15 17:43	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/03/15 17:43	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/03/15 17:43	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/03/15 17:43	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/03/15 17:43	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 17:43	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/03/15 17:43	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/03/15 17:43	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/03/15 17:43	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/03/15 17:43	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/03/15 17:43	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 17:43	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/03/15 17:43	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/03/15 17:43	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/03/15 17:43	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/03/15 17:43	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/03/15 17:43	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/03/15 17:43	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/03/15 17:43	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/03/15 17:43	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/03/15 17:43	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Client Sample ID: TB-13-082515
Date Collected: 08/25/15 01:00
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/03/15 17:43	1
Styrene	0.28	U	1.0	0.28	ug/L			09/03/15 17:43	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/03/15 17:43	1
Toluene	0.17	U	1.0	0.17	ug/L			09/03/15 17:43	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/03/15 17:43	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 17:43	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/03/15 17:43	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/03/15 17:43	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/03/15 17:43	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/03/15 17:43	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/03/15 17:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/03/15 17:43*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/03/15 17:43*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*09/03/15 17:43*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*09/03/15 17:43*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/03/15 17:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*121*		*70 - 130*		*09/03/15 17:43*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-278804/6
Matrix: Water
Analysis Batch: 278804

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 15:25	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/03/15 15:25	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 15:25	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/03/15 15:25	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/03/15 15:25	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/03/15 15:25	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/03/15 15:25	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/03/15 15:25	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/03/15 15:25	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/03/15 15:25	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 15:25	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/03/15 15:25	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/03/15 15:25	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/03/15 15:25	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/03/15 15:25	1
Acetone	2.7	U	25	2.7	ug/L			09/03/15 15:25	1
Benzene	0.20	U	1.0	0.20	ug/L			09/03/15 15:25	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/03/15 15:25	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/03/15 15:25	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/03/15 15:25	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/03/15 15:25	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/03/15 15:25	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/03/15 15:25	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/03/15 15:25	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/03/15 15:25	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/03/15 15:25	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/03/15 15:25	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 15:25	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			09/03/15 15:25	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/03/15 15:25	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/03/15 15:25	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/03/15 15:25	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/03/15 15:25	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/03/15 15:25	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/03/15 15:25	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/03/15 15:25	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/03/15 15:25	1
Methylene Chloride	0.375	J	5.0	0.22	ug/L			09/03/15 15:25	1
Styrene	0.28	U	1.0	0.28	ug/L			09/03/15 15:25	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/03/15 15:25	1
Toluene	0.17	U	1.0	0.17	ug/L			09/03/15 15:25	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/03/15 15:25	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/03/15 15:25	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/03/15 15:25	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/03/15 15:25	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/03/15 15:25	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/03/15 15:25	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/03/15 15:25	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					09/03/15 15:25	1
Total Alkanes TIC	None		ug/L					09/03/15 15:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130		09/03/15 15:25	1
Dibromofluoromethane (Surr)	110		70 - 130		09/03/15 15:25	1
Toluene-d8 (Surr)	103		70 - 130		09/03/15 15:25	1
1,2-Dichloroethane-d4 (Surr)	123		70 - 130		09/03/15 15:25	1

Lab Sample ID: LCS 490-278804/3
Matrix: Water
Analysis Batch: 278804

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	22.6		ug/L		113	78 - 135
Freon-113	20.0	16.8		ug/L		84	77 - 129
1,1,2,2-Tetrachloroethane	20.0	21.4		ug/L		107	69 - 131
1,1,2-Trichloroethane	20.0	18.9		ug/L		95	80 - 124
1,1-Dichloroethane	20.0	21.7		ug/L		108	78 - 125
1,1-Dichloroethene	20.0	17.8		ug/L		89	79 - 124
1,2,4-Trichlorobenzene	20.0	20.2		ug/L		101	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	18.6		ug/L		93	54 - 125
1,2-Dichlorobenzene	20.0	19.8		ug/L		99	80 - 121
1,2-Dichloropropane	20.0	17.8		ug/L		89	75 - 120
1,3-Dichlorobenzene	20.0	20.1		ug/L		100	80 - 122
1,4-Dichlorobenzene	20.0	19.3		ug/L		97	80 - 120
2-Butanone (MEK)	100	105		ug/L		105	62 - 133
2-Hexanone	100	110		ug/L		110	60 - 142
4-Methyl-2-pentanone (MIBK)	100	109		ug/L		109	60 - 137
Acetone	100	78.6		ug/L		79	54 - 145
Benzene	20.0	21.1		ug/L		105	80 - 121
Bromoform	20.0	18.4		ug/L		92	46 - 145
Bromomethane	20.0	16.5		ug/L		83	41 - 150
Carbon disulfide	20.0	17.4		ug/L		87	77 - 126
Carbon tetrachloride	20.0	22.0		ug/L		110	64 - 147
Chlorobenzene	20.0	19.6		ug/L		98	80 - 120
Chlorodibromomethane	20.0	18.4		ug/L		92	69 - 133
Chloroethane	20.0	16.5		ug/L		82	72 - 120
Chloroform	20.0	21.3		ug/L		107	73 - 129
Chloromethane	20.0	11.9		ug/L		60	12 - 150
cis-1,2-Dichloroethene	20.0	23.2		ug/L		116	76 - 125
cis-1,3-Dichloropropene	20.0	19.7		ug/L		99	74 - 140
Cyclohexane	20.0	25.6	*	ug/L		128	73 - 122
Dichlorobromomethane	20.0	18.0		ug/L		90	75 - 129
Dichlorodifluoromethane	20.0	18.6		ug/L		93	37 - 127
Ethylbenzene	20.0	21.1		ug/L		105	80 - 130
1,2-Dibromoethane	20.0	19.8		ug/L		99	80 - 129
Isopropylbenzene	20.0	21.6		ug/L		108	80 - 141
Methyl acetate	100	72.2		ug/L		72	64 - 150
Methyl tert-butyl ether	20.0	16.5		ug/L		83	72 - 133
Methylcyclohexane	20.0	19.4		ug/L		97	71 - 129
Methylene Chloride	20.0	17.8		ug/L		89	79 - 123
Styrene	20.0	21.2		ug/L		106	80 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 490-278804/3
Matrix: Water
Analysis Batch: 278804

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	20.0	18.3		ug/L		91	80 - 126
Toluene	20.0	19.4		ug/L		97	80 - 126
trans-1,2-Dichloroethene	20.0	16.2		ug/L		81	79 - 126
trans-1,3-Dichloropropene	20.0	20.2		ug/L		101	63 - 134
Trichloroethene	20.0	18.0		ug/L		90	80 - 123
Trichlorofluoromethane	20.0	17.5		ug/L		88	65 - 124
Vinyl chloride	20.0	18.7		ug/L		94	68 - 120
1,2-Dichloroethane	20.0	24.1		ug/L		121	77 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*

Lab Sample ID: 490-85948-1 MS
Matrix: Water
Analysis Batch: 278804

Client Sample ID: OB-15B-082415
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.19	U	50.0	53.7		ug/L		107	76 - 149
Freon-113	0.15	U	50.0	38.7		ug/L		77	72 - 148
1,1,2,2-Tetrachloroethane	0.19	U	50.0	46.8		ug/L		94	56 - 143
1,1,2-Trichloroethane	0.19	U	50.0	43.6		ug/L		87	74 - 134
1,1-Dichloroethane	0.24	U	50.0	50.0		ug/L		100	71 - 139
1,1-Dichloroethene	0.25	U F1	50.0	34.4	F1	ug/L		69	70 - 142
1,2,4-Trichlorobenzene	0.20	U	50.0	46.1		ug/L		92	60 - 136
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	40.1		ug/L		80	52 - 126
1,2-Dichlorobenzene	0.19	U	50.0	46.0		ug/L		92	79 - 128
1,2-Dichloropropane	0.25	U	50.0	42.0		ug/L		84	67 - 131
1,3-Dichlorobenzene	0.18	U	50.0	46.2		ug/L		92	77 - 131
1,4-Dichlorobenzene	0.17	U	50.0	43.9		ug/L		88	78 - 126
2-Butanone (MEK)	2.6	U	250	228		ug/L		91	50 - 138
2-Hexanone	1.3	U	250	253		ug/L		101	50 - 150
4-Methyl-2-pentanone (MIBK)	0.81	U	250	239		ug/L		96	50 - 147
Acetone	2.7	U	250	171		ug/L		68	45 - 141
Benzene	0.20	U	50.0	46.6		ug/L		93	75 - 133
Bromoform	0.29	U	50.0	44.3		ug/L		89	42 - 147
Bromomethane	0.35	U	50.0	34.6		ug/L		69	16 - 163
Carbon disulfide	0.22	U	50.0	25.9		ug/L		52	48 - 152
Carbon tetrachloride	0.18	U	50.0	51.7		ug/L		103	62 - 164
Chlorobenzene	0.18	U	50.0	44.8		ug/L		90	80 - 129
Chlorodibromomethane	0.25	U	50.0	43.8		ug/L		88	66 - 140
Chloroethane	0.36	U	50.0	33.3		ug/L		67	58 - 137
Chloroform	0.23	U	50.0	50.9		ug/L		102	66 - 138
Chloromethane	0.36	U	50.0	25.3		ug/L		51	10 - 169
cis-1,2-Dichloroethene	0.21	U	50.0	50.5		ug/L		101	68 - 138
cis-1,3-Dichloropropene	0.17	U	50.0	44.9		ug/L		90	71 - 141

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-85948-1 MS
Matrix: Water
Analysis Batch: 278804

Client Sample ID: OB-15B-082415
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	0.13	U *	50.0	50.7		ug/L		101	58 - 144
Dichlorobromomethane	0.17	U	50.0	41.7		ug/L		83	70 - 140
Dichlorodifluoromethane	0.17	U	50.0	36.9		ug/L		74	40 - 127
Ethylbenzene	0.19	U	50.0	49.4		ug/L		99	79 - 139
1,2-Dibromoethane	0.21	U	50.0	44.5		ug/L		89	75 - 137
Isopropylbenzene	0.33	U	50.0	53.5		ug/L		107	80 - 153
Methyl acetate	0.58	U	250	140		ug/L		56	30 - 165
Methyl tert-butyl ether	0.17	U	50.0	37.2		ug/L		74	66 - 141
Methylcyclohexane	0.090	U	50.0	43.6		ug/L		87	59 - 151
Methylene Chloride	0.22	U	50.0	36.5		ug/L		73	64 - 139
Styrene	0.28	U	50.0	49.6		ug/L		99	61 - 148
Tetrachloroethene	0.14	U	50.0	42.7		ug/L		85	72 - 145
Toluene	0.17	U	50.0	44.5		ug/L		89	75 - 136
trans-1,2-Dichloroethene	0.23	U	50.0	34.8		ug/L		70	66 - 143
trans-1,3-Dichloropropene	0.17	U	50.0	45.6		ug/L		91	59 - 135
Trichloroethene	0.20	U	50.0	42.4		ug/L		85	73 - 144
Trichlorofluoromethane	0.21	U	50.0	39.5		ug/L		79	58 - 139
Vinyl chloride	0.18	U	50.0	37.1		ug/L		74	56 - 129
1,2-Dichloroethane	0.20	U	50.0	53.4		ug/L		107	64 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*

Lab Sample ID: 490-85948-1 MSD
Matrix: Water
Analysis Batch: 278804

Client Sample ID: OB-15B-082415
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.19	U	50.0	56.5		ug/L		113	76 - 149	5	17
Freon-113	0.15	U	50.0	41.2		ug/L		82	72 - 148	6	18
1,1,2,2-Tetrachloroethane	0.19	U	50.0	48.8		ug/L		98	56 - 143	4	20
1,1,2-Trichloroethane	0.19	U	50.0	45.2		ug/L		90	74 - 134	4	15
1,1-Dichloroethane	0.24	U	50.0	51.9		ug/L		104	71 - 139	4	17
1,1-Dichloroethene	0.25	U F1	50.0	40.3		ug/L		81	70 - 142	16	17
1,2,4-Trichlorobenzene	0.20	U	50.0	49.8		ug/L		100	60 - 136	8	19
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	43.2		ug/L		86	52 - 126	7	24
1,2-Dichlorobenzene	0.19	U	50.0	48.8		ug/L		98	79 - 128	6	15
1,2-Dichloropropane	0.25	U	50.0	43.6		ug/L		87	67 - 131	4	17
1,3-Dichlorobenzene	0.18	U	50.0	48.6		ug/L		97	77 - 131	5	15
1,4-Dichlorobenzene	0.17	U	50.0	47.6		ug/L		95	78 - 126	8	15
2-Butanone (MEK)	2.6	U	250	235		ug/L		94	50 - 138	3	19
2-Hexanone	1.3	U	250	255		ug/L		102	50 - 150	1	15
4-Methyl-2-pentanone (MIBK)	0.81	U	250	238		ug/L		95	50 - 147	1	17
Acetone	2.7	U	250	184		ug/L		73	45 - 141	7	21
Benzene	0.20	U	50.0	49.3		ug/L		99	75 - 133	6	17

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-85948-1 MSD
Matrix: Water
Analysis Batch: 278804

Client Sample ID: OB-15B-082415
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	0.29	U	50.0	45.4		ug/L		91	42 - 147	2	16
Bromomethane	0.35	U	50.0	39.8		ug/L		80	16 - 163	14	50
Carbon disulfide	0.22	U	50.0	27.4		ug/L		55	48 - 152	6	21
Carbon tetrachloride	0.18	U	50.0	55.2		ug/L		110	62 - 164	7	19
Chlorobenzene	0.18	U	50.0	46.6		ug/L		93	80 - 129	4	14
Chlorodibromomethane	0.25	U	50.0	44.8		ug/L		90	66 - 140	2	15
Chloroethane	0.36	U	50.0	36.5		ug/L		73	58 - 137	9	20
Chloroform	0.23	U	50.0	53.2		ug/L		106	66 - 138	4	18
Chloromethane	0.36	U	50.0	26.7		ug/L		53	10 - 169	6	31
cis-1,2-Dichloroethene	0.21	U	50.0	54.1		ug/L		108	68 - 138	7	17
cis-1,3-Dichloropropene	0.17	U	50.0	45.6		ug/L		91	71 - 141	2	15
Cyclohexane	0.13	U *	50.0	54.1		ug/L		108	58 - 144	6	16
Dichlorobromomethane	0.17	U	50.0	44.7		ug/L		89	70 - 140	7	18
Dichlorodifluoromethane	0.17	U	50.0	37.3		ug/L		75	40 - 127	1	18
Ethylbenzene	0.19	U	50.0	50.8		ug/L		102	79 - 139	3	15
1,2-Dibromoethane	0.21	U	50.0	45.5		ug/L		91	75 - 137	2	15
Isopropylbenzene	0.33	U	50.0	53.8		ug/L		108	80 - 153	1	16
Methyl acetate	0.58	U	250	146		ug/L		58	30 - 165	4	31
Methyl tert-butyl ether	0.17	U	50.0	40.5		ug/L		81	66 - 141	8	16
Methylcyclohexane	0.090	U	50.0	41.0		ug/L		82	59 - 151	6	19
Methylene Chloride	0.22	U	50.0	38.5		ug/L		77	64 - 139	5	17
Styrene	0.28	U	50.0	51.5		ug/L		103	61 - 148	4	24
Tetrachloroethene	0.14	U	50.0	44.5		ug/L		89	72 - 145	4	16
Toluene	0.17	U	50.0	45.3		ug/L		91	75 - 136	2	15
trans-1,2-Dichloroethene	0.23	U	50.0	38.3		ug/L		77	66 - 143	10	16
trans-1,3-Dichloropropene	0.17	U	50.0	46.7		ug/L		93	59 - 135	2	14
Trichloroethene	0.20	U	50.0	42.9		ug/L		86	73 - 144	1	17
Trichlorofluoromethane	0.21	U	50.0	41.2		ug/L		82	58 - 139	4	18
Vinyl chloride	0.18	U	50.0	38.9		ug/L		78	56 - 129	5	17
1,2-Dichloroethane	0.20	U	50.0	55.9		ug/L		112	64 - 136	5	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*120*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-278757/7
Matrix: Water
Analysis Batch: 278757

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/03/15 13:02	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/03/15 13:02	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/03/15 13:02	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/03/15 13:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 130		09/03/15 13:02	1
4-Bromofluorobenzene (Surr)	126		70 - 130		09/03/15 13:02	1
Dibromofluoromethane (Surr)	94		70 - 130		09/03/15 13:02	1
Toluene-d8 (Surr)	103		70 - 130		09/03/15 13:02	1

Lab Sample ID: LCS 490-278757/3
Matrix: Water
Analysis Batch: 278757

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.500	0.478		ug/L		96	70 - 131
1,2-Dibromo-3-Chloropropane	0.500	0.499		ug/L		100	40 - 160
1,4-Dioxane	10.0	14.0		ug/L		140	40 - 160
Ethylene Dibromide	0.500	0.478		ug/L		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		70 - 130
4-Bromofluorobenzene (Surr)	120		70 - 130
Dibromofluoromethane (Surr)	100		70 - 130
Toluene-d8 (Surr)	106		70 - 130

Lab Sample ID: LCSD 490-278757/4
Matrix: Water
Analysis Batch: 278757

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.500	0.502		ug/L		100	70 - 131	5	19
1,2-Dibromo-3-Chloropropane	0.500	0.498		ug/L		100	40 - 160	0	20
1,4-Dioxane	10.0	13.7		ug/L		137	40 - 160	2	20
Ethylene Dibromide	0.500	0.495		ug/L		99	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		70 - 130
4-Bromofluorobenzene (Surr)	117		70 - 130
Dibromofluoromethane (Surr)	99		70 - 130
Toluene-d8 (Surr)	105		70 - 130

Lab Sample ID: 490-86046-H-2 MS
Matrix: Water
Analysis Batch: 278757

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.010	U	0.500	0.542		ug/L		108	53 - 144
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.500		ug/L		100	40 - 160
1,4-Dioxane	4.7	J	10.0	12.7		ug/L		79	40 - 160
Ethylene Dibromide	0.010	U	0.500	0.498		ug/L		100	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		70 - 130
4-Bromofluorobenzene (Surr)	121		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130
Toluene-d8 (Surr)	104		70 - 130

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-86046-H-2 MSD
Matrix: Water
Analysis Batch: 278757

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.010	U	0.500	0.518		ug/L		104	53 - 144	5	19
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.465		ug/L		93	40 - 160	7	20
1,4-Dioxane	4.7	J	10.0	14.1		ug/L		93	40 - 160	11	20
Ethylene Dibromide	0.010	U	0.500	0.483		ug/L		97	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-277572/1-A
Matrix: Water
Analysis Batch: 277755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277572

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		08/30/15 07:58	08/31/15 15:44	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		08/30/15 07:58	08/31/15 15:44	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		08/30/15 07:58	08/31/15 15:44	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		08/30/15 07:58	08/31/15 15:44	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		08/30/15 07:58	08/31/15 15:44	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		08/30/15 07:58	08/31/15 15:44	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		08/30/15 07:58	08/31/15 15:44	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		08/30/15 07:58	08/31/15 15:44	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		08/30/15 07:58	08/31/15 15:44	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		08/30/15 07:58	08/31/15 15:44	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		08/30/15 07:58	08/31/15 15:44	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		08/30/15 07:58	08/31/15 15:44	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		08/30/15 07:58	08/31/15 15:44	1
2-Methylphenol	2.3	U	10	2.3	ug/L		08/30/15 07:58	08/31/15 15:44	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		08/30/15 07:58	08/31/15 15:44	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		08/30/15 07:58	08/31/15 15:44	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		08/30/15 07:58	08/31/15 15:44	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		08/30/15 07:58	08/31/15 15:44	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		08/30/15 07:58	08/31/15 15:44	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		08/30/15 07:58	08/31/15 15:44	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		08/30/15 07:58	08/31/15 15:44	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		08/30/15 07:58	08/31/15 15:44	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		08/30/15 07:58	08/31/15 15:44	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		08/30/15 07:58	08/31/15 15:44	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		08/30/15 07:58	08/31/15 15:44	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		08/30/15 07:58	08/31/15 15:44	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		08/30/15 07:58	08/31/15 15:44	1
Acetophenone	2.3	U	10	2.3	ug/L		08/30/15 07:58	08/31/15 15:44	1
Anthracene	0.38	U	2.0	0.38	ug/L		08/30/15 07:58	08/31/15 15:44	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-277572/1-A
Matrix: Water
Analysis Batch: 277755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277572

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzaldehyde	5.7	U	10	5.7	ug/L		08/30/15 07:58	08/31/15 15:44	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		08/30/15 07:58	08/31/15 15:44	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		08/30/15 07:58	08/31/15 15:44	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		08/30/15 07:58	08/31/15 15:44	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		08/30/15 07:58	08/31/15 15:44	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		08/30/15 07:58	08/31/15 15:44	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		08/30/15 07:58	08/31/15 15:44	1
Carbazole	2.8	U	10	2.8	ug/L		08/30/15 07:58	08/31/15 15:44	1
Caprolactam	2.4	U	10	2.4	ug/L		08/30/15 07:58	08/31/15 15:44	1
Chrysene	0.33	U	2.0	0.33	ug/L		08/30/15 07:58	08/31/15 15:44	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		08/30/15 07:58	08/31/15 15:44	1
Dibenzofuran	2.9	U	10	2.9	ug/L		08/30/15 07:58	08/31/15 15:44	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		08/30/15 07:58	08/31/15 15:44	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		08/30/15 07:58	08/31/15 15:44	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		08/30/15 07:58	08/31/15 15:44	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		08/30/15 07:58	08/31/15 15:44	1
Fluorene	0.32	U	2.0	0.32	ug/L		08/30/15 07:58	08/31/15 15:44	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/30/15 07:58	08/31/15 15:44	1
Hexachloroethane	1.9	U	10	1.9	ug/L		08/30/15 07:58	08/31/15 15:44	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		08/30/15 07:58	08/31/15 15:44	1
Isophorone	3.1	U	10	3.1	ug/L		08/30/15 07:58	08/31/15 15:44	1
Naphthalene	0.37	U	2.0	0.37	ug/L		08/30/15 07:58	08/31/15 15:44	1
Nitrobenzene	2.7	U	10	2.7	ug/L		08/30/15 07:58	08/31/15 15:44	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		08/30/15 07:58	08/31/15 15:44	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		08/30/15 07:58	08/31/15 15:44	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		08/30/15 07:58	08/31/15 15:44	1
Phenol	1.5	U	10	1.5	ug/L		08/30/15 07:58	08/31/15 15:44	1
Pyrene	0.35	U	2.0	0.35	ug/L		08/30/15 07:58	08/31/15 15:44	1
Diphenyl	2.2	U	10	2.2	ug/L		08/30/15 07:58	08/31/15 15:44	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		08/30/15 07:58	08/31/15 15:44	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		08/30/15 07:58	08/31/15 15:44	1
Atrazine	2.9	U	10	2.9	ug/L		08/30/15 07:58	08/31/15 15:44	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/30/15 07:58*	*08/31/15 15:44*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*122*	*X*	*10 - 120*	*08/30/15 07:58*	*08/31/15 15:44*	*1*
2-Fluorobiphenyl (Surr)	*91*		*29 - 120*	*08/30/15 07:58*	*08/31/15 15:44*	*1*
2-Fluorophenol (Surr)	*46*		*10 - 120*	*08/30/15 07:58*	*08/31/15 15:44*	*1*
Nitrobenzene-d5 (Surr)	*94*		*27 - 120*	*08/30/15 07:58*	*08/31/15 15:44*	*1*
Phenol-d5 (Surr)	*32*		*10 - 120*	*08/30/15 07:58*	*08/31/15 15:44*	*1*
Terphenyl-d14 (Surr)	*106*		*13 - 120*	*08/30/15 07:58*	*08/31/15 15:44*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-277572/2-A
Matrix: Water
Analysis Batch: 277755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277572

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	40.0	34.6		ug/L		87	46 - 120
1,2,4,5-Tetrachlorobenzene	40.0	44.2		ug/L		111	25 - 120
2,3,4,6-Tetrachlorophenol	40.0	48.2		ug/L		121	31 - 148
2,4,5-Trichlorophenol	40.0	40.9		ug/L		102	40 - 129
2,4,6-Trichlorophenol	40.0	40.2		ug/L		101	39 - 135
2,4-Dichlorophenol	40.0	37.1		ug/L		93	38 - 120
2,4-Dimethylphenol	40.0	36.6		ug/L		91	21 - 126
2,4-Dinitrophenol	80.0	70.1		ug/L		88	20 - 150
2,4-Dinitrotoluene	40.0	40.8		ug/L		102	46 - 132
2,6-Dinitrotoluene	40.0	38.5		ug/L		96	54 - 128
2-Chloronaphthalene	40.0	33.7		ug/L		84	39 - 120
2-Chlorophenol	40.0	27.7		ug/L		69	40 - 120
2-Methylnaphthalene	40.0	33.3		ug/L		83	31 - 120
2-Methylphenol	40.0	29.4		ug/L		73	38 - 120
2-Nitroaniline	40.0	40.1		ug/L		100	46 - 131
2-Nitrophenol	40.0	34.2		ug/L		86	32 - 120
3,3'-Dichlorobenzidine	40.0	38.9		ug/L		97	46 - 129
3 & 4 Methylphenol	40.0	26.2		ug/L		65	33 - 120
3-Nitroaniline	40.0	32.6		ug/L		82	54 - 121
4,6-Dinitro-2-methylphenol	80.0	77.0		ug/L		96	19 - 150
4-Bromophenyl phenyl ether	40.0	41.3		ug/L		103	47 - 127
4-Chloro-3-methylphenol	40.0	39.6		ug/L		99	44 - 120
4-Chloroaniline	40.0	31.1		ug/L		78	44 - 120
4-Chlorophenyl phenyl ether	40.0	41.7		ug/L		104	50 - 120
4-Nitroaniline	40.0	34.9		ug/L		87	55 - 123
4-Nitrophenol	80.0	34.6		ug/L		43	10 - 120
Acenaphthylene	40.0	35.0		ug/L		88	48 - 120
Acetophenone	40.0	35.4		ug/L		88	52 - 133
Anthracene	40.0	36.8		ug/L		92	58 - 130
Benzaldehyde	40.0	52.1	*	ug/L		130	34 - 120
Benzo[g,h,i]perylene	40.0	41.6		ug/L		104	51 - 123
Benzo[k]fluoranthene	40.0	38.8		ug/L		97	51 - 120
Bis(2-chloroethoxy)methane	40.0	33.3		ug/L		83	44 - 120
Bis(2-chloroethyl)ether	40.0	29.0		ug/L		72	47 - 120
Butyl benzyl phthalate	40.0	30.9		ug/L		77	51 - 146
Bis(2-ethylhexyl) phthalate	40.0	38.7		ug/L		97	47 - 138
Carbazole	40.0	35.9		ug/L		90	54 - 123
Caprolactam	40.0	10.7		ug/L		27	10 - 120
Chrysene	40.0	32.1		ug/L		80	55 - 120
Dibenz(a,h)anthracene	40.0	44.0		ug/L		110	50 - 125
Dibenzofuran	40.0	36.5		ug/L		91	50 - 120
Diethyl phthalate	40.0	40.6		ug/L		102	54 - 128
Dimethyl phthalate	40.0	41.0		ug/L		103	53 - 127
Di-n-butyl phthalate	40.0	39.5		ug/L		99	54 - 140
Fluoranthene	40.0	41.3		ug/L		103	56 - 120
Fluorene	40.0	38.0		ug/L		95	52 - 120
Hexachlorocyclopentadiene	40.0	40.8		ug/L		102	17 - 120
Hexachloroethane	40.0	33.2		ug/L		83	30 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-277572/2-A
Matrix: Water
Analysis Batch: 277755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277572

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Indeno[1,2,3-cd]pyrene	40.0	42.7		ug/L		107	54 - 125
Isophorone	40.0	38.5		ug/L		96	47 - 120
Naphthalene	40.0	32.7		ug/L		82	37 - 120
Nitrobenzene	40.0	37.3		ug/L		93	36 - 120
N-Nitrosodi-n-propylamine	40.0	36.7		ug/L		92	51 - 120
N-Nitrosodiphenylamine	80.0	71.3		ug/L		89	58 - 149
Phenanthrene	40.0	35.0		ug/L		88	56 - 120
Phenol	40.0	14.6		ug/L		37	14 - 120
Pyrene	40.0	29.8		ug/L		74	53 - 129
Diphenyl	40.0	33.8		ug/L		84	10 - 146
Di-n-octyl phthalate	40.0	34.3		ug/L		86	50 - 142
2,2'-oxybis[1-chloropropane]	40.0	21.2		ug/L		53	44 - 120
Atrazine	40.0	39.3		ug/L		98	24 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*131*	*X*	*10 - 120*
2-Fluorobiphenyl (Surr)	*99*		*29 - 120*
2-Fluorophenol (Surr)	*49*		*10 - 120*
Nitrobenzene-d5 (Surr)	*99*		*27 - 120*
Phenol-d5 (Surr)	*36*		*10 - 120*
Terphenyl-d14 (Surr)	*94*		*13 - 120*

Lab Sample ID: 490-85955-G-3-A MSD
Matrix: Water
Analysis Batch: 277755

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 277572

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	0.28	U	34.5	20.8		ug/L		60	46 - 120	13	31
1,2,4,5-Tetrachlorobenzene	1.8	U	34.5	24.9		ug/L		72	10 - 200	15	50
2,3,4,6-Tetrachlorophenol	5.9	U	34.5	29.1		ug/L		84	10 - 200	18	50
2,4,5-Trichlorophenol	6.1	U	34.5	24.0		ug/L		70	40 - 129	17	34
2,4,6-Trichlorophenol	5.9	U	34.5	23.5		ug/L		68	39 - 135	13	40
2,4-Dichlorophenol	4.8	U	34.5	20.5		ug/L		60	38 - 120	16	30
2,4-Dimethylphenol	3.6	U	34.5	20.0		ug/L		58	11 - 130	13	48
2,4-Dinitrophenol	5.1	U	69.0	48.5		ug/L		70	10 - 176	24	31
2,4-Dinitrotoluene	2.8	U	34.5	25.0		ug/L		73	46 - 134	17	26
2,6-Dinitrotoluene	2.0	U	34.5	23.6		ug/L		68	54 - 128	15	29
2-Chloronaphthalene	2.4	U	34.5	19.6		ug/L		57	39 - 120	15	36
2-Chlorophenol	4.1	U	34.5	14.7		ug/L		43	40 - 120	16	46
2-Methylnaphthalene	0.34	U	34.5	18.8		ug/L		55	31 - 120	14	35
2-Methylphenol	2.0	U	34.5	14.8		ug/L		43	36 - 120	16	32
2-Nitroaniline	3.2	U	34.5	24.4		ug/L		71	46 - 131	15	24
2-Nitrophenol	4.6	U	34.5	18.8		ug/L		54	32 - 120	17	31
3,3'-Dichlorobenzidine	2.8	U	34.5	25.0		ug/L		72	10 - 130	7	30
3 & 4 Methylphenol	1.9	U	34.5	12.8		ug/L		37	32 - 120	18	34
3-Nitroaniline	2.3	U	34.5	20.3	J	ug/L		59	38 - 121	13	26
4,6-Dinitro-2-methylphenol	8.0	U	69.0	51.5		ug/L		75	10 - 157	15	34
4-Bromophenyl phenyl ether	2.3	U	34.5	26.1		ug/L		76	47 - 127	16	29

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-85955-G-3-A MSD
Matrix: Water
Analysis Batch: 277755

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 277572

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Chloro-3-methylphenol	3.9	U	34.5	23.5		ug/L		68	38 - 120	14	22
4-Chloroaniline	3.6	U	34.5	18.1		ug/L		53	35 - 120	14	26
4-Chlorophenyl phenyl ether	2.4	U	34.5	25.6		ug/L		74	50 - 120	13	29
4-Nitroaniline	2.7	U	34.5	21.9	J	ug/L		64	47 - 124	17	26
4-Nitrophenol	4.7	U	69.0	18.2	J	ug/L		26	10 - 120	22	38
Acenaphthylene	0.30	U	34.5	20.6		ug/L		60	48 - 120	13	31
Acetophenone	2.0	U	34.5	18.8		ug/L		54	10 - 200	18	50
Anthracene	0.33	U	34.5	23.9		ug/L		69	56 - 130	15	28
Benzaldehyde	4.9	U *	34.5	28.2		ug/L		82	10 - 200	15	50
Benzo[g,h,i]perylene	0.53	U	34.5	25.0		ug/L		73	48 - 137	19	27
Benzo[k]fluoranthene	0.32	U	34.5	22.1		ug/L		64	44 - 134	20	32
Bis(2-chloroethoxy)methane	2.7	U	34.5	18.8		ug/L		54	41 - 120	17	31
Bis(2-chloroethyl)ether	2.4	U	34.5	15.6		ug/L		45	42 - 120	17	38
Butyl benzyl phthalate	2.2	U	34.5	20.2		ug/L		59	51 - 146	17	31
Bis(2-ethylhexyl) phthalate	5.2	U	34.5	27.0		ug/L		78	44 - 138	17	28
Carbazole	2.4	U	34.5	23.6		ug/L		68	53 - 123	16	29
Caprolactam	2.1	U	34.5	6.09	J	ug/L		18	10 - 200	24	50
Chrysene	0.28	U	34.5	21.1		ug/L		61	54 - 123	15	27
Dibenz(a,h)anthracene	0.39	U	34.5	26.2		ug/L		76	50 - 136	20	28
Dibenzofuran	2.5	U	34.5	22.0		ug/L		64	50 - 120	13	29
Diethyl phthalate	2.6	U	34.5	25.5		ug/L		74	53 - 128	16	28
Dimethyl phthalate	2.7	U	34.5	24.9		ug/L		72	53 - 127	15	27
Di-n-butyl phthalate	2.2	U	34.5	25.6		ug/L		74	54 - 140	18	27
Fluoranthene	0.28	U	34.5	27.1		ug/L		79	56 - 120	17	28
Fluorene	0.28	U	34.5	23.5		ug/L		68	52 - 120	13	28
Hexachlorocyclopentadiene	1.6	U	34.5	22.0		ug/L		64	10 - 120	14	43
Hexachloroethane	1.6	U	34.5	17.2		ug/L		50	26 - 120	19	45
Indeno[1,2,3-cd]pyrene	0.35	U	34.5	25.2		ug/L		73	50 - 136	20	27
Isophorone	2.7	U	34.5	22.5		ug/L		65	42 - 120	15	31
Naphthalene	0.32	U	34.5	18.4		ug/L		53	32 - 120	15	37
Nitrobenzene	2.3	U	34.5	20.8		ug/L		60	36 - 120	15	28
N-Nitrosodi-n-propylamine	2.9	U	34.5	19.5		ug/L		57	50 - 121	16	37
N-Nitrosodiphenylamine	3.1	U	69.0	45.2		ug/L		66	45 - 149	13	26
Phenanthrene	0.36	U	34.5	22.9		ug/L		66	53 - 120	15	26
Phenol	1.3	U	34.5	7.06	J	ug/L		20	10 - 120	15	42
Pyrene	0.30	U	34.5	19.7		ug/L		57	50 - 129	15	29
Diphenyl	1.9	U	34.5	19.6		ug/L		57	10 - 200	14	50
Di-n-octyl phthalate	2.2	U	34.5	21.5		ug/L		62	50 - 142	19	28
2,2'-oxybis[1-chloropropane]	2.4	U F1	34.5	10.8	F1	ug/L		31	44 - 120	18	36
Atrazine	2.5	U	34.5	26.5		ug/L		77	10 - 200	15	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*88*		*10 - 120*
2-Fluorobiphenyl (Surr)	*62*		*29 - 120*
2-Fluorophenol (Surr)	*26*		*10 - 120*
Nitrobenzene-d5 (Surr)	*60*		*27 - 120*
Phenol-d5 (Surr)	*18*		*10 - 120*
Terphenyl-d14 (Surr)	*66*		*13 - 120*

Lab Sample ID: 490-85955-H-3-B MS
Matrix: Water
Analysis Batch: 277755

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 277572

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.28	U	34.5	23.8		ug/L		69	46 - 120
1,2,4,5-Tetrachlorobenzene	1.8	U	34.5	28.8		ug/L		84	10 - 200
2,3,4,6-Tetrachlorophenol	5.9	U	34.5	34.8		ug/L		101	10 - 200
2,4,5-Trichlorophenol	6.1	U	34.5	28.5		ug/L		83	40 - 129
2,4,6-Trichlorophenol	5.9	U	34.5	26.7		ug/L		77	39 - 135
2,4-Dichlorophenol	4.8	U	34.5	24.1		ug/L		70	38 - 120
2,4-Dimethylphenol	3.6	U	34.5	22.8		ug/L		66	11 - 130
2,4-Dinitrophenol	5.1	U	69.0	61.9		ug/L		90	10 - 176
2,4-Dinitrotoluene	2.8	U	34.5	29.7		ug/L		86	46 - 134
2,6-Dinitrotoluene	2.0	U	34.5	27.4		ug/L		80	54 - 128
2-Chloronaphthalene	2.4	U	34.5	22.7		ug/L		66	39 - 120
2-Chlorophenol	4.1	U	34.5	17.2		ug/L		50	40 - 120
2-Methylnaphthalene	0.34	U	34.5	21.7		ug/L		63	31 - 120
2-Methylphenol	2.0	U	34.5	17.5		ug/L		51	36 - 120
2-Nitroaniline	3.2	U	34.5	28.5		ug/L		83	46 - 131
2-Nitrophenol	4.6	U	34.5	22.2		ug/L		64	32 - 120
3,3'-Dichlorobenzidine	2.8	U	34.5	26.8		ug/L		78	10 - 130
3 & 4 Methylphenol	1.9	U	34.5	15.3		ug/L		44	32 - 120
3-Nitroaniline	2.3	U	34.5	23.2		ug/L		67	38 - 121
4,6-Dinitro-2-methylphenol	8.0	U	69.0	59.8		ug/L		87	10 - 157
4-Bromophenyl phenyl ether	2.3	U	34.5	30.6		ug/L		89	47 - 127
4-Chloro-3-methylphenol	3.9	U	34.5	27.0		ug/L		78	38 - 120
4-Chloroaniline	3.6	U	34.5	20.7		ug/L		60	35 - 120
4-Chlorophenyl phenyl ether	2.4	U	34.5	29.1		ug/L		85	50 - 120
4-Nitroaniline	2.7	U	34.5	25.9		ug/L		75	47 - 124
4-Nitrophenol	4.7	U	69.0	22.7		ug/L		33	10 - 120
Acenaphthylene	0.30	U	34.5	23.6		ug/L		68	48 - 120
Acetophenone	2.0	U	34.5	22.4		ug/L		65	10 - 200
Anthracene	0.33	U	34.5	27.8		ug/L		80	56 - 130
Benzaldehyde	4.9	U *	34.5	32.7		ug/L		95	10 - 200
Benzo[g,h,i]perylene	0.53	U	34.5	30.4		ug/L		88	48 - 137
Benzo[k]fluoranthene	0.32	U	34.5	27.2		ug/L		79	44 - 134
Bis(2-chloroethoxy)methane	2.7	U	34.5	22.3		ug/L		65	41 - 120
Bis(2-chloroethyl)ether	2.4	U	34.5	18.6		ug/L		54	42 - 120
Butyl benzyl phthalate	2.2	U	34.5	24.0		ug/L		70	51 - 146
Bis(2-ethylhexyl) phthalate	5.2	U	34.5	32.0		ug/L		93	44 - 138
Carbazole	2.4	U	34.5	27.8		ug/L		81	53 - 123
Caprolactam	2.1	U	34.5	7.78	J	ug/L		23	10 - 200
Chrysene	0.28	U	34.5	24.5		ug/L		71	54 - 123
Dibenz(a,h)anthracene	0.39	U	34.5	32.1		ug/L		93	50 - 136
Dibenzofuran	2.5	U	34.5	25.0		ug/L		73	50 - 120
Diethyl phthalate	2.6	U	34.5	30.0		ug/L		87	53 - 128
Dimethyl phthalate	2.7	U	34.5	28.8		ug/L		84	53 - 127
Di-n-butyl phthalate	2.2	U	34.5	30.7		ug/L		89	54 - 140
Fluoranthene	0.28	U	34.5	32.2		ug/L		93	56 - 120
Fluorene	0.28	U	34.5	26.8		ug/L		78	52 - 120
Hexachlorocyclopentadiene	1.6	U	34.5	25.4		ug/L		74	10 - 120
Hexachloroethane	1.6	U	34.5	20.8		ug/L		60	26 - 120
Indeno[1,2,3-cd]pyrene	0.35	U	34.5	31.0		ug/L		90	50 - 136
Isophorone	2.7	U	34.5	26.2		ug/L		76	42 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-85955-H-3-B MS
Matrix: Water
Analysis Batch: 277755

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 277572

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	0.32	U	34.5	21.2		ug/L		62	32 - 120
Nitrobenzene	2.3	U	34.5	24.1		ug/L		70	36 - 120
N-Nitrosodi-n-propylamine	2.9	U	34.5	22.9		ug/L		66	50 - 121
N-Nitrosodiphenylamine	3.1	U	69.0	51.3		ug/L		74	45 - 149
Phenanthrene	0.36	U	34.5	26.6		ug/L		77	53 - 120
Phenol	1.3	U	34.5	8.17	J	ug/L		24	10 - 120
Pyrene	0.30	U	34.5	22.8		ug/L		66	50 - 129
Diphenyl	1.9	U	34.5	22.6		ug/L		65	10 - 200
Di-n-octyl phthalate	2.2	U	34.5	26.0		ug/L		75	50 - 142
2,2'-oxybis[1-chloropropane]	2.4	U F1	34.5	13.0	F1	ug/L		38	44 - 120
Atrazine	2.5	U	34.5	30.8		ug/L		89	10 - 200

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*98*		*10 - 120*
2-Fluorobiphenyl (Surr)	*68*		*29 - 120*
2-Fluorophenol (Surr)	*30*		*10 - 120*
Nitrobenzene-d5 (Surr)	*67*		*27 - 120*
Phenol-d5 (Surr)	*20*		*10 - 120*
Terphenyl-d14 (Surr)	*76*		*13 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 490-277571/1-A
Matrix: Water
Analysis Batch: 277738

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277571

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		08/30/15 07:54	08/31/15 13:05	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		08/30/15 07:54	08/31/15 13:05	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		08/30/15 07:54	08/31/15 13:05	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		08/30/15 07:54	08/31/15 13:05	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		08/30/15 07:54	08/31/15 13:05	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		08/30/15 07:54	08/31/15 13:05	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		08/30/15 07:54	08/31/15 13:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*85*		*10 - 120*	*08/30/15 07:54*	*08/31/15 13:05*	*1*
2-Fluorobiphenyl (Surr)	*84*		*29 - 120*	*08/30/15 07:54*	*08/31/15 13:05*	*1*
Nitrobenzene-d5	*95*		*27 - 120*	*08/30/15 07:54*	*08/31/15 13:05*	*1*
Terphenyl-d14	*102*		*13 - 120*	*08/30/15 07:54*	*08/31/15 13:05*	*1*
2-Fluorophenol	*69*		*10 - 120*	*08/30/15 07:54*	*08/31/15 13:05*	*1*
Phenol-d5	*46*		*10 - 120*	*08/30/15 07:54*	*08/31/15 13:05*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 490-277571/2-A
Matrix: Water
Analysis Batch: 277738

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277571

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.628		ug/L		78	57 - 120
Benzo[a]pyrene	0.800	0.559		ug/L		70	57 - 124
Benzo[b]fluoranthene	0.800	0.633		ug/L		79	51 - 125
Hexachlorobenzene	0.800	0.514		ug/L		64	48 - 131
Hexachlorobutadiene	0.800	0.342	J	ug/L		43	28 - 120
N-Nitrosodimethylamine	0.800	0.401	J	ug/L		50	20 - 120
Pentachlorophenol	1.60	0.969		ug/L		61	21 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*83*		*10 - 120*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*
Nitrobenzene-d5	*103*		*27 - 120*
Terphenyl-d14	*90*		*13 - 120*
2-Fluorophenol	*62*		*10 - 120*
Phenol-d5	*42*		*10 - 120*

Lab Sample ID: LCSD 490-277571/3-A
Matrix: Water
Analysis Batch: 277738

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 277571

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	0.742		ug/L		93	57 - 120	17	27
Benzo[a]pyrene	0.800	0.705		ug/L		88	57 - 124	23	27
Benzo[b]fluoranthene	0.800	0.734		ug/L		92	51 - 125	15	39
Hexachlorobenzene	0.800	0.604		ug/L		76	48 - 131	16	28
Hexachlorobutadiene	0.800	0.364	J	ug/L		46	28 - 120	6	30
N-Nitrosodimethylamine	0.800	0.496	J	ug/L		62	20 - 120	21	32
Pentachlorophenol	1.60	1.05		ug/L		66	21 - 150	8	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*81*		*10 - 120*
2-Fluorobiphenyl (Surr)	*79*		*29 - 120*
Nitrobenzene-d5	*99*		*27 - 120*
Terphenyl-d14	*87*		*13 - 120*
2-Fluorophenol	*65*		*10 - 120*
Phenol-d5	*44*		*10 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-279660/1-A
Matrix: Water
Analysis Batch: 280337

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279660

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/08/15 08:10	09/09/15 20:01	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/08/15 08:10	09/09/15 20:01	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/08/15 08:10	09/09/15 20:01	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 490-279660/1-A
Matrix: Water
Analysis Batch: 280337

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279660

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	0.22	U	0.50	0.22	ug/L		09/08/15 08:10	09/09/15 20:01	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/08/15 08:10	09/09/15 20:01	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/08/15 08:10	09/09/15 20:01	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/08/15 08:10	09/09/15 20:01	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/08/15 08:10	09/09/15 20:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*61*		*10 - 150*	*09/08/15 08:10*	*09/09/15 20:01*	*1*
Tetrachloro-m-xylene	*60*		*10 - 150*	*09/08/15 08:10*	*09/09/15 20:01*	*1*

Lab Sample ID: LCS 490-279660/2-A
Matrix: Water
Analysis Batch: 280337

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	4.05		ug/L		101	23 - 139
PCB-1260	4.00	3.75		ug/L		94	36 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*86*		*10 - 150*
Tetrachloro-m-xylene	*98*		*10 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 490-278740/3
Matrix: Water
Analysis Batch: 278740

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			09/02/15 20:07	1
Sulfate	0.60	U	1.00	0.60	mg/L			09/02/15 20:07	1

Lab Sample ID: LCS 490-278740/4
Matrix: Water
Analysis Batch: 278740

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	97.46		mg/L		97	80 - 120
Sulfate	100	97.60		mg/L		98	80 - 120

Lab Sample ID: 490-85948-1 MS
Matrix: Water
Analysis Batch: 278740

Client Sample ID: OB-15B-082415
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.53		100	97.92		mg/L		96	80 - 120
Sulfate	10.8		100	106.7		mg/L		96	80 - 120

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 490-85948-1 MSD
Matrix: Water
Analysis Batch: 278740

Client Sample ID: OB-15B-082415
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.53		100	96.89		mg/L		95	80 - 120	1	20
Sulfate	10.8		100	105.6		mg/L		95	80 - 120	1	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 490-276608/1-A
Matrix: Water
Analysis Batch: 277352

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276608

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/27/15 09:38	08/28/15 13:11	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:11	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:11	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:11	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:11	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/27/15 09:38	08/28/15 13:11	1
Calcium	0.13	U	1.0	0.13	mg/L		08/27/15 09:38	08/28/15 13:11	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:11	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:11	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:11	1
Iron	0.010	U	0.025	0.010	mg/L		08/27/15 09:38	08/28/15 13:11	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/27/15 09:38	08/28/15 13:11	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/27/15 09:38	08/28/15 13:11	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:11	1
Potassium	0.13	U	1.0	0.13	mg/L		08/27/15 09:38	08/28/15 13:11	1
Silver	0.000692	J	0.0020	0.00050	mg/L		08/27/15 09:38	08/28/15 13:11	1
Sodium	0.13	U	1.0	0.13	mg/L		08/27/15 09:38	08/28/15 13:11	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/27/15 09:38	08/28/15 13:11	1
Vanadium	0.000984	J	0.0020	0.00010	mg/L		08/27/15 09:38	08/28/15 13:11	1
Zinc	0.010	U	0.025	0.010	mg/L		08/27/15 09:38	08/28/15 13:11	1

Lab Sample ID: LCS 490-276608/2-A
Matrix: Water
Analysis Batch: 277352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276608

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	0.976		mg/L		98	80 - 120
Antimony	0.100	0.0973		mg/L		97	80 - 120
Arsenic	0.100	0.0872		mg/L		87	80 - 120
Barium	0.100	0.0984		mg/L		98	80 - 120
Beryllium	0.100	0.0902		mg/L		90	80 - 120
Cadmium	0.100	0.0924		mg/L		92	80 - 120
Calcium	10.0	10.07		mg/L		101	80 - 120
Chromium	0.100	0.102		mg/L		102	80 - 120
Cobalt	0.100	0.102		mg/L		102	80 - 120
Copper	0.100	0.0978		mg/L		98	80 - 120
Iron	1.00	1.10		mg/L		110	80 - 120
Lead	0.100	0.0975		mg/L		98	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-276608/2-A
Matrix: Water
Analysis Batch: 277352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276608

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Magnesium	10.0	9.81		mg/L		98	80 - 120
Manganese	0.100	0.100		mg/L		100	80 - 120
Nickel	0.100	0.0976		mg/L		98	80 - 120
Potassium	10.0	10.04		mg/L		100	80 - 120
Silver	0.100	0.102		mg/L		102	80 - 120
Sodium	10.0	10.05		mg/L		101	80 - 120
Thallium	0.100	0.105		mg/L		105	80 - 120
Vanadium	0.100	0.103		mg/L		103	80 - 120
Zinc	0.100	0.0874		mg/L		87	80 - 120

Lab Sample ID: 490-85948-1 MS
Matrix: Water
Analysis Batch: 277352

Client Sample ID: OB-15B-082415
Prep Type: Total/NA
Prep Batch: 276608

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.89		1.00	1.77		mg/L		87	75 - 125
Antimony	0.00050	U	0.100	0.0970		mg/L		97	75 - 125
Arsenic	0.0014	J	0.100	0.0887		mg/L		87	75 - 125
Barium	0.041		0.100	0.137		mg/L		97	75 - 125
Beryllium	0.00050	U	0.100	0.0876		mg/L		88	75 - 125
Cadmium	0.00040	U	0.100	0.0937		mg/L		94	75 - 125
Calcium	23.0		10.0	32.50		mg/L		95	75 - 125
Chromium	0.0022		0.100	0.103		mg/L		101	75 - 125
Cobalt	0.00082	J	0.100	0.101		mg/L		100	75 - 125
Copper	0.0019	J	0.100	0.0980		mg/L		96	75 - 125
Iron	1.6		1.00	2.63		mg/L		101	75 - 125
Lead	0.00063	J	0.100	0.0977		mg/L		97	75 - 125
Magnesium	5.8		10.0	15.36		mg/L		95	75 - 125
Nickel	0.015		0.100	0.111		mg/L		96	75 - 125
Potassium	0.90	J	10.0	10.89		mg/L		100	75 - 125
Silver	0.00050	U	0.100	0.102		mg/L		102	75 - 125
Sodium	4.0		10.0	13.94		mg/L		99	75 - 125
Thallium	0.0011	J	0.100	0.106		mg/L		104	75 - 125
Vanadium	0.0054	B	0.100	0.107		mg/L		102	75 - 125
Zinc	0.010	U	0.100	0.0813		mg/L		81	75 - 125

Lab Sample ID: 490-85948-1 MS
Matrix: Water
Analysis Batch: 278204

Client Sample ID: OB-15B-082415
Prep Type: Total/NA
Prep Batch: 276608

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	4.0		0.100	4.07	4	mg/L		86	75 - 125

Lab Sample ID: 490-85948-1 MSD
Matrix: Water
Analysis Batch: 277352

Client Sample ID: OB-15B-082415
Prep Type: Total/NA
Prep Batch: 276608

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.89		1.00	1.79		mg/L		90	75 - 125	1	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85948-1 MSD — **Client Sample ID: OB-15B-082415**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 277352 — **Prep Batch: 276608**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.00050	U	0.100	0.0950		mg/L		95	75 - 125	2	20
Arsenic	0.0014	J	0.100	0.0880		mg/L		87	75 - 125	1	20
Barium	0.041		0.100	0.136		mg/L		95	75 - 125	1	20
Beryllium	0.00050	U	0.100	0.0876		mg/L		88	75 - 125	0	20
Cadmium	0.00040	U	0.100	0.0916		mg/L		92	75 - 125	2	20
Calcium	23.0		10.0	32.89		mg/L		99	75 - 125	1	20
Chromium	0.0022		0.100	0.101		mg/L		99	75 - 125	2	20
Cobalt	0.00082	J	0.100	0.0996		mg/L		99	75 - 125	1	20
Copper	0.0019	J	0.100	0.0967		mg/L		95	75 - 125	1	20
Iron	1.6		1.00	2.68		mg/L		106	75 - 125	2	20
Lead	0.00063	J	0.100	0.0976		mg/L		97	75 - 125	0	20
Magnesium	5.8		10.0	15.31		mg/L		95	75 - 125	0	20
Nickel	0.015		0.100	0.108		mg/L		93	75 - 125	2	20
Potassium	0.90	J	10.0	10.76		mg/L		99	75 - 125	1	20
Silver	0.00050	U	0.100	0.0999		mg/L		100	75 - 125	2	20
Sodium	4.0		10.0	13.70		mg/L		97	75 - 125	2	20
Thallium	0.0011	J	0.100	0.104		mg/L		103	75 - 125	2	20
Vanadium	0.0054	B	0.100	0.107		mg/L		101	75 - 125	1	20
Zinc	0.010	U	0.100	0.0796		mg/L		80	75 - 125	2	20

Lab Sample ID: 490-85948-1 MSD — **Client Sample ID: OB-15B-082415**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 278204 — **Prep Batch: 276608**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	4.0		0.100	4.02	4	mg/L		41	75 - 125	1	20

Lab Sample ID: MB 490-280205/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 281318 — **Prep Batch: 280205**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.00050	U	0.0020	0.00050	mg/L		09/09/15 14:34	09/11/15 14:17	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		09/09/15 14:34	09/11/15 14:17	1

Lab Sample ID: LCS 490-280205/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 281318 — **Prep Batch: 280205**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	0.100	0.0973		mg/L		97	80 - 120

Lab Sample ID: 490-85948-2 MS — **Client Sample ID: RW-13 (71-91)-082415**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 281318 — **Prep Batch: 280205**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	0.0031		0.100	0.102		mg/L		98	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85948-2 MSD
Matrix: Water
Analysis Batch: 281318

Client Sample ID: RW-13 (71-91)-082415
Prep Type: Total/NA
Prep Batch: 280205

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium	0.0031		0.100	0.0991		mg/L		96	75 - 125	2	20

Lab Sample ID: MB 490-277682/1-A
Matrix: Water
Analysis Batch: 278980

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 277682

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/30/15 13:22	09/03/15 11:46	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 11:46	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 11:46	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 11:46	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 11:46	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/30/15 13:22	09/03/15 11:46	1
Calcium	0.13	U	1.0	0.13	mg/L		08/30/15 13:22	09/03/15 11:46	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 11:46	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 11:46	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 11:46	1
Iron	0.010	U	0.025	0.010	mg/L		08/30/15 13:22	09/03/15 11:46	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/30/15 13:22	09/03/15 11:46	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/30/15 13:22	09/03/15 11:46	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 11:46	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 11:46	1
Potassium	0.13	U	1.0	0.13	mg/L		08/30/15 13:22	09/03/15 11:46	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/30/15 13:22	09/03/15 11:46	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/30/15 13:22	09/03/15 11:46	1
Sodium	0.13	U	1.0	0.13	mg/L		08/30/15 13:22	09/03/15 11:46	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/30/15 13:22	09/03/15 11:46	1
Vanadium	0.00181	J	0.0020	0.00010	mg/L		08/30/15 13:22	09/03/15 11:46	1

Lab Sample ID: MB 490-277682/1-A
Matrix: Water
Analysis Batch: 279593

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 277682

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	0.010	U	0.025	0.010	mg/L		08/30/15 13:22	09/04/15 18:59	1

Lab Sample ID: LCS 490-277682/2-A
Matrix: Water
Analysis Batch: 278980

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 277682

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.04		mg/L		104	80 - 120
Antimony	0.100	0.0977		mg/L		98	80 - 120
Arsenic	0.100	0.0915		mg/L		92	80 - 120
Barium	0.100	0.101		mg/L		101	80 - 120
Beryllium	0.100	0.110		mg/L		110	80 - 120
Cadmium	0.100	0.0981		mg/L		98	80 - 120
Calcium	10.0	10.05		mg/L		101	80 - 120
Chromium	0.100	0.103		mg/L		103	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-277682/2-A
Matrix: Water
Analysis Batch: 278980

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 277682

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.100	0.105		mg/L		105	80 - 120
Copper	0.100	0.103		mg/L		103	80 - 120
Iron	1.00	1.08		mg/L		108	80 - 120
Lead	0.100	0.0973		mg/L		97	80 - 120
Magnesium	10.0	10.26		mg/L		103	80 - 120
Manganese	0.100	0.101		mg/L		101	80 - 120
Nickel	0.100	0.105		mg/L		105	80 - 120
Potassium	10.0	10.27		mg/L		103	80 - 120
Selenium	0.100	0.0916		mg/L		92	80 - 120
Silver	0.100	0.0860		mg/L		86	80 - 120
Sodium	10.0	10.42		mg/L		104	80 - 120
Thallium	0.100	0.0958		mg/L		96	80 - 120
Vanadium	0.100	0.105		mg/L		105	80 - 120

Lab Sample ID: LCS 490-277682/2-A
Matrix: Water
Analysis Batch: 279593

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 277682

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	0.100	0.0864		mg/L		86	80 - 120

Lab Sample ID: MB 490-277068/1-B
Matrix: Water
Analysis Batch: 278732

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 277083

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 20:41	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 20:41	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 20:41	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/28/15 10:18	09/02/15 20:41	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 20:41	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 20:41	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 20:41	1
Iron	0.010	U	0.025	0.010	mg/L		08/28/15 10:18	09/02/15 20:41	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/28/15 10:18	09/02/15 20:41	1
Manganese	0.00143	J	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 20:41	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/28/15 10:18	09/02/15 20:41	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/02/15 20:41	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/28/15 10:18	09/02/15 20:41	1
Vanadium	0.000729	J	0.0020	0.00010	mg/L		08/28/15 10:18	09/02/15 20:41	1
Zinc	0.010	U	0.025	0.010	mg/L		08/28/15 10:18	09/02/15 20:41	1

Lab Sample ID: MB 490-277068/1-B
Matrix: Water
Analysis Batch: 279070

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 277083

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 10:49	1
Calcium	0.13	U	1.0	0.13	mg/L		08/28/15 10:18	09/03/15 10:49	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 490-277068/1-B
Matrix: Water
Analysis Batch: 279070

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 277083

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	0.13	U	1.0	0.13	mg/L		08/28/15 10:18	09/03/15 10:49	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 10:49	1
Potassium	0.13	U	1.0	0.13	mg/L		08/28/15 10:18	09/03/15 10:49	1
Sodium	0.13	U	1.0	0.13	mg/L		08/28/15 10:18	09/03/15 10:49	1

Lab Sample ID: LCS 490-277068/2-B
Matrix: Water
Analysis Batch: 278732

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 277083

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.100	0.107		mg/L		107	80 - 120
Arsenic	0.100	0.103		mg/L		103	80 - 120
Barium	0.100	0.108		mg/L		108	80 - 120
Cadmium	0.100	0.0994		mg/L		99	80 - 120
Chromium	0.100	0.113		mg/L		113	80 - 120
Cobalt	0.100	0.108		mg/L		108	80 - 120
Copper	0.100	0.105		mg/L		105	80 - 120
Iron	1.00	1.10		mg/L		110	80 - 120
Lead	0.100	0.102		mg/L		102	80 - 120
Manganese	0.100	0.111		mg/L		111	80 - 120
Selenium	0.100	0.101		mg/L		101	80 - 120
Silver	0.100	0.110		mg/L		110	80 - 120
Thallium	0.100	0.0945		mg/L		95	80 - 120
Vanadium	0.100	0.0964		mg/L		96	80 - 120
Zinc	0.100	0.0960		mg/L		96	80 - 120

Lab Sample ID: LCS 490-277068/2-B
Matrix: Water
Analysis Batch: 279070

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 277083

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.100	0.104		mg/L		104	80 - 120
Calcium	10.0	10.44		mg/L		104	80 - 120
Magnesium	10.0	9.89		mg/L		99	80 - 120
Nickel	0.100	0.104		mg/L		104	80 - 120
Potassium	10.0	9.96		mg/L		100	80 - 120
Sodium	10.0	9.94		mg/L		99	80 - 120

Lab Sample ID: 490-86046-C-2-E MS
Matrix: Water
Analysis Batch: 278732

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 277083

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0012	J	0.100	0.112		mg/L		111	75 - 125
Arsenic	0.0052		0.100	0.106		mg/L		100	75 - 125
Barium	0.067		0.100	0.174		mg/L		107	75 - 125
Cadmium	0.00040	U	0.100	0.101		mg/L		101	75 - 125
Chromium	0.00050	U	0.100	0.105		mg/L		105	75 - 125
Cobalt	0.00050	U	0.100	0.102		mg/L		102	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-86046-C-2-E MS
Matrix: Water
Analysis Batch: 278732

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 277083

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.00087	J	0.100	0.110		mg/L		109	75 - 125
Iron	0.025		1.00	1.07		mg/L		104	75 - 125
Lead	0.00020	U	0.100	0.0974		mg/L		97	75 - 125
Manganese	0.00050	U	0.100	0.106		mg/L		106	75 - 125
Selenium	0.0042		0.100	0.0994		mg/L		95	75 - 125
Silver	0.00050	U	0.100	0.109		mg/L		109	75 - 125
Thallium	0.00057	J	0.100	0.0920		mg/L		91	75 - 125
Vanadium	0.034	B	0.100	0.135		mg/L		100	75 - 125
Zinc	0.010	U	0.100	0.0912		mg/L		91	75 - 125

Lab Sample ID: 490-86046-C-2-F MSD
Matrix: Water
Analysis Batch: 278732

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 277083

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.0012	J	0.100	0.115		mg/L		114	75 - 125	2	20
Arsenic	0.0052		0.100	0.107		mg/L		102	75 - 125	2	20
Barium	0.067		0.100	0.174		mg/L		107	75 - 125	0	20
Cadmium	0.00040	U	0.100	0.104		mg/L		104	75 - 125	3	20
Chromium	0.00050	U	0.100	0.106		mg/L		106	75 - 125	2	20
Cobalt	0.00050	U	0.100	0.103		mg/L		103	75 - 125	1	20
Copper	0.00087	J	0.100	0.113		mg/L		112	75 - 125	3	20
Iron	0.025		1.00	1.09		mg/L		106	75 - 125	1	20
Lead	0.00020	U	0.100	0.0992		mg/L		99	75 - 125	2	20
Manganese	0.00050	U	0.100	0.107		mg/L		107	75 - 125	1	20
Selenium	0.0042		0.100	0.102		mg/L		98	75 - 125	3	20
Silver	0.00050	U	0.100	0.111		mg/L		111	75 - 125	2	20
Thallium	0.00057	J	0.100	0.0935		mg/L		93	75 - 125	2	20
Vanadium	0.034	B	0.100	0.136		mg/L		102	75 - 125	1	20
Zinc	0.010	U	0.100	0.0931		mg/L		93	75 - 125	2	20

Lab Sample ID: 490-85759-A-7-E MS
Matrix: Water
Analysis Batch: 278980

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 277682

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0096	U	1.00	1.05		mg/L		105	75 - 125
Antimony	0.00050	U	0.100	0.0985		mg/L		98	75 - 125
Arsenic	0.0047		0.100	0.0974		mg/L		93	75 - 125
Barium	0.034		0.100	0.141		mg/L		107	75 - 125
Beryllium	0.00050	U	0.100	0.103		mg/L		103	75 - 125
Cadmium	0.00040	U	0.100	0.103		mg/L		103	75 - 125
Calcium	311	E	10.0	327.7	E 4	mg/L		164	75 - 125
Chromium	0.00050	U	0.100	0.102		mg/L		102	75 - 125
Cobalt	0.0090		0.100	0.127		mg/L		118	75 - 125
Copper	0.00050	U	0.100	0.107		mg/L		107	75 - 125
Iron	9.6		1.00	10.93	4	mg/L		128	75 - 125
Lead	0.00020	U	0.100	0.0953		mg/L		95	75 - 125
Magnesium	50.5		10.0	62.24	4	mg/L		118	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-85759-A-7-E MS
Matrix: Water
Analysis Batch: 278980

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 277682

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	3.8	E	0.100	3.99	E 4	mg/L		237	75 - 125
Nickel	0.0028		0.100	0.116		mg/L		113	75 - 125
Potassium	24.1		10.0	35.38		mg/L		113	75 - 125
Selenium	0.00060	U	0.100	0.108		mg/L		108	75 - 125
Silver	0.00050	U	0.100	0.0872		mg/L		87	75 - 125
Sodium	13.1		10.0	24.48		mg/L		114	75 - 125
Thallium	0.00078	J	0.100	0.0966		mg/L		96	75 - 125
Vanadium	0.0019	J B	0.100	0.108		mg/L		106	75 - 125

Lab Sample ID: 490-85759-A-7-E MS
Matrix: Water
Analysis Batch: 279593

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 277682

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	0.054		0.100	0.141		mg/L		87	75 - 125

Lab Sample ID: 490-85759-A-7-F MSD
Matrix: Water
Analysis Batch: 278980

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 277682

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0096	U	1.00	1.03		mg/L		103	75 - 125	2	20
Antimony	0.00050	U	0.100	0.0969		mg/L		97	75 - 125	2	20
Arsenic	0.0047		0.100	0.0969		mg/L		92	75 - 125	0	20
Barium	0.034		0.100	0.140		mg/L		106	75 - 125	1	20
Beryllium	0.00050	U	0.100	0.101		mg/L		101	75 - 125	1	20
Cadmium	0.00040	U	0.100	0.105		mg/L		105	75 - 125	2	20
Calcium	311	E	10.0	318.1	E 4	mg/L		68	75 - 125	3	20
Chromium	0.00050	U	0.100	0.102		mg/L		102	75 - 125	0	20
Cobalt	0.0090		0.100	0.128		mg/L		119	75 - 125	1	20
Copper	0.00050	U	0.100	0.108		mg/L		108	75 - 125	1	20
Iron	9.6		1.00	10.60	4	mg/L		95	75 - 125	3	20
Lead	0.00020	U	0.100	0.0948		mg/L		95	75 - 125	1	20
Magnesium	50.5		10.0	60.74	4	mg/L		103	75 - 125	2	20
Manganese	3.8	E	0.100	3.83	E 4	mg/L		79	75 - 125	4	20
Nickel	0.0028		0.100	0.117		mg/L		114	75 - 125	1	20
Potassium	24.1		10.0	34.63		mg/L		106	75 - 125	2	20
Selenium	0.00060	U	0.100	0.110		mg/L		110	75 - 125	2	20
Silver	0.00050	U	0.100	0.0864		mg/L		86	75 - 125	1	20
Sodium	13.1		10.0	23.88		mg/L		108	75 - 125	2	20
Thallium	0.00078	J	0.100	0.0965		mg/L		96	75 - 125	0	20
Vanadium	0.0019	J B	0.100	0.108		mg/L		106	75 - 125	0	20

Lab Sample ID: 490-85759-A-7-F MSD
Matrix: Water
Analysis Batch: 279593

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 277682

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Zinc	0.054		0.100	0.140		mg/L		86	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 490-278247/1-A
Matrix: Water
Analysis Batch: 278710

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 278247

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/01/15 16:15	09/02/15 16:28	1

Lab Sample ID: LCS 490-278247/2-A
Matrix: Water
Analysis Batch: 278710

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 278247

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000953		mg/L		95	80 - 120

Lab Sample ID: 490-86046-B-2-E MS
Matrix: Water
Analysis Batch: 278710

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 278247

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.00108		mg/L		108	75 - 125

Lab Sample ID: 490-86046-B-2-F MSD
Matrix: Water
Analysis Batch: 278710

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 278247

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.00103		mg/L		103	75 - 125	5	20

Lab Sample ID: MB 490-276971/1-B
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 277394

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/27/15 21:10	08/30/15 01:24	1

Lab Sample ID: LCS 490-276971/2-B
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 277394

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000919		mg/L		92	80 - 120

Lab Sample ID: 490-86022-E-1-K MS
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 277394

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.000984		mg/L		98	75 - 125

Lab Sample ID: 490-86022-E-1-L MSD
Matrix: Water
Analysis Batch: 277632

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 277394

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.00102		mg/L		102	75 - 125	3	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 490-276910/1-A
Matrix: Water
Analysis Batch: 277612

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276910

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/27/15 16:19	08/28/15 12:05	1

Lab Sample ID: LCS 490-276910/2-A
Matrix: Water
Analysis Batch: 277612

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.105		mg/L		105	90 - 110

Lab Sample ID: 490-85948-4 MS
Matrix: Water
Analysis Batch: 277612

Client Sample ID: RW-5A-082415
Prep Type: Total/NA
Prep Batch: 276910

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1	0.100	0.0823		mg/L		82	70 - 130

Lab Sample ID: 490-85948-4 MSD
Matrix: Water
Analysis Batch: 277612

Client Sample ID: RW-5A-082415
Prep Type: Total/NA
Prep Batch: 276910

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1	0.100	0.0538	F1	mg/L		54	70 - 130	42	46

Lab Sample ID: 490-85964-B-1-B DU
Matrix: Water
Analysis Batch: 277612

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 276910

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.0081	J	0.0124	F5	mg/L		43	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 490-277090/5
Matrix: Water
Analysis Batch: 277090

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/27/15 17:47	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/27/15 17:47	1

Lab Sample ID: LCS 490-277090/6
Matrix: Water
Analysis Batch: 277090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	100	90.71		mg/L		91	90 - 110

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 490-85953-D-1 DU
Matrix: Water
Analysis Batch: 277090

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	115			113.4		mg/L				1	20
Total Alkalinity as CaCO3	115			113.4		mg/L				1	20

Lab Sample ID: 490-85957-S-1 DU
Matrix: Water
Analysis Batch: 277090

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	166			163.9		mg/L				1	20
Total Alkalinity as CaCO3	166			163.9		mg/L				1	20

GC/MS VOA

Analysis Batch: 278757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	8260C SIM	
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	8260C SIM	
490-85948-3	FB-01-082415	Total/NA	Water	8260C SIM	
490-85948-4	RW-5A-082415	Total/NA	Water	8260C SIM	
490-85948-5	OB-7-082415	Total/NA	Water	8260C SIM	
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	8260C SIM	
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	8260C SIM	
490-85948-8	TB-13-082515	Total/NA	Water	8260C SIM	
490-86046-H-2 MS	Matrix Spike	Total/NA	Water	8260C SIM	
490-86046-H-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C SIM	
LCS 490-278757/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-278757/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-278757/7	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 278804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	8260C	
490-85948-1 MS	OB-15B-082415	Total/NA	Water	8260C	
490-85948-1 MSD	OB-15B-082415	Total/NA	Water	8260C	
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	8260C	
490-85948-3	FB-01-082415	Total/NA	Water	8260C	
490-85948-4	RW-5A-082415	Total/NA	Water	8260C	
490-85948-5	OB-7-082415	Total/NA	Water	8260C	
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	8260C	
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	8260C	
490-85948-8	TB-13-082515	Total/NA	Water	8260C	
LCS 490-278804/3	Lab Control Sample	Total/NA	Water	8260C	
MB 490-278804/6	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 277571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	3510C	
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	3510C	
490-85948-3	FB-01-082415	Total/NA	Water	3510C	
490-85948-4	RW-5A-082415	Total/NA	Water	3510C	
490-85948-5	OB-7-082415	Total/NA	Water	3510C	
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	3510C	
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	3510C	
LCS 490-277571/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-277571/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 490-277571/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 277572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	3510C	
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	3510C	
490-85948-3	FB-01-082415	Total/NA	Water	3510C	
490-85948-4	RW-5A-082415	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 277572 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-5	OB-7-082415	Total/NA	Water	3510C	
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	3510C	
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	3510C	
490-85955-G-3-A MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	
490-85955-H-3-B MS	Matrix Spike	Total/NA	Water	3510C	
LCS 490-277572/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-277572/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 277738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	8270D SIM	277571
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	8270D SIM	277571
490-85948-3	FB-01-082415	Total/NA	Water	8270D SIM	277571
490-85948-4	RW-5A-082415	Total/NA	Water	8270D SIM	277571
490-85948-5	OB-7-082415	Total/NA	Water	8270D SIM	277571
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	8270D SIM	277571
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	8270D SIM	277571
LCS 490-277571/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	277571
LCSD 490-277571/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	277571
MB 490-277571/1-A	Method Blank	Total/NA	Water	8270D SIM	277571

Analysis Batch: 277755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	8270D	277572
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	8270D	277572
490-85948-3	FB-01-082415	Total/NA	Water	8270D	277572
490-85948-4	RW-5A-082415	Total/NA	Water	8270D	277572
490-85948-5	OB-7-082415	Total/NA	Water	8270D	277572
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	8270D	277572
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	8270D	277572
490-85955-G-3-A MSD	Matrix Spike Duplicate	Total/NA	Water	8270D	277572
490-85955-H-3-B MS	Matrix Spike	Total/NA	Water	8270D	277572
LCS 490-277572/2-A	Lab Control Sample	Total/NA	Water	8270D	277572
MB 490-277572/1-A	Method Blank	Total/NA	Water	8270D	277572

GC Semi VOA

Prep Batch: 279660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	3510C	
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	3510C	
490-85948-3	FB-01-082415	Total/NA	Water	3510C	
490-85948-4	RW-5A-082415	Total/NA	Water	3510C	
490-85948-5	OB-7-082415	Total/NA	Water	3510C	
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	3510C	
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	3510C	
LCS 490-279660/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-279660/1-A	Method Blank	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Analysis Batch: 280337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	8082A	279660
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	8082A	279660
490-85948-3	FB-01-082415	Total/NA	Water	8082A	279660
490-85948-4	RW-5A-082415	Total/NA	Water	8082A	279660
490-85948-5	OB-7-082415	Total/NA	Water	8082A	279660
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	8082A	279660
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	8082A	279660
LCS 490-279660/2-A	Lab Control Sample	Total/NA	Water	8082A	279660
MB 490-279660/1-A	Method Blank	Total/NA	Water	8082A	279660

HPLC/IC

Analysis Batch: 278740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	9056A	
490-85948-1 MS	OB-15B-082415	Total/NA	Water	9056A	
490-85948-1 MSD	OB-15B-082415	Total/NA	Water	9056A	
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	9056A	
490-85948-3	FB-01-082415	Total/NA	Water	9056A	
490-85948-4	RW-5A-082415	Total/NA	Water	9056A	
490-85948-5	OB-7-082415	Total/NA	Water	9056A	
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	9056A	
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	9056A	
LCS 490-278740/4	Lab Control Sample	Total/NA	Water	9056A	
MB 490-278740/3	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 276608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	3010A	
490-85948-1 MS	OB-15B-082415	Total/NA	Water	3010A	
490-85948-1 MSD	OB-15B-082415	Total/NA	Water	3010A	
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	3010A	
490-85948-3	FB-01-082415	Total/NA	Water	3010A	
490-85948-4	RW-5A-082415	Total/NA	Water	3010A	
490-85948-5	OB-7-082415	Total/NA	Water	3010A	
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	3010A	
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	3010A	
LCS 490-276608/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-276608/1-A	Method Blank	Total/NA	Water	3010A	

Filtration Batch: 276971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Dissolved	Water	Filtration	
490-85948-2	RW-13 (71-91)-082415	Dissolved	Water	Filtration	
490-85948-3	FB-01-082415	Dissolved	Water	Filtration	
490-85948-4	RW-5A-082415	Dissolved	Water	Filtration	
490-85948-5	OB-7-082415	Dissolved	Water	Filtration	
490-85948-6	RW-4A (113-123)-082415	Dissolved	Water	Filtration	

Metals (Continued)

Filtration Batch: 276971 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-7	RW-4 (333-343)-082415	Dissolved	Water	Filtration	
490-86022-E-1-K MS	Matrix Spike	Dissolved	Water	Filtration	
490-86022-E-1-L MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	
LCS 490-276971/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-276971/1-B	Method Blank	Dissolved	Water	Filtration	

Filtration Batch: 277068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Dissolved	Water	Filtration	
490-85948-2	RW-13 (71-91)-082415	Dissolved	Water	Filtration	
490-85948-3	FB-01-082415	Dissolved	Water	Filtration	
490-85948-4	RW-5A-082415	Dissolved	Water	Filtration	
490-86046-C-2-E MS	Matrix Spike	Dissolved	Water	Filtration	
490-86046-C-2-F MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	
LCS 490-277068/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-277068/1-B	Method Blank	Dissolved	Water	Filtration	

Prep Batch: 277083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Dissolved	Water	3005A	277068
490-85948-2	RW-13 (71-91)-082415	Dissolved	Water	3005A	277068
490-85948-3	FB-01-082415	Dissolved	Water	3005A	277068
490-85948-4	RW-5A-082415	Dissolved	Water	3005A	277068
490-86046-C-2-E MS	Matrix Spike	Dissolved	Water	3005A	277068
490-86046-C-2-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	277068
LCS 490-277068/2-B	Lab Control Sample	Dissolved	Water	3005A	277068
MB 490-277068/1-B	Method Blank	Dissolved	Water	3005A	277068

Analysis Batch: 277352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	6020A	276608
490-85948-1 MS	OB-15B-082415	Total/NA	Water	6020A	276608
490-85948-1 MSD	OB-15B-082415	Total/NA	Water	6020A	276608
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	6020A	276608
490-85948-3	FB-01-082415	Total/NA	Water	6020A	276608
490-85948-4	RW-5A-082415	Total/NA	Water	6020A	276608
490-85948-5	OB-7-082415	Total/NA	Water	6020A	276608
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	6020A	276608
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	6020A	276608
LCS 490-276608/2-A	Lab Control Sample	Total/NA	Water	6020A	276608
MB 490-276608/1-A	Method Blank	Total/NA	Water	6020A	276608

Prep Batch: 277394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Dissolved	Water	7470A	276971
490-85948-2	RW-13 (71-91)-082415	Dissolved	Water	7470A	276971
490-85948-3	FB-01-082415	Dissolved	Water	7470A	276971
490-85948-4	RW-5A-082415	Dissolved	Water	7470A	276971
490-85948-5	OB-7-082415	Dissolved	Water	7470A	276971
490-85948-6	RW-4A (113-123)-082415	Dissolved	Water	7470A	276971
490-85948-7	RW-4 (333-343)-082415	Dissolved	Water	7470A	276971

Metals (Continued)

Prep Batch: 277394 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86022-E-1-K MS	Matrix Spike	Dissolved	Water	7470A	276971
490-86022-E-1-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	276971
LCS 490-276971/2-B	Lab Control Sample	Dissolved	Water	7470A	276971
MB 490-276971/1-B	Method Blank	Dissolved	Water	7470A	276971

Filtration Batch: 277598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-5	OB-7-082415	Dissolved	Water	Filtration	
490-85948-6	RW-4A (113-123)-082415	Dissolved	Water	Filtration	
490-85948-7	RW-4 (333-343)-082415	Dissolved	Water	Filtration	

Analysis Batch: 277632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Dissolved	Water	7470A	277394
490-85948-2	RW-13 (71-91)-082415	Dissolved	Water	7470A	277394
490-85948-3	FB-01-082415	Dissolved	Water	7470A	277394
490-85948-4	RW-5A-082415	Dissolved	Water	7470A	277394
490-85948-5	OB-7-082415	Dissolved	Water	7470A	277394
490-85948-6	RW-4A (113-123)-082415	Dissolved	Water	7470A	277394
490-85948-7	RW-4 (333-343)-082415	Dissolved	Water	7470A	277394
490-86022-E-1-K MS	Matrix Spike	Dissolved	Water	7470A	277394
490-86022-E-1-L MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	277394
LCS 490-276971/2-B	Lab Control Sample	Dissolved	Water	7470A	277394
MB 490-276971/1-B	Method Blank	Dissolved	Water	7470A	277394

Prep Batch: 277682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85759-A-7-E MS	Matrix Spike	Dissolved	Water	3005A	
490-85759-A-7-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	
490-85948-5	OB-7-082415	Dissolved	Water	3005A	277598
490-85948-6	RW-4A (113-123)-082415	Dissolved	Water	3005A	277598
490-85948-7	RW-4 (333-343)-082415	Dissolved	Water	3005A	277598
LCS 490-277682/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 490-277682/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 278204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	6020A	276608
490-85948-1 MS	OB-15B-082415	Total/NA	Water	6020A	276608
490-85948-1 MSD	OB-15B-082415	Total/NA	Water	6020A	276608
490-85948-5	OB-7-082415	Total/NA	Water	6020A	276608

Prep Batch: 278247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	7470A	
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	7470A	
490-85948-3	FB-01-082415	Total/NA	Water	7470A	
490-85948-4	RW-5A-082415	Total/NA	Water	7470A	
490-85948-5	OB-7-082415	Total/NA	Water	7470A	
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	7470A	
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 278247 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-B-2-E MS	Matrix Spike	Total/NA	Water	7470A	
490-86046-B-2-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
LCS 490-278247/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 490-278247/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 278710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	7470A	278247
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	7470A	278247
490-85948-3	FB-01-082415	Total/NA	Water	7470A	278247
490-85948-4	RW-5A-082415	Total/NA	Water	7470A	278247
490-85948-5	OB-7-082415	Total/NA	Water	7470A	278247
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	7470A	278247
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	7470A	278247
490-86046-B-2-E MS	Matrix Spike	Total/NA	Water	7470A	278247
490-86046-B-2-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	278247
LCS 490-278247/2-A	Lab Control Sample	Total/NA	Water	7470A	278247
MB 490-278247/1-A	Method Blank	Total/NA	Water	7470A	278247

Analysis Batch: 278732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Dissolved	Water	6020A	277083
490-85948-2	RW-13 (71-91)-082415	Dissolved	Water	6020A	277083
490-85948-3	FB-01-082415	Dissolved	Water	6020A	277083
490-85948-4	RW-5A-082415	Dissolved	Water	6020A	277083
490-86046-C-2-E MS	Matrix Spike	Dissolved	Water	6020A	277083
490-86046-C-2-F MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	277083
LCS 490-277068/2-B	Lab Control Sample	Dissolved	Water	6020A	277083
MB 490-277068/1-B	Method Blank	Dissolved	Water	6020A	277083

Analysis Batch: 278980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85759-A-7-E MS	Matrix Spike	Dissolved	Water	6020A	277682
490-85759-A-7-F MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	277682
490-85948-5	OB-7-082415	Dissolved	Water	6020A	277682
490-85948-6	RW-4A (113-123)-082415	Dissolved	Water	6020A	277682
490-85948-7	RW-4 (333-343)-082415	Dissolved	Water	6020A	277682
LCS 490-277682/2-A	Lab Control Sample	Total Recoverable	Water	6020A	277682
MB 490-277682/1-A	Method Blank	Total Recoverable	Water	6020A	277682

Analysis Batch: 279070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Dissolved	Water	6020A	277083
490-85948-2	RW-13 (71-91)-082415	Dissolved	Water	6020A	277083
490-85948-3	FB-01-082415	Dissolved	Water	6020A	277083
490-85948-4	RW-5A-082415	Dissolved	Water	6020A	277083
LCS 490-277068/2-B	Lab Control Sample	Dissolved	Water	6020A	277083
MB 490-277068/1-B	Method Blank	Dissolved	Water	6020A	277083

Metals (Continued)

Analysis Batch: 279593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85759-A-7-E MS	Matrix Spike	Dissolved	Water	6020A	277682
490-85759-A-7-F MSD	Matrix Spike Duplicate	Dissolved	Water	6020A	277682
490-85948-5	OB-7-082415	Dissolved	Water	6020A	277682
490-85948-6	RW-4A (113-123)-082415	Dissolved	Water	6020A	277682
490-85948-7	RW-4 (333-343)-082415	Dissolved	Water	6020A	277682
LCS 490-277682/2-A	Lab Control Sample	Total Recoverable	Water	6020A	277682
MB 490-277682/1-A	Method Blank	Total Recoverable	Water	6020A	277682

Prep Batch: 280205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	3010A	
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	3010A	
490-85948-2 MS	RW-13 (71-91)-082415	Total/NA	Water	3010A	
490-85948-2 MSD	RW-13 (71-91)-082415	Total/NA	Water	3010A	
490-85948-3	FB-01-082415	Total/NA	Water	3010A	
490-85948-4	RW-5A-082415	Total/NA	Water	3010A	
490-85948-5	OB-7-082415	Total/NA	Water	3010A	
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	3010A	
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	3010A	
LCS 490-280205/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-280205/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 281318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	6020A	280205
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	6020A	280205
490-85948-2 MS	RW-13 (71-91)-082415	Total/NA	Water	6020A	280205
490-85948-2 MSD	RW-13 (71-91)-082415	Total/NA	Water	6020A	280205
490-85948-3	FB-01-082415	Total/NA	Water	6020A	280205
490-85948-4	RW-5A-082415	Total/NA	Water	6020A	280205
490-85948-5	OB-7-082415	Total/NA	Water	6020A	280205
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	6020A	280205
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	6020A	280205
LCS 490-280205/2-A	Lab Control Sample	Total/NA	Water	6020A	280205
MB 490-280205/1-A	Method Blank	Total/NA	Water	6020A	280205

General Chemistry

Prep Batch: 276910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	9012B	
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	9012B	
490-85948-3	FB-01-082415	Total/NA	Water	9012B	
490-85948-4	RW-5A-082415	Total/NA	Water	9012B	
490-85948-4 MS	RW-5A-082415	Total/NA	Water	9012B	
490-85948-4 MSD	RW-5A-082415	Total/NA	Water	9012B	
490-85948-5	OB-7-082415	Total/NA	Water	9012B	
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	9012B	
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	9012B	
490-85964-B-1-B DU	Duplicate	Total/NA	Water	9012B	

General Chemistry (Continued)

Prep Batch: 276910 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-276910/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 490-276910/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 277090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	SM 2320B	
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	SM 2320B	
490-85948-3	FB-01-082415	Total/NA	Water	SM 2320B	
490-85948-4	RW-5A-082415	Total/NA	Water	SM 2320B	
490-85948-5	OB-7-082415	Total/NA	Water	SM 2320B	
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	SM 2320B	
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	SM 2320B	
490-85953-D-1 DU	Duplicate	Total/NA	Water	SM 2320B	
490-85957-S-1 DU	Duplicate	Total/NA	Water	SM 2320B	
LCS 490-277090/6	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 490-277090/5	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 277612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-1	OB-15B-082415	Total/NA	Water	9012B	276910
490-85948-2	RW-13 (71-91)-082415	Total/NA	Water	9012B	276910
490-85948-3	FB-01-082415	Total/NA	Water	9012B	276910
490-85948-4	RW-5A-082415	Total/NA	Water	9012B	276910
490-85948-4 MS	RW-5A-082415	Total/NA	Water	9012B	276910
490-85948-4 MSD	RW-5A-082415	Total/NA	Water	9012B	276910
490-85948-5	OB-7-082415	Total/NA	Water	9012B	276910
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	9012B	276910
490-85948-7	RW-4 (333-343)-082415	Total/NA	Water	9012B	276910
490-85964-B-1-B DU	Duplicate	Total/NA	Water	9012B	276910
LCS 490-276910/2-A	Lab Control Sample	Total/NA	Water	9012B	276910
MB 490-276910/1-A	Method Blank	Total/NA	Water	9012B	276910

Client Sample ID: OB-15B-082415

Lab Sample ID: 490-85948-1

Date Collected: 08/24/15 11:15

Matrix: Water

Date Received: 08/26/15 11:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278804	09/03/15 19:05	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278757	09/03/15 14:28	PS	TAL NSH
Total/NA	Prep	3510C			290 mL	1 mL	277572	08/30/15 07:58	ET	TAL NSH
Total/NA	Analysis	8270D		1	290 mL	1 mL	277755	08/31/15 16:32	BES	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	277571	08/30/15 07:54	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	270 mL	1 mL	277738	08/31/15 14:54	BES	TAL NSH
Total/NA	Prep	3510C			290 mL	1 mL	279660	09/08/15 08:10	MRM	TAL NSH
Total/NA	Analysis	8082A		1	290 mL	1 mL	280337	09/09/15 20:32	HMT	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278740	09/02/15 20:55	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277083	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277068	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278732	09/02/15 22:45	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277083	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277068	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 11:51	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	276608	08/27/15 09:38	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277352	08/28/15 13:22	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	276608	08/27/15 09:38	ZLN	TAL NSH
Total/NA	Analysis	6020A		10	50 mL	50 mL	278204	08/31/15 14:02	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	280205	09/09/15 14:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	281318	09/11/15 14:54	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277394	08/27/15 21:10	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276971	08/27/15 21:10	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277632	08/30/15 01:48	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	278247	09/01/15 16:15	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278710	09/02/15 16:55	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276910	08/27/15 16:19	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	277612	08/28/15 12:07	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	277090	08/27/15 18:00	SMB	TAL NSH

Client Sample ID: RW-13 (71-91)-082415

Lab Sample ID: 490-85948-2

Date Collected: 08/24/15 13:35

Matrix: Water

Date Received: 08/26/15 11:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278804	09/03/15 19:32	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278757	09/03/15 14:57	PS	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	277572	08/30/15 07:58	ET	TAL NSH
Total/NA	Analysis	8270D		1	270 mL	1 mL	277755	08/31/15 16:55	BES	TAL NSH
Total/NA	Prep	3510C			290 mL	1 mL	277571	08/30/15 07:54	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	290 mL	1 mL	277738	08/31/15 15:21	BES	TAL NSH
Total/NA	Prep	3510C			260 mL	1 mL	279660	09/08/15 08:10	MRM	TAL NSH
Total/NA	Analysis	8082A		1	260 mL	1 mL	280337	09/09/15 20:48	HMT	TAL NSH

Client Sample ID: RW-13 (71-91)-082415

Date Collected: 08/24/15 13:35
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	10 mL		278740	09/02/15 22:07	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277083	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277068	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278732	09/02/15 22:51	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277083	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277068	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 11:56	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	276608	08/27/15 09:38	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277352	08/28/15 14:20	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	280205	09/09/15 14:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	281318	09/11/15 14:29	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277394	08/27/15 21:10	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276971	08/27/15 21:10	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277632	08/30/15 01:51	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	278247	09/01/15 16:15	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278710	09/02/15 16:52	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276910	08/27/15 16:19	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	277612	08/28/15 12:08	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	277090	08/27/15 18:06	SMB	TAL NSH

Client Sample ID: FB-01-082415

Date Collected: 08/24/15 07:30
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278804	09/03/15 19:59	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278757	09/03/15 15:25	PS	TAL NSH
Total/NA	Prep	3510C			290 mL	1 mL	277572	08/30/15 07:58	ET	TAL NSH
Total/NA	Analysis	8270D		1	290 mL	1 mL	277755	08/31/15 17:19	BES	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	277571	08/30/15 07:54	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	270 mL	1 mL	277738	08/31/15 16:15	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	279660	09/08/15 08:10	MRM	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	280337	09/09/15 21:03	HMT	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278740	09/02/15 22:31	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277083	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277068	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278732	09/02/15 22:56	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277083	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277068	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 12:01	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	276608	08/27/15 09:38	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277352	08/28/15 14:26	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	280205	09/09/15 14:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	281318	09/11/15 15:00	KKK	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	7470A			30 mL	30 mL	277394	08/27/15 21:10	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276971	08/27/15 21:10	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277632	08/30/15 01:53	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	278247	09/01/15 16:15	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278710	09/02/15 16:57	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276910	08/27/15 16:19	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	277612	08/28/15 12:09	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	277090	08/27/15 18:10	SMB	TAL NSH

Client Sample ID: RW-5A-082415

Date Collected: 08/24/15 10:25
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278804	09/03/15 20:27	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278757	09/03/15 15:54	PS	TAL NSH
Total/NA	Prep	3510C			290 mL	1 mL	277572	08/30/15 07:58	ET	TAL NSH
Total/NA	Analysis	8270D		1	290 mL	1 mL	277755	08/31/15 17:43	BES	TAL NSH
Total/NA	Prep	3510C			280 mL	1 mL	277571	08/30/15 07:54	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	280 mL	1 mL	277738	08/31/15 16:43	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	279660	09/08/15 08:10	MRM	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	280337	09/09/15 21:19	HMT	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278740	09/02/15 22:55	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277083	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277068	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278732	09/02/15 23:01	KKK	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277083	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277068	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279070	09/03/15 12:07	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	276608	08/27/15 09:42	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277352	08/28/15 14:32	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	280205	09/09/15 14:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	281318	09/11/15 15:15	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277394	08/27/15 21:10	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276971	08/27/15 21:10	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277632	08/30/15 01:55	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	278247	09/01/15 16:15	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278710	09/02/15 17:00	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276910	08/27/15 16:19	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	277612	08/28/15 12:09	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	277090	08/27/15 18:15	SMB	TAL NSH

Client Sample ID: OB-7-082415

Lab Sample ID: 490-85948-5

Date Collected: 08/24/15 12:50

Matrix: Water

Date Received: 08/26/15 11:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278804	09/03/15 20:54	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278757	09/03/15 16:23	PS	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	277572	08/30/15 07:58	ET	TAL NSH
Total/NA	Analysis	8270D		1	270 mL	1 mL	277755	08/31/15 18:07	BES	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	277571	08/30/15 07:54	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	270 mL	1 mL	277738	08/31/15 17:10	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	279660	09/08/15 08:10	MRM	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	280337	09/09/15 21:35	HMT	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278740	09/02/15 23:19	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277682	08/30/15 13:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277598	08/30/15 13:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278980	09/03/15 12:31	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277682	08/30/15 13:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277598	08/30/15 13:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279593	09/04/15 19:38	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	276608	08/27/15 09:42	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277352	08/28/15 14:37	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	276608	08/27/15 09:42	ZLN	TAL NSH
Total/NA	Analysis	6020A		10	50 mL	50 mL	278204	08/31/15 14:31	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	280205	09/09/15 14:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	281318	09/11/15 15:20	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277394	08/27/15 21:10	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276971	08/27/15 21:10	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277632	08/30/15 01:58	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	278247	09/01/15 16:15	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278710	09/02/15 17:02	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276910	08/27/15 16:19	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	277612	08/28/15 12:11	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	277090	08/27/15 18:20	SMB	TAL NSH

Client Sample ID: RW-4A (113-123)-082415

Lab Sample ID: 490-85948-6

Date Collected: 08/24/15 09:35

Matrix: Water

Date Received: 08/26/15 11:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278804	09/03/15 21:21	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278757	09/03/15 16:52	PS	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277572	08/30/15 07:58	ET	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	277755	08/31/15 18:30	BES	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	277571	08/30/15 07:54	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	270 mL	1 mL	277738	08/31/15 17:37	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	279660	09/08/15 08:10	MRM	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	280337	09/09/15 21:50	HMT	TAL NSH

Client Sample ID: RW-4A (113-123)-082415

Lab Sample ID: 490-85948-6

Date Collected: 08/24/15 09:35

Matrix: Water

Date Received: 08/26/15 11:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	10 mL		278740	09/02/15 23:43	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277682	08/30/15 13:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277598	08/30/15 13:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278980	09/03/15 12:36	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277682	08/30/15 13:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277598	08/30/15 13:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279593	09/04/15 19:44	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	276608	08/27/15 09:42	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277352	08/28/15 14:43	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	280205	09/09/15 14:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	281318	09/11/15 15:26	KKK	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	277394	08/27/15 21:10	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276971	08/27/15 21:10	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277632	08/30/15 02:05	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	278247	09/01/15 16:15	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278710	09/02/15 17:04	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276910	08/27/15 16:19	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	277612	08/28/15 12:12	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	277090	08/27/15 18:26	SMB	TAL NSH

Client Sample ID: RW-4 (333-343)-082415

Lab Sample ID: 490-85948-7

Date Collected: 08/24/15 11:25

Matrix: Water

Date Received: 08/26/15 11:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278804	09/03/15 21:48	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278757	09/03/15 17:21	PS	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277572	08/30/15 07:58	ET	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	277755	08/31/15 18:54	BES	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	277571	08/30/15 07:54	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	270 mL	1 mL	277738	08/31/15 18:05	BES	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	279660	09/08/15 08:10	MRM	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	280337	09/09/15 22:06	HMT	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		278740	09/03/15 00:07	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277682	08/30/15 13:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277598	08/30/15 13:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	278980	09/03/15 12:53	CME	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277682	08/30/15 13:22	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277598	08/30/15 13:22	ZLN	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	279593	09/04/15 20:01	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	276608	08/27/15 09:42	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277352	08/28/15 14:49	LEG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	280205	09/09/15 14:34	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	281318	09/11/15 15:31	KKK	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	7470A			30 mL	30 mL	277394	08/27/15 21:10	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	276971	08/27/15 21:10	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	277632	08/30/15 02:08	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	278247	09/01/15 16:15	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278710	09/02/15 17:07	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	276910	08/27/15 16:19	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	277612	08/28/15 12:13	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	277090	08/27/15 18:33	SMB	TAL NSH

Client Sample ID: TB-13-082515

Date Collected: 08/25/15 01:00
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	278804	09/03/15 17:43	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278757	09/03/15 13:31	PS	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
9056A	Anions, Ion Chromatography	SW846	TAL NSH
6020A	Metals (ICP/MS)	SW846	TAL NSH
7470A	Mercury (CVAA)	SW846	TAL NSH
9012B	Cyanide, Total andor Amenable	SW846	TAL NSH
SM 2320B	Alkalinity	SM	TAL NSH

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	TN965	09-30-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total
8260C		Water	Dichlorobromomethane
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	1,4-Dioxane
8260C SIM		Water	Ethylene Dibromide
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3

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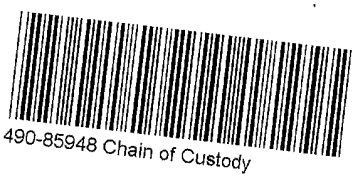
Nashville, TN

COOLER RECEIPT FOR



Cooler Received/Opened On: 8/26/2015 @0915

1. Tracking # 3364 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 1.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES..NO..NA

If yes, how many and where: 0

5. Were the seals intact, signed, and dated correctly? YES...NO..NA

6. Were custody papers inside cooler? YES..NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) HKG

7. Were custody seals on containers: YES NO and Intact YES...NO..NA

Were these signed and dated correctly? YES...NO..NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO...NA

b. Was there any observable headspace present in any VOA vial? YES..NO..NA

14. Was there a Trip Blank in this cooler? YES..NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES..NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

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Nashville, TN

COOLER RECEIPT FORM

S(Loc: 490 y
85948

Cooler Received/Opened On: 8/26/2015 @0915

1. Tracking # 3375 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 0.3 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where: 0

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? YES..(NO)..NA

I certify that I opened the cooler and answered questions 1-6 (intial) HKG

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? (YES)..NO...NA

b. Was there any observable headspace present in any VOA vial? YES..(NO)..NA

14. Was there a Trip Blank in this cooler? YES..(NO)..NA If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? (YES).NO..NA

b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA

16. Was residual chlorine present? YES..(NO)..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

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THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FO

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85948
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Cooler Received/Opened On: 8/26/2015 @0915

1. Tracking # 3386 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 1.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where: Ø

5. Were the seals intact, signed, and dated correctly? YES...NO..(NA)

6. Were custody papers inside cooler? YES..(NO)..NA

I certify that I opened the cooler and answered questions 1-6 (intial) Ø

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES..(NO)..NA

14. Was there a Trip Blank in this cooler? YES..(NO)..NA If multiple coolers, sequence # 3

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? (YES)..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES..(NO)..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
85948
#1
L

TestAmerica

9/21/2015

Client Information	Sampler: Robert Lauterberg	Lab PM: Brown, Shali	Carrier Tr	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filterl)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalimity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
OB-15B-082415	8/24/15	1115	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
RW-13(71-91)-082415	8/24/15	13:35	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
FB-01-082415	8/24/15	07:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
RW-5A-082415	8/24/15	10:25	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
OB-7-082415	8/24/15	12:50	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
RW-4A(113-123)-082415	8/24/15	09:35	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
RW-4(333-343)-082415	8/24/15	11:25	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
TB-13-082515	8/25/15	—	—	Water	N	N	✓	✓													
				Water																	
				Water																	
				Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8/25/15 0800	Cornerstone		8/25/15 0800	TA
James Thiessen	8-25-15 1140	TA		8/26/15 915	TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 490-85948-1

Login Number: 85948
List Number: 1
Creator: Gundi, Hozar K

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-86046-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Tim Roeper

Authorized for release by:
9/21/2015 12:13:06 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-86046-1	RW-3DS (155-160)-082515	Water	08/25/15 08:40	08/27/15 10:00
490-86046-2	RW-2 (452-462)-082515	Water	08/25/15 13:30	08/27/15 10:00
490-86046-3	Dup-04-082515	Water	08/25/15 12:00	08/27/15 10:00
490-86046-4	TB-14-082515	Water	08/26/15 01:00	08/27/15 10:00
490-86046-5	RW-11D (262-267)-082615	Water	08/26/15 10:30	08/27/15 10:00

Job ID: 490-86046-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 490-86046-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/27/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.9º C and 4.3º C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples RW-3DS (155-160)-082515 (490-86046-1), RW-2 (452-462)-082515 (490-86046-2), Dup-04-082515 (490-86046-3), TB-14-082515 (490-86046-4) and RW-11D (262-267)-082615 (490-86046-5) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 09/04/2015 and 09/05/2015.

Methylene Chloride was detected in method blank MB 490-279465/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

1,1-Dichloroethane, cis-1,2-Dichloroethene and Cyclohexane failed the recovery criteria high for LCS 490-279129/3. Refer to the QC report for details.

Cyclohexane failed the recovery criteria high for the MS of sample RW-2 (452-462)-082515MS (490-86046-2) in batch 490-279129. Refer

Job ID: 490-86046-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS SIM)

Samples RW-3DS (155-160)-082515 (490-86046-1), RW-2 (452-462)-082515 (490-86046-2), Dup-04-082515 (490-86046-3), TB-14-082515 (490-86046-4) and RW-11D (262-267)-082615 (490-86046-5) were analyzed for volatile organic compounds (GC-MS SIM) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 09/03/2015.

1,2-Dichloroethane-d4 (Surr) failed the surrogate recovery criteria high for RW-3DS (155-160)-082515 (490-86046-1). This sample did not contain any target analytes in the affected range; therefore, re-extraction and/or re-analysis was not performed.

The continuing calibration verification (CCV) associated with batch 490-278757 recovered marginally above the upper control limit for 1,4-Dioxane and 4-Bromofluorobenzene (Surr). The samples associated with this CCV have been reported. The following samples are impacted: RW-3DS (155-160)-082515 (490-86046-1), RW-2 (452-462)-082515 (490-86046-2), Dup-04-082515 (490-86046-3), RW-11D (262-267)-082615 (490-86046-5) and (CCVIS 490-278757/2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GC MS)

Samples RW-3DS (155-160)-082515 (490-86046-1), RW-2 (452-462)-082515 (490-86046-2), Dup-04-082515 (490-86046-3) and RW-11D (262-267)-082615 (490-86046-5) were analyzed for semivolatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 09/01/2015 and analyzed on 09/05/2015.

Benzaldehyde failed the recovery criteria high for LCS 490-277997/2-A. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples RW-3DS (155-160)-082515 (490-86046-1), Dup-04-082515 (490-86046-3) and RW-11D (262-267)-082615 (490-86046-5) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared and analyzed on 09/09/2015.

There was insufficient sample available for the extraction and analysis of samples RW-2 (452-462)-082515.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

Samples RW-3DS (155-160)-082515 (490-86046-1), RW-2 (452-462)-082515 (490-86046-2), Dup-04-082515 (490-86046-3) and RW-11D (262-267)-082615 (490-86046-5) were analyzed for polycyclic aromatic hydrocarbons (PAHs) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 09/01/2015 and 09/03/2015 and analyzed on 09/01/2015 and 09/04/2015.

Benzo[a]anthracene, Benzo[a]pyrene and Benzo[b]fluoranthene failed the recovery criteria high for LCS 490-278994/2-A.
Pentachlorophenol exceeded the RPD limit for LCSD 490-277972/3-A.
Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene and Pentachlorophenol exceeded the RPD limit for LCSD 490-278994/3-A.
Refer to the QC report for details. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED METALS (ICPMS)

Samples RW-3DS (155-160)-082515 (490-86046-1), RW-2 (452-462)-082515 (490-86046-2), Dup-04-082515 (490-86046-3) and RW-11D (262-267)-082615 (490-86046-5) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/28/2015 and analyzed on 09/03/2015.

Job ID: 490-86046-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

Manganese and Vanadium were detected in method blank MB 490-277068/1-B at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Calcium, Potassium and Sodium failed the recovery criteria low for the MS of sample RW-2 (452-462)-082515MS (490-86046-2) in batch 490-279070.
Calcium, Potassium and Sodium failed the recovery criteria low for the MSD of sample RW-2 (452-462)-082515MSD (490-86046-2) in batch 490-279070. Refer to the QC report for details.

Samples RW-3DS (155-160)-082515 (490-86046-1)[5X], RW-2 (452-462)-082515 (490-86046-2)[5X], Dup-04-082515 (490-86046-3)[5X] and RW-11D (262-267)-082615 (490-86046-5)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

METALS (ICPMS)
Samples RW-3DS (155-160)-082515 (490-86046-1), RW-2 (452-462)-082515 (490-86046-2), Dup-04-082515 (490-86046-3) and RW-11D (262-267)-082615 (490-86046-5) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/30/2015 and analyzed on 08/31/2015 and 09/01/2015.

Vanadium was detected in method blank MB 490-277578/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Calcium and Sodium failed the recovery criteria low for the MS of sample RW-2 (452-462)-082515MS (490-86046-2) in batch 490-278353.
Potassium failed the recovery criteria high.
Calcium and Potassium failed the recovery criteria high for the MSD of sample RW-2 (452-462)-082515MSD (490-86046-2) in batch 490-278353. Refer to the QC report for details.

Samples RW-3DS (155-160)-082515 (490-86046-1)[50X], RW-2 (452-462)-082515 (490-86046-2)[50X], Dup-04-082515 (490-86046-3)[50X] and RW-11D (262-267)-082615 (490-86046-5)[50X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED MERCURY (CVAA)
Samples RW-3DS (155-160)-082515 (490-86046-1), RW-2 (452-462)-082515 (490-86046-2), Dup-04-082515 (490-86046-3) and RW-11D (262-267)-082615 (490-86046-5) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/31/2015 and analyzed on 09/02/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY
Samples RW-3DS (155-160)-082515 (490-86046-1), RW-2 (452-462)-082515 (490-86046-2), Dup-04-082515 (490-86046-3) and RW-11D (262-267)-082615 (490-86046-5) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 09/01/2015 and analyzed on 09/02/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ALKALINITY
Samples RW-3DS (155-160)-082515 (490-86046-1), RW-2 (452-462)-082515 (490-86046-2), Dup-04-082515 (490-86046-3) and RW-11D (262-267)-082615 (490-86046-5) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/27/2015.

Job ID: 490-86046-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL CYANIDE

Samples RW-3DS (155-160)-082515 (490-86046-1), RW-2 (452-462)-082515 (490-86046-2), Dup-04-082515 (490-86046-3) and RW-11D (262-267)-082615 (490-86046-5) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared on 08/29/2015 and analyzed on 08/30/2015.

Cyanide, Total failed the recovery criteria low for the MS of sample RW-2 (452-462)-082515MS (490-86046-2) in batch 490-277627. Cyanide, Total failed the recovery criteria low for the MSD of sample RW-2 (452-462)-082515MSD (490-86046-2) in batch 490-277627. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS

Samples RW-3DS (155-160)-082515 (490-86046-1), RW-2 (452-462)-082515 (490-86046-2), Dup-04-082515 (490-86046-3) and RW-11D (262-267)-082615 (490-86046-5) were analyzed for anions in accordance with SW-846 Method 9056. The samples were analyzed on 09/01/2015 and 09/04/2015.

Chloride and Sulfate failed the recovery criteria low for the MS of sample RW-2 (452-462)-082515MS (490-86046-2) in batch 490-278255. Chloride and Sulfate failed the recovery criteria low for the MSD of sample RW-2 (452-462)-082515MSD (490-86046-2) in batch 490-278255. Refer to the QC report for details.

Samples RW-3DS (155-160)-082515 (490-86046-1)[5X], RW-2 (452-462)-082515 (490-86046-2)[5X] and Dup-04-082515 (490-86046-3) [5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
E	Result exceeded calibration range.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	RPD of the LCS and LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Client Sample ID: RW-3DS (155-160)-082515
Date Collected: 08/25/15 08:40
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-1
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/03/15 17:49	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/03/15 17:49	1
1,4-Dioxane	**38**		10	0.27	ug/L			09/03/15 17:49	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/03/15 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*144*	*X*	*70 - 130*		*09/03/15 17:49*	*1*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*		*09/03/15 17:49*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/03/15 17:49*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/03/15 17:49*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 23:15	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/04/15 23:15	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 23:15	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 23:15	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/04/15 23:15	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/04/15 23:15	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/04/15 23:15	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/04/15 23:15	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/04/15 23:15	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/04/15 23:15	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/04/15 23:15	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/04/15 23:15	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/04/15 23:15	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/04/15 23:15	1
Acetone	2.7	U	25	2.7	ug/L			09/04/15 23:15	1
Benzene	0.20	U	1.0	0.20	ug/L			09/04/15 23:15	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/04/15 23:15	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/04/15 23:15	1
Carbon disulfide	**11**		1.0	0.22	ug/L			09/04/15 23:15	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/04/15 23:15	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/04/15 23:15	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/04/15 23:15	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/04/15 23:15	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/04/15 23:15	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/04/15 23:15	1
cis-1,2-Dichloroethene	0.21	U *	1.0	0.21	ug/L			09/04/15 23:15	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/04/15 23:15	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/04/15 23:15	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/04/15 23:15	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/04/15 23:15	1
Ethylbenzene	**0.26**	**J**	1.0	0.19	ug/L			09/04/15 23:15	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/04/15 23:15	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/04/15 23:15	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/04/15 23:15	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/04/15 23:15	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/04/15 23:15	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/04/15 23:15	1

Client Sample ID: RW-3DS (155-160)-082515
Date Collected: 08/25/15 08:40
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	0.28	U	1.0	0.28	ug/L			09/04/15 23:15	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/04/15 23:15	1
Toluene	**0.60**	**J**	1.0	0.17	ug/L			09/04/15 23:15	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/04/15 23:15	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/04/15 23:15	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/04/15 23:15	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/04/15 23:15	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/04/15 23:15	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/04/15 23:15	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/04/15 23:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1-Propene, 2-methyl-	*3.3*	*J N*	*ug/L*		*1.30*	*115-11-7*		*09/04/15 23:15*	*1*
Cysteic acid	*8.6*	*J N*	*ug/L*		*1.46*	*1000131-23-1*		*09/04/15 23:15*	*1*
Isobutyl alcohol	*38*	*J*	*ug/L*		*3.42*	*78-83-1*		*09/04/15 23:15*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/04/15 23:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*09/04/15 23:15*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*09/04/15 23:15*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/04/15 23:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*09/04/15 23:15*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**1.0**		1.0	0.24	ug/L			09/05/15 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*09/05/15 19:20*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/05/15 19:20*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/05/15 19:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*09/05/15 19:20*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 17:12	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 17:12	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 17:12	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		09/01/15 05:42	09/01/15 17:12	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		09/01/15 05:42	09/01/15 17:12	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		09/01/15 05:42	09/01/15 17:12	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		09/01/15 05:42	09/01/15 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*70*		*10 - 120*	*09/01/15 05:42*	*09/01/15 17:12*	*1*
2-Fluorobiphenyl (Surr)	*53*		*29 - 120*	*09/01/15 05:42*	*09/01/15 17:12*	*1*
Nitrobenzene-d5	*71*		*27 - 120*	*09/01/15 05:42*	*09/01/15 17:12*	*1*
Terphenyl-d14	*66*		*13 - 120*	*09/01/15 05:42*	*09/01/15 17:12*	*1*
2-Fluorophenol	*45*		*10 - 120*	*09/01/15 05:42*	*09/01/15 17:12*	*1*
Phenol-d5	*33*		*10 - 120*	*09/01/15 05:42*	*09/01/15 17:12*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Client Sample ID: RW-3DS (155-160)-082515
Date Collected: 08/25/15 08:40
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		09/01/15 09:06	09/05/15 00:06	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		09/01/15 09:06	09/05/15 00:06	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		09/01/15 09:06	09/05/15 00:06	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		09/01/15 09:06	09/05/15 00:06	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		09/01/15 09:06	09/05/15 00:06	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		09/01/15 09:06	09/05/15 00:06	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		09/01/15 09:06	09/05/15 00:06	1
2,4-Dinitrophenol	**6.6**	**J**	25	5.9	ug/L		09/01/15 09:06	09/05/15 00:06	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		09/01/15 09:06	09/05/15 00:06	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		09/01/15 09:06	09/05/15 00:06	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 00:06	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		09/01/15 09:06	09/05/15 00:06	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		09/01/15 09:06	09/05/15 00:06	1
2-Methylphenol	2.3	U	10	2.3	ug/L		09/01/15 09:06	09/05/15 00:06	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		09/01/15 09:06	09/05/15 00:06	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		09/01/15 09:06	09/05/15 00:06	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		09/01/15 09:06	09/05/15 00:06	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		09/01/15 09:06	09/05/15 00:06	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		09/01/15 09:06	09/05/15 00:06	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		09/01/15 09:06	09/05/15 00:06	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		09/01/15 09:06	09/05/15 00:06	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		09/01/15 09:06	09/05/15 00:06	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		09/01/15 09:06	09/05/15 00:06	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 00:06	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		09/01/15 09:06	09/05/15 00:06	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		09/01/15 09:06	09/05/15 00:06	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		09/01/15 09:06	09/05/15 00:06	1
Acetophenone	2.3	U	10	2.3	ug/L		09/01/15 09:06	09/05/15 00:06	1
Anthracene	0.38	U	2.0	0.38	ug/L		09/01/15 09:06	09/05/15 00:06	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		09/01/15 09:06	09/05/15 00:06	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		09/01/15 09:06	09/05/15 00:06	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		09/01/15 09:06	09/05/15 00:06	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		09/01/15 09:06	09/05/15 00:06	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 00:06	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:06	09/05/15 00:06	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		09/01/15 09:06	09/05/15 00:06	1
Carbazole	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 00:06	1
Caprolactam	2.4	U	10	2.4	ug/L		09/01/15 09:06	09/05/15 00:06	1
Chrysene	0.33	U	2.0	0.33	ug/L		09/01/15 09:06	09/05/15 00:06	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		09/01/15 09:06	09/05/15 00:06	1
Dibenzofuran	2.9	U	10	2.9	ug/L		09/01/15 09:06	09/05/15 00:06	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		09/01/15 09:06	09/05/15 00:06	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		09/01/15 09:06	09/05/15 00:06	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:06	09/05/15 00:06	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		09/01/15 09:06	09/05/15 00:06	1
Fluorene	0.32	U	2.0	0.32	ug/L		09/01/15 09:06	09/05/15 00:06	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		09/01/15 09:06	09/05/15 00:06	1
Hexachloroethane	1.9	U	10	1.9	ug/L		09/01/15 09:06	09/05/15 00:06	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		09/01/15 09:06	09/05/15 00:06	1

Client Sample ID: RW-3DS (155-160)-082515
Date Collected: 08/25/15 08:40
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	3.1	U	10	3.1	ug/L		09/01/15 09:06	09/05/15 00:06	1
Naphthalene	0.37	U	2.0	0.37	ug/L		09/01/15 09:06	09/05/15 00:06	1
Nitrobenzene	2.7	U	10	2.7	ug/L		09/01/15 09:06	09/05/15 00:06	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		09/01/15 09:06	09/05/15 00:06	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		09/01/15 09:06	09/05/15 00:06	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		09/01/15 09:06	09/05/15 00:06	1
Phenol	**3.0**	**J**	10	1.5	ug/L		09/01/15 09:06	09/05/15 00:06	1
Pyrene	0.35	U	2.0	0.35	ug/L		09/01/15 09:06	09/05/15 00:06	1
Diphenyl	2.2	U	10	2.2	ug/L		09/01/15 09:06	09/05/15 00:06	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:06	09/05/15 00:06	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 00:06	1
Atrazine	2.9	U	10	2.9	ug/L		09/01/15 09:06	09/05/15 00:06	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane	*9.9*	*J*	*ug/L*		*3.27*	*123-91-1*	*09/01/15 09:06*	*09/05/15 00:06*	*1*
Benzothiazole	*4.5*	*J N*	*ug/L*		*6.32*	*95-16-9*	*09/01/15 09:06*	*09/05/15 00:06*	*1*
Benzoic acid, 2,4-dimethyl-	*5.5*	*J N*	*ug/L*		*6.69*	*611-01-8*	*09/01/15 09:06*	*09/05/15 00:06*	*1*
Diethyltoluamide	*5.6*	*J N*	*ug/L*		*7.67*	*134-62-3*	*09/01/15 09:06*	*09/05/15 00:06*	*1*
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	*9.5*	*J N*	*ug/L*		*8.42*	*1620-98-0*	*09/01/15 09:06*	*09/05/15 00:06*	*1*
Benzenesulfonamide, N-butyl-	*7.6*	*J N*	*ug/L*		*8.51*	*3622-84-2*	*09/01/15 09:06*	*09/05/15 00:06*	*1*
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,	*20*	*J N*	*ug/L*		*8.92*	*82304-66-3*	*09/01/15 09:06*	*09/05/15 00:06*	*1*
n-Hexadecanoic acid	*8.7*	*J N*	*ug/L*		*9.00*	*57-10-3*	*09/01/15 09:06*	*09/05/15 00:06*	*1*
3,5-di-tert-Butyl-4-hydroxyphenylpropion	*8.8*	*J N*	*ug/L*		*9.12*	*20170-32-5*	*09/01/15 09:06*	*09/05/15 00:06*	*1*
2-Mercaptobenzothiazole	*7.6*	*J N*	*ug/L*		*9.21*	*149-30-4*	*09/01/15 09:06*	*09/05/15 00:06*	*1*
9-Octadecenoic acid, (E)-	*18*	*J N*	*ug/L*		*9.59*	*112-79-8*	*09/01/15 09:06*	*09/05/15 00:06*	*1*
Octadecanoic acid	*11*	*J N*	*ug/L*		*9.66*	*57-11-4*	*09/01/15 09:06*	*09/05/15 00:06*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*106*		*10 - 120*	*09/01/15 09:06*	*09/05/15 00:06*	*1*
2-Fluorobiphenyl (Surr)	*85*		*29 - 120*	*09/01/15 09:06*	*09/05/15 00:06*	*1*
2-Fluorophenol (Surr)	*47*		*10 - 120*	*09/01/15 09:06*	*09/05/15 00:06*	*1*
Nitrobenzene-d5 (Surr)	*81*		*27 - 120*	*09/01/15 09:06*	*09/05/15 00:06*	*1*
Phenol-d5 (Surr)	*32*		*10 - 120*	*09/01/15 09:06*	*09/05/15 00:06*	*1*
Terphenyl-d14 (Surr)	*106*		*13 - 120*	*09/01/15 09:06*	*09/05/15 00:06*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/09/15 06:16	09/09/15 22:53	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/09/15 06:16	09/09/15 22:53	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/09/15 06:16	09/09/15 22:53	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/09/15 06:16	09/09/15 22:53	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/09/15 06:16	09/09/15 22:53	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/09/15 06:16	09/09/15 22:53	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/09/15 06:16	09/09/15 22:53	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/09/15 06:16	09/09/15 22:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*91*		*10 - 150*	*09/09/15 06:16*	*09/09/15 22:53*	*1*

Client Sample ID: RW-3DS (155-160)-082515
Date Collected: 08/25/15 08:40
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-1
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*96*		*10 - 150*	*09/09/15 06:16*	*09/09/15 22:53*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**32.2**		5.00	3.50	mg/L			09/01/15 16:50	5
Sulfate	**464**		5.00	3.00	mg/L			09/01/15 16:50	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.082**		0.020	0.0096	mg/L		08/30/15 10:12	08/31/15 19:44	1
Antimony	**0.00051**	**J**	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:44	1
Arsenic	**0.012**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:44	1
Barium	**0.013**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:44	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:44	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/30/15 10:12	08/31/15 19:44	1
Calcium	**46.6**		1.0	0.13	mg/L		08/30/15 10:12	08/31/15 19:44	1
Chromium	**0.0035**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:44	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:44	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:44	1
Iron	**0.012**	**J**	0.025	0.010	mg/L		08/30/15 10:12	08/31/15 19:44	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/30/15 10:12	08/31/15 19:44	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/30/15 10:12	08/31/15 19:44	1
Manganese	**0.00059**	**J**	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:44	1
Nickel	**0.0056**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:44	1
Potassium	**54.8**		1.0	0.13	mg/L		08/30/15 10:12	08/31/15 19:44	1
Selenium	**0.0042**		0.0020	0.00060	mg/L		08/30/15 10:12	08/31/15 19:44	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:44	1
Sodium	**219**		50.0	6.3	mg/L		08/30/15 10:12	09/01/15 17:27	50
Thallium	**0.00070**	**J**	0.0020	0.00020	mg/L		08/30/15 10:12	08/31/15 19:44	1
Vanadium	**0.0058**	**B**	0.0020	0.00010	mg/L		08/30/15 10:12	08/31/15 19:44	1
Zinc	0.010	U	0.025	0.010	mg/L		08/30/15 10:12	08/31/15 19:44	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.061**	**J**	0.10	0.048	mg/L		08/28/15 10:18	09/03/15 11:25	5
Antimony	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:25	5
Arsenic	**0.014**		0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:25	5
Barium	**0.018**		0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:25	5
Beryllium	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:25	5
Cadmium	0.0020	U	0.0050	0.0020	mg/L		08/28/15 10:18	09/03/15 11:25	5
Calcium	**55.6**		5.0	0.63	mg/L		08/28/15 10:18	09/03/15 11:25	5
Chromium	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:25	5
Cobalt	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:25	5
Copper	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:25	5
Iron	0.050	U	0.13	0.050	mg/L		08/28/15 10:18	09/03/15 11:25	5
Lead	0.0010	U	0.010	0.0010	mg/L		08/28/15 10:18	09/03/15 11:25	5
Magnesium	0.63	U	5.0	0.63	mg/L		08/28/15 10:18	09/03/15 11:25	5
Manganese	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:25	5
Nickel	**0.0037**	**J**	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:25	5
Potassium	**56.0**		5.0	0.63	mg/L		08/28/15 10:18	09/03/15 11:25	5

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Client Sample ID: RW-3DS (155-160)-082515
Date Collected: 08/25/15 08:40
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-1
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**0.0031**	**J**	0.010	0.0030	mg/L		08/28/15 10:18	09/03/15 11:25	5
Silver	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:25	5
Sodium	**220**		5.0	0.63	mg/L		08/28/15 10:18	09/03/15 11:25	5
Thallium	**0.0012**	**J**	0.010	0.0010	mg/L		08/28/15 10:18	09/03/15 11:25	5
Vanadium	**0.0085**	**J B**	0.010	0.00050	mg/L		08/28/15 10:18	09/03/15 11:25	5
Zinc	0.050	U	0.13	0.050	mg/L		08/28/15 10:18	09/03/15 11:25	5

Method: 7470A - 7470A – Mercury (CVAA) – Aqueous Matrix

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/01/15 16:15	09/02/15 16:40	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 19:53	09/02/15 14:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/29/15 15:11	08/30/15 14:17	1
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/27/15 20:12	1
Total Alkalinity as CaCO3	**92.1**		10.0	5.0	mg/L			08/27/15 20:12	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Client Sample ID: RW-2 (452-462)-082515
Date Collected: 08/25/15 13:30
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-2
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/03/15 18:18	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/03/15 18:18	1
1,4-Dioxane	**4.7**	**J**	10	0.27	ug/L			09/03/15 18:18	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/03/15 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*124*		*70 - 130*		*09/03/15 18:18*	*1*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*		*09/03/15 18:18*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/03/15 18:18*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/03/15 18:18*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 17:21	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/04/15 17:21	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 17:21	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 17:21	1
1,1-Dichloroethane	0.24	U *	1.0	0.24	ug/L			09/04/15 17:21	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/04/15 17:21	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/04/15 17:21	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/04/15 17:21	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/04/15 17:21	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/04/15 17:21	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/04/15 17:21	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/04/15 17:21	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/04/15 17:21	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/04/15 17:21	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/04/15 17:21	1
Acetone	**16**	**J**	25	2.7	ug/L			09/04/15 17:21	1
Benzene	**0.24**	**J**	1.0	0.20	ug/L			09/04/15 17:21	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/04/15 17:21	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/04/15 17:21	1
Carbon disulfide	**1.8**		1.0	0.22	ug/L			09/04/15 17:21	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/04/15 17:21	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/04/15 17:21	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/04/15 17:21	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/04/15 17:21	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/04/15 17:21	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/04/15 17:21	1
cis-1,2-Dichloroethene	0.21	U *	1.0	0.21	ug/L			09/04/15 17:21	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/04/15 17:21	1
Cyclohexane	0.13	U F1 *	5.0	0.13	ug/L			09/04/15 17:21	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/04/15 17:21	1
Dichlorodifluoromethane	**0.19**	**J**	1.0	0.17	ug/L			09/04/15 17:21	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/04/15 17:21	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/04/15 17:21	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/04/15 17:21	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/04/15 17:21	1
Methyl tert-butyl ether	**0.30**	**J**	1.0	0.17	ug/L			09/04/15 17:21	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/04/15 17:21	1

Client Sample ID: RW-2 (452-462)-082515
Date Collected: 08/25/15 13:30
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/04/15 17:21	1
Styrene	0.28	U	1.0	0.28	ug/L			09/04/15 17:21	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/04/15 17:21	1
Toluene	**0.71**	**J**	1.0	0.17	ug/L			09/04/15 17:21	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/04/15 17:21	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/04/15 17:21	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/04/15 17:21	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/04/15 17:21	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/04/15 17:21	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/04/15 17:21	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/04/15 17:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1-Propene, 2-methyl-	*5.2*	*J N*	*ug/L*		*1.30*	*115-11-7*		*09/04/15 17:21*	*1*
Unknown	*3.1*	*J*	*ug/L*		*1.45*			*09/04/15 17:21*	*1*
Isopropyl alcohol	*62*		*ug/L*		*2.07*	*67-63-0*		*09/04/15 17:21*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/04/15 17:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*09/04/15 17:21*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*09/04/15 17:21*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/04/15 17:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*125*		*70 - 130*		*09/04/15 17:21*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 17:40	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 17:40	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 17:40	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		09/01/15 05:42	09/01/15 17:40	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		09/01/15 05:42	09/01/15 17:40	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		09/01/15 05:42	09/01/15 17:40	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		09/01/15 05:42	09/01/15 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*87*		*10 - 120*	*09/01/15 05:42*	*09/01/15 17:40*	*1*
2-Fluorobiphenyl (Surr)	*63*		*29 - 120*	*09/01/15 05:42*	*09/01/15 17:40*	*1*
Nitrobenzene-d5	*71*		*27 - 120*	*09/01/15 05:42*	*09/01/15 17:40*	*1*
Terphenyl-d14	*79*		*13 - 120*	*09/01/15 05:42*	*09/01/15 17:40*	*1*
2-Fluorophenol	*52*		*10 - 120*	*09/01/15 05:42*	*09/01/15 17:40*	*1*
Phenol-d5	*37*		*10 - 120*	*09/01/15 05:42*	*09/01/15 17:40*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		09/01/15 09:06	09/05/15 00:32	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		09/01/15 09:06	09/05/15 00:32	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		09/01/15 09:06	09/05/15 00:32	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		09/01/15 09:06	09/05/15 00:32	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		09/01/15 09:06	09/05/15 00:32	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		09/01/15 09:06	09/05/15 00:32	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		09/01/15 09:06	09/05/15 00:32	1

Client Sample ID: RW-2 (452-462)-082515
Date Collected: 08/25/15 13:30
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	**6.5**	**J**	25	5.9	ug/L		09/01/15 09:06	09/05/15 00:32	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		09/01/15 09:06	09/05/15 00:32	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		09/01/15 09:06	09/05/15 00:32	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 00:32	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		09/01/15 09:06	09/05/15 00:32	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		09/01/15 09:06	09/05/15 00:32	1
2-Methylphenol	2.3	U	10	2.3	ug/L		09/01/15 09:06	09/05/15 00:32	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		09/01/15 09:06	09/05/15 00:32	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		09/01/15 09:06	09/05/15 00:32	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		09/01/15 09:06	09/05/15 00:32	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		09/01/15 09:06	09/05/15 00:32	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		09/01/15 09:06	09/05/15 00:32	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		09/01/15 09:06	09/05/15 00:32	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		09/01/15 09:06	09/05/15 00:32	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		09/01/15 09:06	09/05/15 00:32	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		09/01/15 09:06	09/05/15 00:32	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 00:32	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		09/01/15 09:06	09/05/15 00:32	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		09/01/15 09:06	09/05/15 00:32	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		09/01/15 09:06	09/05/15 00:32	1
Acetophenone	2.3	U	10	2.3	ug/L		09/01/15 09:06	09/05/15 00:32	1
Anthracene	0.38	U	2.0	0.38	ug/L		09/01/15 09:06	09/05/15 00:32	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		09/01/15 09:06	09/05/15 00:32	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		09/01/15 09:06	09/05/15 00:32	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		09/01/15 09:06	09/05/15 00:32	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		09/01/15 09:06	09/05/15 00:32	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 00:32	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:06	09/05/15 00:32	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		09/01/15 09:06	09/05/15 00:32	1
Carbazole	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 00:32	1
Caprolactam	2.4	U	10	2.4	ug/L		09/01/15 09:06	09/05/15 00:32	1
Chrysene	0.33	U	2.0	0.33	ug/L		09/01/15 09:06	09/05/15 00:32	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		09/01/15 09:06	09/05/15 00:32	1
Dibenzofuran	2.9	U	10	2.9	ug/L		09/01/15 09:06	09/05/15 00:32	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		09/01/15 09:06	09/05/15 00:32	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		09/01/15 09:06	09/05/15 00:32	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:06	09/05/15 00:32	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		09/01/15 09:06	09/05/15 00:32	1
Fluorene	0.32	U	2.0	0.32	ug/L		09/01/15 09:06	09/05/15 00:32	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		09/01/15 09:06	09/05/15 00:32	1
Hexachloroethane	1.9	U	10	1.9	ug/L		09/01/15 09:06	09/05/15 00:32	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		09/01/15 09:06	09/05/15 00:32	1
Isophorone	3.1	U	10	3.1	ug/L		09/01/15 09:06	09/05/15 00:32	1
Naphthalene	0.37	U	2.0	0.37	ug/L		09/01/15 09:06	09/05/15 00:32	1
Nitrobenzene	2.7	U	10	2.7	ug/L		09/01/15 09:06	09/05/15 00:32	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		09/01/15 09:06	09/05/15 00:32	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		09/01/15 09:06	09/05/15 00:32	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		09/01/15 09:06	09/05/15 00:32	1
Phenol	**10**		10	1.5	ug/L		09/01/15 09:06	09/05/15 00:32	1

Client Sample ID: RW-2 (452-462)-082515

Date Collected: 08/25/15 13:30
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-2

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	0.35	U	2.0	0.35	ug/L		09/01/15 09:06	09/05/15 00:32	1
Diphenyl	2.2	U	10	2.2	ug/L		09/01/15 09:06	09/05/15 00:32	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:06	09/05/15 00:32	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 00:32	1
Atrazine	2.9	U	10	2.9	ug/L		09/01/15 09:06	09/05/15 00:32	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclohexanone, 3,3,5-trimethyl-	*5.1*	*J N*	*ug/L*		*5.40*	*873-94-9*	*09/01/15 09:06*	*09/05/15 00:32*	*1*
Unknown	*6.7*	*J*	*ug/L*		*5.85*		*09/01/15 09:06*	*09/05/15 00:32*	*1*
Benzeneacetic acid	*10*	*J N*	*ug/L*		*6.23*	*103-82-2*	*09/01/15 09:06*	*09/05/15 00:32*	*1*
Nonanoic acid	*5.5*	*J N*	*ug/L*		*6.28*	*112-05-0*	*09/01/15 09:06*	*09/05/15 00:32*	*1*
Ethanone, 1-(2-hydroxyphenyl)-	*3.6*	*J N*	*ug/L*		*7.11*	*118-93-4*	*09/01/15 09:06*	*09/05/15 00:32*	*1*
Tetradecanoic acid	*4.2*	*J N*	*ug/L*		*8.28*	*544-63-8*	*09/01/15 09:06*	*09/05/15 00:32*	*1*
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca -6,	*12*	*J N*	*ug/L*		*8.92*	*82304-66-3*	*09/01/15 09:06*	*09/05/15 00:32*	*1*
n-Hexadecanoic acid	*5.0*	*J N*	*ug/L*		*8.99*	*57-10-3*	*09/01/15 09:06*	*09/05/15 00:32*	*1*
3,5-di-tert-Butyl-4-hydroxyphenylprop ion	*18*	*J N*	*ug/L*		*9.12*	*20170-32-5*	*09/01/15 09:06*	*09/05/15 00:32*	*1*
Oleic Acid	*19*	*J N*	*ug/L*		*9.59*	*112-80-1*	*09/01/15 09:06*	*09/05/15 00:32*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*103*		*10 - 120*	*09/01/15 09:06*	*09/05/15 00:32*	*1*
2-Fluorobiphenyl (Surr)	*76*		*29 - 120*	*09/01/15 09:06*	*09/05/15 00:32*	*1*
2-Fluorophenol (Surr)	*42*		*10 - 120*	*09/01/15 09:06*	*09/05/15 00:32*	*1*
Nitrobenzene-d5 (Surr)	*72*		*27 - 120*	*09/01/15 09:06*	*09/05/15 00:32*	*1*
Phenol-d5 (Surr)	*28*		*10 - 120*	*09/01/15 09:06*	*09/05/15 00:32*	*1*
Terphenyl-d14 (Surr)	*106*		*13 - 120*	*09/01/15 09:06*	*09/05/15 00:32*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**601**	**F1**	5.00	3.50	mg/L			09/01/15 17:14	5
Sulfate	**167**	**F1**	5.00	3.00	mg/L			09/01/15 17:14	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.10**		0.020	0.0096	mg/L		08/30/15 10:12	08/31/15 19:18	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:18	1
Arsenic	**0.0054**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:18	1
Barium	**0.059**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:18	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:18	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/30/15 10:12	08/31/15 19:18	1
Calcium	**132**		50.0	6.3	mg/L		08/30/15 10:12	09/01/15 17:06	50
Chromium	**0.00058**	**J**	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:18	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:18	1
Copper	**0.0010**	**J**	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:18	1
Iron	**0.021**	**J**	0.025	0.010	mg/L		08/30/15 10:12	08/31/15 19:18	1
Lead	**0.00020**	**J**	0.0020	0.00020	mg/L		08/30/15 10:12	08/31/15 19:18	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/30/15 10:12	08/31/15 19:18	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:18	1
Nickel	**0.0083**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:18	1
Potassium	**103**		50.0	6.3	mg/L		08/30/15 10:12	09/01/15 17:06	50

Client Sample ID: RW-2 (452-462)-082515

Date Collected: 08/25/15 13:30
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-2

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**0.0036**		0.0020	0.00060	mg/L		08/30/15 10:12	08/31/15 19:18	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:18	1
Sodium	**371**		50.0	6.3	mg/L		08/30/15 10:12	09/01/15 17:06	50
Thallium	**0.00051**	**J**	0.0020	0.00020	mg/L		08/30/15 10:12	08/31/15 19:18	1
Vanadium	**0.040**	**B**	0.0020	0.00010	mg/L		08/30/15 10:12	08/31/15 19:18	1
Zinc	0.010	U	0.025	0.010	mg/L		08/30/15 10:12	08/31/15 19:18	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.14**		0.10	0.048	mg/L		08/28/15 10:18	09/03/15 10:59	5
Antimony	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 10:59	5
Arsenic	**0.0056**	**J**	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 10:59	5
Barium	**0.070**		0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 10:59	5
Beryllium	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 10:59	5
Cadmium	0.0020	U	0.0050	0.0020	mg/L		08/28/15 10:18	09/03/15 10:59	5
Calcium	**145**		5.0	0.63	mg/L		08/28/15 10:18	09/03/15 10:59	5
Chromium	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 10:59	5
Cobalt	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 10:59	5
Copper	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 10:59	5
Iron	0.050	U	0.13	0.050	mg/L		08/28/15 10:18	09/03/15 10:59	5
Lead	0.0010	U	0.010	0.0010	mg/L		08/28/15 10:18	09/03/15 10:59	5
Magnesium	0.63	U	5.0	0.63	mg/L		08/28/15 10:18	09/03/15 10:59	5
Manganese	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 10:59	5
Nickel	**0.0088**	**J**	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 10:59	5
Potassium	**129**		5.0	0.63	mg/L		08/28/15 10:18	09/03/15 10:59	5
Selenium	**0.0049**	**J**	0.010	0.0030	mg/L		08/28/15 10:18	09/03/15 10:59	5
Silver	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 10:59	5
Sodium	**382**		5.0	0.63	mg/L		08/28/15 10:18	09/03/15 10:59	5
Thallium	**0.0029**	**J**	0.010	0.0010	mg/L		08/28/15 10:18	09/03/15 10:59	5
Vanadium	**0.040**	**B**	0.010	0.00050	mg/L		08/28/15 10:18	09/03/15 10:59	5
Zinc	0.050	U	0.13	0.050	mg/L		08/28/15 10:18	09/03/15 10:59	5

Method: 7470A - 7470A – Mercury (CVAA) – Aqueous Matrix

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/01/15 16:15	09/02/15 16:33	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 19:53	09/02/15 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U F1	0.010	0.0070	mg/L		08/29/15 15:11	08/30/15 14:18	1
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/27/15 21:16	1
Total Alkalinity as CaCO3	**127**		10.0	5.0	mg/L			08/27/15 21:16	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Client Sample ID: Dup-04-082515
Date Collected: 08/25/15 12:00
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-3
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/03/15 18:47	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/03/15 18:47	1
1,4-Dioxane	**36**		10	0.27	ug/L			09/03/15 18:47	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/03/15 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*09/03/15 18:47*	*1*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*		*09/03/15 18:47*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/03/15 18:47*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/03/15 18:47*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 17:48	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/04/15 17:48	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 17:48	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 17:48	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/04/15 17:48	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/04/15 17:48	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/04/15 17:48	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/04/15 17:48	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/04/15 17:48	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/04/15 17:48	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/04/15 17:48	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/04/15 17:48	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/04/15 17:48	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/04/15 17:48	1
Acetone	**3.0**	**J**	25	2.7	ug/L			09/04/15 17:48	1
Benzene	0.20	U	1.0	0.20	ug/L			09/04/15 17:48	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/04/15 17:48	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/04/15 17:48	1
Carbon disulfide	**12**		1.0	0.22	ug/L			09/04/15 17:48	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/04/15 17:48	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/04/15 17:48	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/04/15 17:48	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/04/15 17:48	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/04/15 17:48	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/04/15 17:48	1
cis-1,2-Dichloroethene	0.21	U *	1.0	0.21	ug/L			09/04/15 17:48	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/04/15 17:48	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/04/15 17:48	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/04/15 17:48	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/04/15 17:48	1
Ethylbenzene	**0.23**	**J**	1.0	0.19	ug/L			09/04/15 17:48	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/04/15 17:48	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/04/15 17:48	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/04/15 17:48	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/04/15 17:48	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/04/15 17:48	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/04/15 17:48	1

Client Sample ID: Dup-04-082515

Date Collected: 08/25/15 12:00
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	0.28	U	1.0	0.28	ug/L			09/04/15 17:48	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/04/15 17:48	1
Toluene	**0.48**	**J**	1.0	0.17	ug/L			09/04/15 17:48	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/04/15 17:48	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/04/15 17:48	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/04/15 17:48	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/04/15 17:48	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/04/15 17:48	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/04/15 17:48	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/04/15 17:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1-Propene, 2-methyl-	*5.5*	*J N*	*ug/L*		*1.30*	*115-11-7*		*09/04/15 17:48*	*1*
Isobutyl alcohol	*47*	*J*	*ug/L*		*3.42*	*78-83-1*		*09/04/15 17:48*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/04/15 17:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/04/15 17:48*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*09/04/15 17:48*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/04/15 17:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*127*		*70 - 130*		*09/04/15 17:48*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**1.0**		1.0	0.24	ug/L			09/05/15 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/05/15 19:47*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/05/15 19:47*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*09/05/15 19:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*09/05/15 19:47*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 19:02	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 19:02	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 19:02	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		09/01/15 05:42	09/01/15 19:02	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		09/01/15 05:42	09/01/15 19:02	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		09/01/15 05:42	09/01/15 19:02	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		09/01/15 05:42	09/01/15 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*87*		*10 - 120*	*09/01/15 05:42*	*09/01/15 19:02*	*1*
2-Fluorobiphenyl (Surr)	*60*		*29 - 120*	*09/01/15 05:42*	*09/01/15 19:02*	*1*
Nitrobenzene-d5	*75*		*27 - 120*	*09/01/15 05:42*	*09/01/15 19:02*	*1*
Terphenyl-d14	*78*		*13 - 120*	*09/01/15 05:42*	*09/01/15 19:02*	*1*
2-Fluorophenol	*55*		*10 - 120*	*09/01/15 05:42*	*09/01/15 19:02*	*1*
Phenol-d5	*40*		*10 - 120*	*09/01/15 05:42*	*09/01/15 19:02*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Client Sample ID: Dup-04-082515
Date Collected: 08/25/15 12:00
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		09/01/15 09:06	09/05/15 01:48	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		09/01/15 09:06	09/05/15 01:48	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		09/01/15 09:06	09/05/15 01:48	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		09/01/15 09:06	09/05/15 01:48	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		09/01/15 09:06	09/05/15 01:48	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		09/01/15 09:06	09/05/15 01:48	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		09/01/15 09:06	09/05/15 01:48	1
2,4-Dinitrophenol	**6.8**	**J**	25	5.9	ug/L		09/01/15 09:06	09/05/15 01:48	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		09/01/15 09:06	09/05/15 01:48	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		09/01/15 09:06	09/05/15 01:48	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 01:48	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		09/01/15 09:06	09/05/15 01:48	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		09/01/15 09:06	09/05/15 01:48	1
2-Methylphenol	2.3	U	10	2.3	ug/L		09/01/15 09:06	09/05/15 01:48	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		09/01/15 09:06	09/05/15 01:48	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		09/01/15 09:06	09/05/15 01:48	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		09/01/15 09:06	09/05/15 01:48	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		09/01/15 09:06	09/05/15 01:48	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		09/01/15 09:06	09/05/15 01:48	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		09/01/15 09:06	09/05/15 01:48	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		09/01/15 09:06	09/05/15 01:48	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		09/01/15 09:06	09/05/15 01:48	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		09/01/15 09:06	09/05/15 01:48	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 01:48	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		09/01/15 09:06	09/05/15 01:48	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		09/01/15 09:06	09/05/15 01:48	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		09/01/15 09:06	09/05/15 01:48	1
Acetophenone	2.3	U	10	2.3	ug/L		09/01/15 09:06	09/05/15 01:48	1
Anthracene	0.38	U	2.0	0.38	ug/L		09/01/15 09:06	09/05/15 01:48	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		09/01/15 09:06	09/05/15 01:48	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		09/01/15 09:06	09/05/15 01:48	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		09/01/15 09:06	09/05/15 01:48	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		09/01/15 09:06	09/05/15 01:48	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 01:48	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:06	09/05/15 01:48	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		09/01/15 09:06	09/05/15 01:48	1
Carbazole	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 01:48	1
Caprolactam	2.4	U	10	2.4	ug/L		09/01/15 09:06	09/05/15 01:48	1
Chrysene	0.33	U	2.0	0.33	ug/L		09/01/15 09:06	09/05/15 01:48	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		09/01/15 09:06	09/05/15 01:48	1
Dibenzofuran	2.9	U	10	2.9	ug/L		09/01/15 09:06	09/05/15 01:48	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		09/01/15 09:06	09/05/15 01:48	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		09/01/15 09:06	09/05/15 01:48	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:06	09/05/15 01:48	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		09/01/15 09:06	09/05/15 01:48	1
Fluorene	0.32	U	2.0	0.32	ug/L		09/01/15 09:06	09/05/15 01:48	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		09/01/15 09:06	09/05/15 01:48	1
Hexachloroethane	1.9	U	10	1.9	ug/L		09/01/15 09:06	09/05/15 01:48	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		09/01/15 09:06	09/05/15 01:48	1

Client Sample ID: Dup-04-082515
Date Collected: 08/25/15 12:00
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	3.1	U	10	3.1	ug/L		09/01/15 09:06	09/05/15 01:48	1
Naphthalene	0.37	U	2.0	0.37	ug/L		09/01/15 09:06	09/05/15 01:48	1
Nitrobenzene	2.7	U	10	2.7	ug/L		09/01/15 09:06	09/05/15 01:48	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		09/01/15 09:06	09/05/15 01:48	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		09/01/15 09:06	09/05/15 01:48	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		09/01/15 09:06	09/05/15 01:48	1
Phenol	**2.7**	**J**	10	1.5	ug/L		09/01/15 09:06	09/05/15 01:48	1
Pyrene	0.35	U	2.0	0.35	ug/L		09/01/15 09:06	09/05/15 01:48	1
Diphenyl	2.2	U	10	2.2	ug/L		09/01/15 09:06	09/05/15 01:48	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:06	09/05/15 01:48	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 01:48	1
Atrazine	2.9	U	10	2.9	ug/L		09/01/15 09:06	09/05/15 01:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane	*9.6*	*J*	*ug/L*		*3.26*	*123-91-1*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
Benzoic acid, 2,5-dimethyl-	*6.1*	*J N*	*ug/L*		*6.69*	*610-72-0*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
Diethyltoluamide	*8.0*	*J N*	*ug/L*		*7.67*	*134-62-3*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	*9.5*	*J N*	*ug/L*		*8.42*	*1620-98-0*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
Benzenesulfonamide, N-butyl-	*8.2*	*J N*	*ug/L*		*8.51*	*3622-84-2*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
Benzoic acid, 3,5-bis(1,1-dimethylethyl)	*5.8*	*J N*	*ug/L*		*8.82*	*1421-49-4*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,	*22*	*J N*	*ug/L*		*8.92*	*82304-66-3*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
Tridecanoic acid	*6.3*	*J N*	*ug/L*		*9.00*	*638-53-9*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
3,5-di-tert-Butyl-4-hydroxyphenylpropion	*10*	*J N*	*ug/L*		*9.12*	*20170-32-5*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
2-Mercaptobenzothiazole	*8.0*	*J N*	*ug/L*		*9.21*	*149-30-4*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
9-Octadecenoic acid, (E)-	*19*	*J N*	*ug/L*		*9.59*	*112-79-8*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
Hexadecanoic acid, butyl ester	*11*	*J N*	*ug/L*		*9.73*	*111-06-8*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
Heptadecane, 2,6,10,15-tetramethyl-	*4.7*	*J N*	*ug/L*		*10.58*	*54833-48-6*	*09/01/15 09:06*	*09/05/15 01:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*111*		*10 - 120*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
2-Fluorobiphenyl (Surr)	*81*		*29 - 120*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
2-Fluorophenol (Surr)	*45*		*10 - 120*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
Nitrobenzene-d5 (Surr)	*78*		*27 - 120*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
Phenol-d5 (Surr)	*31*		*10 - 120*	*09/01/15 09:06*	*09/05/15 01:48*	*1*
Terphenyl-d14 (Surr)	*111*		*13 - 120*	*09/01/15 09:06*	*09/05/15 01:48*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/09/15 06:16	09/09/15 23:08	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/09/15 06:16	09/09/15 23:08	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/09/15 06:16	09/09/15 23:08	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/09/15 06:16	09/09/15 23:08	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/09/15 06:16	09/09/15 23:08	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/09/15 06:16	09/09/15 23:08	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/09/15 06:16	09/09/15 23:08	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/09/15 06:16	09/09/15 23:08	1

Client Sample ID: Dup-04-082515

Date Collected: 08/25/15 12:00
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*99*		*10 - 150*	*09/09/15 06:16*	*09/09/15 23:08*	*1*
Tetrachloro-m-xylene	*91*		*10 - 150*	*09/09/15 06:16*	*09/09/15 23:08*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**31.4**		5.00	3.50	mg/L			09/01/15 18:26	5
Sulfate	**467**		5.00	3.00	mg/L			09/01/15 18:26	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.077**		0.020	0.0096	mg/L		08/30/15 10:12	08/31/15 19:50	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:50	1
Arsenic	**0.012**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:50	1
Barium	**0.013**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:50	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:50	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/30/15 10:12	08/31/15 19:50	1
Calcium	**45.2**		1.0	0.13	mg/L		08/30/15 10:12	08/31/15 19:50	1
Chromium	**0.0032**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:50	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:50	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:50	1
Iron	**0.027**		0.025	0.010	mg/L		08/30/15 10:12	08/31/15 19:50	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/30/15 10:12	08/31/15 19:50	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/30/15 10:12	08/31/15 19:50	1
Manganese	**0.00080**	**J**	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:50	1
Nickel	**0.0054**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:50	1
Potassium	**51.7**		1.0	0.13	mg/L		08/30/15 10:12	08/31/15 19:50	1
Selenium	**0.0039**		0.0020	0.00060	mg/L		08/30/15 10:12	08/31/15 19:50	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:50	1
Sodium	**221**		50.0	6.3	mg/L		08/30/15 10:12	09/01/15 17:32	50
Thallium	**0.00024**	**J**	0.0020	0.00020	mg/L		08/30/15 10:12	08/31/15 19:50	1
Vanadium	**0.0056**	**B**	0.0020	0.00010	mg/L		08/30/15 10:12	08/31/15 19:50	1
Zinc	0.010	U	0.025	0.010	mg/L		08/30/15 10:12	08/31/15 19:50	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.055**	**J**	0.10	0.048	mg/L		08/28/15 10:18	09/03/15 11:30	5
Antimony	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:30	5
Arsenic	**0.012**		0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:30	5
Barium	**0.016**		0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:30	5
Beryllium	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:30	5
Cadmium	0.0020	U	0.0050	0.0020	mg/L		08/28/15 10:18	09/03/15 11:30	5
Calcium	**49.1**		5.0	0.63	mg/L		08/28/15 10:18	09/03/15 11:30	5
Chromium	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:30	5
Cobalt	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:30	5
Copper	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:30	5
Iron	0.050	U	0.13	0.050	mg/L		08/28/15 10:18	09/03/15 11:30	5
Lead	0.0010	U	0.010	0.0010	mg/L		08/28/15 10:18	09/03/15 11:30	5
Magnesium	0.63	U	5.0	0.63	mg/L		08/28/15 10:18	09/03/15 11:30	5
Manganese	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:30	5
Nickel	**0.0035**	**J**	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:30	5
Potassium	**52.4**		5.0	0.63	mg/L		08/28/15 10:18	09/03/15 11:30	5

Client Sample ID: Dup-04-082515
Date Collected: 08/25/15 12:00
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-3
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**0.0041**	**J**	0.010	0.0030	mg/L		08/28/15 10:18	09/03/15 11:30	5
Silver	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:30	5
Sodium	**209**		5.0	0.63	mg/L		08/28/15 10:18	09/03/15 11:30	5
Thallium	0.0010	U	0.010	0.0010	mg/L		08/28/15 10:18	09/03/15 11:30	5
Vanadium	**0.0083**	**J B**	0.010	0.00050	mg/L		08/28/15 10:18	09/03/15 11:30	5
Zinc	0.050	U	0.13	0.050	mg/L		08/28/15 10:18	09/03/15 11:30	5

Method: 7470A - 7470A – Mercury (CVAA) – Aqueous Matrix

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/01/15 16:15	09/02/15 16:48	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 19:53	09/02/15 14:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/29/15 15:11	08/30/15 14:20	1
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/27/15 20:19	1
Total Alkalinity as CaCO3	**104**		10.0	5.0	mg/L			08/27/15 20:19	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Client Sample ID: TB-14-082515
Date Collected: 08/26/15 01:00
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-4
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/03/15 14:00	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/03/15 14:00	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/03/15 14:00	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/03/15 14:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*09/03/15 14:00*	*1*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*		*09/03/15 14:00*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/03/15 14:00*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/03/15 14:00*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 15:59	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/04/15 15:59	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 15:59	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 15:59	1
1,1-Dichloroethane	0.24	U *	1.0	0.24	ug/L			09/04/15 15:59	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/04/15 15:59	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/04/15 15:59	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/04/15 15:59	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/04/15 15:59	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/04/15 15:59	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/04/15 15:59	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/04/15 15:59	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/04/15 15:59	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/04/15 15:59	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/04/15 15:59	1
Acetone	**3.0**	**J**	25	2.7	ug/L			09/04/15 15:59	1
Benzene	0.20	U	1.0	0.20	ug/L			09/04/15 15:59	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/04/15 15:59	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/04/15 15:59	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/04/15 15:59	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/04/15 15:59	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/04/15 15:59	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/04/15 15:59	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/04/15 15:59	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/04/15 15:59	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/04/15 15:59	1
cis-1,2-Dichloroethene	0.21	U *	1.0	0.21	ug/L			09/04/15 15:59	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/04/15 15:59	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/04/15 15:59	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/04/15 15:59	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/04/15 15:59	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/04/15 15:59	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/04/15 15:59	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/04/15 15:59	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/04/15 15:59	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/04/15 15:59	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/04/15 15:59	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Client Sample ID: TB-14-082515
Date Collected: 08/26/15 01:00
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/04/15 15:59	1
Styrene	0.28	U	1.0	0.28	ug/L			09/04/15 15:59	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/04/15 15:59	1
Toluene	0.17	U	1.0	0.17	ug/L			09/04/15 15:59	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/04/15 15:59	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/04/15 15:59	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/04/15 15:59	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/04/15 15:59	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/04/15 15:59	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/04/15 15:59	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/04/15 15:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/04/15 15:59*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/04/15 15:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*09/04/15 15:59*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*09/04/15 15:59*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/04/15 15:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*		*09/04/15 15:59*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Client Sample ID: RW-11D (262-267)-082615
Date Collected: 08/26/15 10:30
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-5
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/03/15 19:15	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/03/15 19:15	1
1,4-Dioxane	**26**		10	0.27	ug/L			09/03/15 19:15	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/03/15 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*126*		*70 - 130*		*09/03/15 19:15*	*1*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*		*09/03/15 19:15*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/03/15 19:15*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/03/15 19:15*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 19:10	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/04/15 19:10	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 19:10	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 19:10	1
1,1-Dichloroethane	0.24	U *	1.0	0.24	ug/L			09/04/15 19:10	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/04/15 19:10	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/04/15 19:10	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/04/15 19:10	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/04/15 19:10	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/04/15 19:10	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/04/15 19:10	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/04/15 19:10	1
2-Butanone (MEK)	**29**	**J**	50	2.6	ug/L			09/04/15 19:10	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/04/15 19:10	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/04/15 19:10	1
Acetone	**45**		25	2.7	ug/L			09/04/15 19:10	1
Benzene	**1.6**		1.0	0.20	ug/L			09/04/15 19:10	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/04/15 19:10	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/04/15 19:10	1
Carbon disulfide	**63**		1.0	0.22	ug/L			09/04/15 19:10	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/04/15 19:10	1
Chlorobenzene	**0.22**	**J**	1.0	0.18	ug/L			09/04/15 19:10	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/04/15 19:10	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/04/15 19:10	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/04/15 19:10	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/04/15 19:10	1
cis-1,2-Dichloroethene	0.21	U *	1.0	0.21	ug/L			09/04/15 19:10	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/04/15 19:10	1
Cyclohexane	0.13	U *	5.0	0.13	ug/L			09/04/15 19:10	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/04/15 19:10	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/04/15 19:10	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/04/15 19:10	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/04/15 19:10	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/04/15 19:10	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/04/15 19:10	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/04/15 19:10	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/04/15 19:10	1

Client Sample ID: RW-11D (262-267)-082615
Date Collected: 08/26/15 10:30
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/04/15 19:10	1
Styrene	0.28	U	1.0	0.28	ug/L			09/04/15 19:10	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/04/15 19:10	1
Toluene	0.17	U	1.0	0.17	ug/L			09/04/15 19:10	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/04/15 19:10	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/04/15 19:10	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/04/15 19:10	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/04/15 19:10	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/04/15 19:10	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/04/15 19:10	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/04/15 19:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
2-Butanone, 3,3-dimethyl-	*3.1*	*J N*	*ug/L*		*4.28*	*75-97-8*		*09/04/15 19:10*	*1*
Total Alkanes TIC	*None*		*ug/L*					*09/04/15 19:10*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*09/04/15 19:10*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/04/15 19:10*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/04/15 19:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*09/04/15 19:10*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 19:29	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 19:29	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 19:29	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		09/01/15 05:42	09/01/15 19:29	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		09/01/15 05:42	09/01/15 19:29	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		09/01/15 05:42	09/01/15 19:29	1
Pentachlorophenol	0.10	U *	0.30	0.10	ug/L		09/01/15 05:42	09/01/15 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*92*		*10 - 120*	*09/01/15 05:42*	*09/01/15 19:29*	*1*
2-Fluorobiphenyl (Surr)	*65*		*29 - 120*	*09/01/15 05:42*	*09/01/15 19:29*	*1*
Nitrobenzene-d5	*101*		*27 - 120*	*09/01/15 05:42*	*09/01/15 19:29*	*1*
Terphenyl-d14	*84*		*13 - 120*	*09/01/15 05:42*	*09/01/15 19:29*	*1*
2-Fluorophenol	*58*		*10 - 120*	*09/01/15 05:42*	*09/01/15 19:29*	*1*
Phenol-d5	*41*		*10 - 120*	*09/01/15 05:42*	*09/01/15 19:29*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		09/01/15 09:06	09/05/15 02:14	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		09/01/15 09:06	09/05/15 02:14	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		09/01/15 09:06	09/05/15 02:14	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		09/01/15 09:06	09/05/15 02:14	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		09/01/15 09:06	09/05/15 02:14	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		09/01/15 09:06	09/05/15 02:14	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		09/01/15 09:06	09/05/15 02:14	1
2,4-Dinitrophenol	**6.6**	**J**	25	5.9	ug/L		09/01/15 09:06	09/05/15 02:14	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		09/01/15 09:06	09/05/15 02:14	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Client Sample ID: RW-11D (262-267)-082615
Date Collected: 08/26/15 10:30
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		09/01/15 09:06	09/05/15 02:14	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 02:14	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		09/01/15 09:06	09/05/15 02:14	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		09/01/15 09:06	09/05/15 02:14	1
2-Methylphenol	2.3	U	10	2.3	ug/L		09/01/15 09:06	09/05/15 02:14	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		09/01/15 09:06	09/05/15 02:14	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		09/01/15 09:06	09/05/15 02:14	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		09/01/15 09:06	09/05/15 02:14	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		09/01/15 09:06	09/05/15 02:14	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		09/01/15 09:06	09/05/15 02:14	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		09/01/15 09:06	09/05/15 02:14	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		09/01/15 09:06	09/05/15 02:14	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		09/01/15 09:06	09/05/15 02:14	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		09/01/15 09:06	09/05/15 02:14	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 02:14	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		09/01/15 09:06	09/05/15 02:14	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		09/01/15 09:06	09/05/15 02:14	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		09/01/15 09:06	09/05/15 02:14	1
Acetophenone	2.3	U	10	2.3	ug/L		09/01/15 09:06	09/05/15 02:14	1
Anthracene	0.38	U	2.0	0.38	ug/L		09/01/15 09:06	09/05/15 02:14	1
Benzaldehyde	5.7	U *	10	5.7	ug/L		09/01/15 09:06	09/05/15 02:14	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		09/01/15 09:06	09/05/15 02:14	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		09/01/15 09:06	09/05/15 02:14	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		09/01/15 09:06	09/05/15 02:14	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 02:14	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:06	09/05/15 02:14	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		09/01/15 09:06	09/05/15 02:14	1
Carbazole	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 02:14	1
Caprolactam	2.4	U	10	2.4	ug/L		09/01/15 09:06	09/05/15 02:14	1
Chrysene	0.33	U	2.0	0.33	ug/L		09/01/15 09:06	09/05/15 02:14	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		09/01/15 09:06	09/05/15 02:14	1
Dibenzofuran	2.9	U	10	2.9	ug/L		09/01/15 09:06	09/05/15 02:14	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		09/01/15 09:06	09/05/15 02:14	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		09/01/15 09:06	09/05/15 02:14	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:06	09/05/15 02:14	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		09/01/15 09:06	09/05/15 02:14	1
Fluorene	0.32	U	2.0	0.32	ug/L		09/01/15 09:06	09/05/15 02:14	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		09/01/15 09:06	09/05/15 02:14	1
Hexachloroethane	1.9	U	10	1.9	ug/L		09/01/15 09:06	09/05/15 02:14	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		09/01/15 09:06	09/05/15 02:14	1
Isophorone	3.1	U	10	3.1	ug/L		09/01/15 09:06	09/05/15 02:14	1
Naphthalene	0.37	U	2.0	0.37	ug/L		09/01/15 09:06	09/05/15 02:14	1
Nitrobenzene	2.7	U	10	2.7	ug/L		09/01/15 09:06	09/05/15 02:14	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		09/01/15 09:06	09/05/15 02:14	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		09/01/15 09:06	09/05/15 02:14	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		09/01/15 09:06	09/05/15 02:14	1
Phenol	**2.3**	**J**	10	1.5	ug/L		09/01/15 09:06	09/05/15 02:14	1
Pyrene	0.35	U	2.0	0.35	ug/L		09/01/15 09:06	09/05/15 02:14	1
Diphenyl	2.2	U	10	2.2	ug/L		09/01/15 09:06	09/05/15 02:14	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Client Sample ID: RW-11D (262-267)-082615
Date Collected: 08/26/15 10:30
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:06	09/05/15 02:14	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/05/15 02:14	1
Atrazine	2.9	U	10	2.9	ug/L		09/01/15 09:06	09/05/15 02:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane	*9.5*	*J*	*ug/L*		*3.26*	*123-91-1*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
Benzoic Acid	*8.5*	*J N*	*ug/L*		*5.86*	*65-85-0*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
Ethanol, 1-(2-butoxyethoxy)-	*27*	*J N*	*ug/L*		*6.00*	*54446-78-5*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
Nonanoic acid	*43*	*J N*	*ug/L*		*6.30*	*112-05-0*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
Tetradecanoic acid	*7.6*	*J N*	*ug/L*		*8.28*	*544-63-8*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	*7.6*	*J N*	*ug/L*		*8.42*	*1620-98-0*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,	*78*	*J N*	*ug/L*		*8.93*	*82304-66-3*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
n-Hexadecanoic acid	*19*	*J N*	*ug/L*		*9.00*	*57-10-3*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
3,5-di-tert-Butyl-4-hydroxyphenylpropion	*39*	*J N*	*ug/L*		*9.13*	*20170-32-5*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
2-Mercaptobenzothiazole	*12*	*J N*	*ug/L*		*9.21*	*149-30-4*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
Heptadecanoic acid	*8.5*	*J N*	*ug/L*		*9.30*	*506-12-7*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
9,12-Octadecadienoic acid (Z,Z)-	*16*	*J N*	*ug/L*		*9.59*	*60-33-3*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
Octadecanoic acid	*29*	*J N*	*ug/L*		*9.66*	*57-11-4*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
17-Pentatriacontene	*7.7*	*J N*	*ug/L*		*12.34*	*6971-40-0*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
1-Heptadecene	*6.7*	*J N*	*ug/L*		*13.40*	*6765-39-5*	*09/01/15 09:06*	*09/05/15 02:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*107*		*10 - 120*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
2-Fluorobiphenyl (Surr)	*78*		*29 - 120*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
2-Fluorophenol (Surr)	*45*		*10 - 120*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
Nitrobenzene-d5 (Surr)	*75*		*27 - 120*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
Phenol-d5 (Surr)	*30*		*10 - 120*	*09/01/15 09:06*	*09/05/15 02:14*	*1*
Terphenyl-d14 (Surr)	*106*		*13 - 120*	*09/01/15 09:06*	*09/05/15 02:14*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/09/15 06:16	09/09/15 23:24	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/09/15 06:16	09/09/15 23:24	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/09/15 06:16	09/09/15 23:24	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/09/15 06:16	09/09/15 23:24	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/09/15 06:16	09/09/15 23:24	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/09/15 06:16	09/09/15 23:24	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/09/15 06:16	09/09/15 23:24	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/09/15 06:16	09/09/15 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*83*		*10 - 150*	*09/09/15 06:16*	*09/09/15 23:24*	*1*
Tetrachloro-m-xylene	*85*		*10 - 150*	*09/09/15 06:16*	*09/09/15 23:24*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**40.5**		1.00	0.70	mg/L			09/04/15 06:04	1
Sulfate	**40.6**		1.00	0.60	mg/L			09/04/15 06:04	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Client Sample ID: RW-11D (262-267)-082615
Date Collected: 08/26/15 10:30
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-5
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.73**		0.020	0.0096	mg/L		08/30/15 10:12	08/31/15 19:55	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:55	1
Arsenic	**0.0024**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:55	1
Barium	**0.54**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:55	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:55	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/30/15 10:12	08/31/15 19:55	1
Calcium	**383**		50.0	6.3	mg/L		08/30/15 10:12	09/01/15 17:37	50
Chromium	**0.040**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:55	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:55	1
Copper	**0.0032**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:55	1
Iron	**0.49**		0.025	0.010	mg/L		08/30/15 10:12	08/31/15 19:55	1
Lead	**0.00069**	**J**	0.0020	0.00020	mg/L		08/30/15 10:12	08/31/15 19:55	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/30/15 10:12	08/31/15 19:55	1
Manganese	**0.0063**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:55	1
Nickel	**0.017**		0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:55	1
Potassium	**117**		50.0	6.3	mg/L		08/30/15 10:12	09/01/15 17:37	50
Selenium	**0.0010**	**J**	0.0020	0.00060	mg/L		08/30/15 10:12	08/31/15 19:55	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:55	1
Sodium	**210**		50.0	6.3	mg/L		08/30/15 10:12	09/01/15 17:37	50
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/30/15 10:12	08/31/15 19:55	1
Vanadium	**0.0024**	**B**	0.0020	0.00010	mg/L		08/30/15 10:12	08/31/15 19:55	1
Zinc	0.010	U	0.025	0.010	mg/L		08/30/15 10:12	08/31/15 19:55	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.065**	**J**	0.10	0.048	mg/L		08/28/15 10:18	09/03/15 11:46	5
Antimony	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:46	5
Arsenic	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:46	5
Barium	**0.57**		0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:46	5
Beryllium	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:46	5
Cadmium	0.0020	U	0.0050	0.0020	mg/L		08/28/15 10:18	09/03/15 11:46	5
Calcium	**439**		5.0	0.63	mg/L		08/28/15 10:18	09/03/15 11:46	5
Chromium	**0.030**		0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:46	5
Cobalt	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:46	5
Copper	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:46	5
Iron	0.050	U	0.13	0.050	mg/L		08/28/15 10:18	09/03/15 11:46	5
Lead	0.0010	U	0.010	0.0010	mg/L		08/28/15 10:18	09/03/15 11:46	5
Magnesium	0.63	U	5.0	0.63	mg/L		08/28/15 10:18	09/03/15 11:46	5
Manganese	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:46	5
Nickel	**0.015**		0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:46	5
Potassium	**123**		5.0	0.63	mg/L		08/28/15 10:18	09/03/15 11:46	5
Selenium	0.0030	U	0.010	0.0030	mg/L		08/28/15 10:18	09/03/15 11:46	5
Silver	0.0025	U	0.010	0.0025	mg/L		08/28/15 10:18	09/03/15 11:46	5
Sodium	**209**		5.0	0.63	mg/L		08/28/15 10:18	09/03/15 11:46	5
Thallium	0.0010	U	0.010	0.0010	mg/L		08/28/15 10:18	09/03/15 11:46	5
Vanadium	**0.0013**	**J B**	0.010	0.00050	mg/L		08/28/15 10:18	09/03/15 11:46	5
Zinc	0.050	U	0.13	0.050	mg/L		08/28/15 10:18	09/03/15 11:46	5

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Client Sample ID: RW-11D (262-267)-082615
Date Collected: 08/26/15 10:30
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-5
Matrix: Water

Method: 7470A - 7470A – Mercury (CVAA) – Aqueous Matrix

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/01/15 16:15	09/02/15 16:50	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 19:53	09/02/15 14:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/29/15 15:11	08/30/15 14:21	1
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/27/15 20:30	1
Total Alkalinity as CaCO3	**1300**		10.0	5.0	mg/L			08/27/15 20:30	1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-279129/6
Matrix: Water
Analysis Batch: 279129

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 14:46	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/04/15 14:46	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 14:46	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/04/15 14:46	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/04/15 14:46	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/04/15 14:46	1
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/04/15 14:46	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/04/15 14:46	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/04/15 14:46	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/04/15 14:46	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/04/15 14:46	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/04/15 14:46	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/04/15 14:46	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/04/15 14:46	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/04/15 14:46	1
Acetone	2.7	U	25	2.7	ug/L			09/04/15 14:46	1
Benzene	0.20	U	1.0	0.20	ug/L			09/04/15 14:46	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/04/15 14:46	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/04/15 14:46	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/04/15 14:46	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/04/15 14:46	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/04/15 14:46	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/04/15 14:46	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/04/15 14:46	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/04/15 14:46	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/04/15 14:46	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/04/15 14:46	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/04/15 14:46	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			09/04/15 14:46	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/04/15 14:46	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/04/15 14:46	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/04/15 14:46	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/04/15 14:46	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/04/15 14:46	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/04/15 14:46	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/04/15 14:46	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/04/15 14:46	1
Methylene Chloride	0.22	U	5.0	0.22	ug/L			09/04/15 14:46	1
Styrene	0.28	U	1.0	0.28	ug/L			09/04/15 14:46	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/04/15 14:46	1
Toluene	0.17	U	1.0	0.17	ug/L			09/04/15 14:46	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/04/15 14:46	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/04/15 14:46	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/04/15 14:46	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/04/15 14:46	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/04/15 14:46	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/04/15 14:46	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/04/15 14:46	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					09/04/15 14:46	1
Total Alkanes TIC	None		ug/L					09/04/15 14:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130		09/04/15 14:46	1
Dibromofluoromethane (Surr)	98		70 - 130		09/04/15 14:46	1
Toluene-d8 (Surr)	97		70 - 130		09/04/15 14:46	1
1,2-Dichloroethane-d4 (Surr)	113		70 - 130		09/04/15 14:46	1

Lab Sample ID: LCS 490-279129/3
Matrix: Water
Analysis Batch: 279129

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	25.7		ug/L		129	78 - 135
Freon-113	20.0	20.4		ug/L		102	77 - 129
1,1,2,2-Tetrachloroethane	20.0	20.9		ug/L		105	69 - 131
1,1,2-Trichloroethane	20.0	19.3		ug/L		97	80 - 124
1,1-Dichloroethane	20.0	25.7	*	ug/L		129	78 - 125
1,1-Dichloroethene	20.0	20.5		ug/L		102	79 - 124
1,2,4-Trichlorobenzene	20.0	20.1		ug/L		101	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	17.3		ug/L		87	54 - 125
1,2-Dichlorobenzene	20.0	20.6		ug/L		103	80 - 121
1,2-Dichloropropane	20.0	20.5		ug/L		103	75 - 120
1,3-Dichlorobenzene	20.0	20.7		ug/L		103	80 - 122
1,4-Dichlorobenzene	20.0	19.7		ug/L		98	80 - 120
2-Butanone (MEK)	100	116		ug/L		116	62 - 133
2-Hexanone	100	114		ug/L		114	60 - 142
4-Methyl-2-pentanone (MIBK)	100	99.7		ug/L		100	60 - 137
Acetone	100	83.4		ug/L		83	54 - 145
Benzene	20.0	21.9		ug/L		110	80 - 121
Bromoform	20.0	19.0		ug/L		95	46 - 145
Bromomethane	20.0	21.8		ug/L		109	41 - 150
Carbon disulfide	20.0	20.6		ug/L		103	77 - 126
Carbon tetrachloride	20.0	26.1		ug/L		130	64 - 147
Chlorobenzene	20.0	20.4		ug/L		102	80 - 120
Chlorodibromomethane	20.0	18.7		ug/L		93	69 - 133
Chloroethane	20.0	22.0		ug/L		110	72 - 120
Chloroform	20.0	24.9		ug/L		125	73 - 129
Chloromethane	20.0	17.0		ug/L		85	12 - 150
cis-1,2-Dichloroethene	20.0	26.6	*	ug/L		133	76 - 125
cis-1,3-Dichloropropene	20.0	20.5		ug/L		103	74 - 140
Cyclohexane	20.0	29.8	*	ug/L		149	73 - 122
Dichlorobromomethane	20.0	20.0		ug/L		100	75 - 129
Dichlorodifluoromethane	20.0	22.2		ug/L		111	37 - 127
Ethylbenzene	20.0	21.7		ug/L		108	80 - 130
1,2-Dibromoethane	20.0	19.9		ug/L		99	80 - 129
Isopropylbenzene	20.0	22.5		ug/L		113	80 - 141
Methyl acetate	100	80.9		ug/L		81	64 - 150
Methyl tert-butyl ether	20.0	19.5		ug/L		97	72 - 133
Methylcyclohexane	20.0	22.3		ug/L		112	71 - 129
Methylene Chloride	20.0	20.3		ug/L		102	79 - 123
Styrene	20.0	21.9		ug/L		110	80 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 490-279129/3
Matrix: Water
Analysis Batch: 279129

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	20.0	20.6		ug/L		103	80 - 126
Toluene	20.0	20.4		ug/L		102	80 - 126
trans-1,2-Dichloroethene	20.0	19.7		ug/L		99	79 - 126
trans-1,3-Dichloropropene	20.0	20.2		ug/L		101	63 - 134
Trichloroethene	20.0	21.0		ug/L		105	80 - 123
Trichlorofluoromethane	20.0	19.3		ug/L		97	65 - 124
Vinyl chloride	20.0	22.0		ug/L		110	68 - 120
1,2-Dichloroethane	20.0	21.4		ug/L		107	77 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*113*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*

Lab Sample ID: 490-86046-2 MS
Matrix: Water
Analysis Batch: 279129

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.19	U	50.0	66.4		ug/L		133	76 - 149
Freon-113	0.15	U	50.0	50.8		ug/L		102	72 - 148
1,1,2,2-Tetrachloroethane	0.19	U	50.0	50.9		ug/L		102	56 - 143
1,1,2-Trichloroethane	0.19	U	50.0	44.8		ug/L		90	74 - 134
1,1-Dichloroethane	0.24	U *	50.0	62.0		ug/L		124	71 - 139
1,1-Dichloroethene	0.25	U	50.0	51.1		ug/L		102	70 - 142
1,2,4-Trichlorobenzene	0.20	U	50.0	50.3		ug/L		101	60 - 136
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	45.8		ug/L		92	52 - 126
1,2-Dichlorobenzene	0.19	U	50.0	49.2		ug/L		98	79 - 128
1,2-Dichloropropane	0.25	U	50.0	50.4		ug/L		101	67 - 131
1,3-Dichlorobenzene	0.18	U	50.0	50.3		ug/L		101	77 - 131
1,4-Dichlorobenzene	0.17	U	50.0	49.5		ug/L		99	78 - 126
2-Butanone (MEK)	2.6	U	250	289		ug/L		115	50 - 138
2-Hexanone	1.3	U	250	301		ug/L		120	50 - 150
4-Methyl-2-pentanone (MIBK)	0.81	U	250	276		ug/L		111	50 - 147
Acetone	16	J	250	236		ug/L		88	45 - 141
Benzene	0.24	J	50.0	59.4		ug/L		118	75 - 133
Bromoform	0.29	U	50.0	46.3		ug/L		93	42 - 147
Bromomethane	0.35	U	50.0	58.0		ug/L		116	16 - 163
Carbon disulfide	1.8		50.0	44.7		ug/L		86	48 - 152
Carbon tetrachloride	0.18	U	50.0	64.9		ug/L		130	62 - 164
Chlorobenzene	0.18	U	50.0	50.1		ug/L		100	80 - 129
Chlorodibromomethane	0.25	U	50.0	46.0		ug/L		92	66 - 140
Chloroethane	0.36	U	50.0	52.2		ug/L		104	58 - 137
Chloroform	0.23	U	50.0	61.1		ug/L		122	66 - 138
Chloromethane	0.36	U	50.0	37.9		ug/L		76	10 - 169
cis-1,2-Dichloroethene	0.21	U *	50.0	64.8		ug/L		130	68 - 138
cis-1,3-Dichloropropene	0.17	U	50.0	48.6		ug/L		97	71 - 141

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-86046-2 MS
Matrix: Water
Analysis Batch: 279129

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	0.13	U F1 *	50.0	73.2	F1	ug/L		146	58 - 144
Dichlorobromomethane	0.17	U	50.0	49.6		ug/L		99	70 - 140
Dichlorodifluoromethane	0.19	J	50.0	56.2		ug/L		112	40 - 127
Ethylbenzene	0.19	U	50.0	54.6		ug/L		109	79 - 139
1,2-Dibromoethane	0.21	U	50.0	47.6		ug/L		95	75 - 137
Isopropylbenzene	0.33	U	50.0	57.3		ug/L		115	80 - 153
Methyl acetate	0.58	U	250	193		ug/L		77	30 - 165
Methyl tert-butyl ether	0.30	J	50.0	45.9		ug/L		91	66 - 141
Methylcyclohexane	0.090	U	50.0	54.3		ug/L		109	59 - 151
Methylene Chloride	0.22	U	50.0	46.1		ug/L		92	64 - 139
Styrene	0.28	U	50.0	56.0		ug/L		112	61 - 148
Tetrachloroethene	0.14	U	50.0	49.5		ug/L		99	72 - 145
Toluene	0.71	J	50.0	49.9		ug/L		98	75 - 136
trans-1,2-Dichloroethene	0.23	U	50.0	47.3		ug/L		95	66 - 143
trans-1,3-Dichloropropene	0.17	U	50.0	50.0		ug/L		100	59 - 135
Trichloroethene	0.20	U	50.0	51.6		ug/L		103	73 - 144
Trichlorofluoromethane	0.21	U	50.0	56.1		ug/L		112	58 - 139
Vinyl chloride	0.18	U	50.0	53.6		ug/L		107	56 - 129
1,2-Dichloroethane	0.20	U	50.0	64.0		ug/L		128	64 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*114*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*130*		*70 - 130*

Lab Sample ID: 490-86046-2 MSD
Matrix: Water
Analysis Batch: 279129

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.19	U	50.0	57.8		ug/L		116	76 - 149	14	17
Freon-113	0.15	U	50.0	43.5		ug/L		87	72 - 148	15	18
1,1,2,2-Tetrachloroethane	0.19	U	50.0	49.4		ug/L		99	56 - 143	3	20
1,1,2-Trichloroethane	0.19	U	50.0	46.0		ug/L		92	74 - 134	3	15
1,1-Dichloroethane	0.24	U *	50.0	53.2		ug/L		106	71 - 139	15	17
1,1-Dichloroethene	0.25	U	50.0	44.3		ug/L		89	70 - 142	14	17
1,2,4-Trichlorobenzene	0.20	U	50.0	53.7		ug/L		107	60 - 136	7	19
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	45.7		ug/L		91	52 - 126	0	24
1,2-Dichlorobenzene	0.19	U	50.0	49.8		ug/L		100	79 - 128	1	15
1,2-Dichloropropane	0.25	U	50.0	44.5		ug/L		89	67 - 131	12	17
1,3-Dichlorobenzene	0.18	U	50.0	50.2		ug/L		100	77 - 131	0	15
1,4-Dichlorobenzene	0.17	U	50.0	47.1		ug/L		94	78 - 126	5	15
2-Butanone (MEK)	2.6	U	250	240		ug/L		96	50 - 138	18	19
2-Hexanone	1.3	U	250	301		ug/L		121	50 - 150	0	15
4-Methyl-2-pentanone (MIBK)	0.81	U	250	280		ug/L		112	50 - 147	1	17
Acetone	16	J	250	201		ug/L		74	45 - 141	16	21
Benzene	0.24	J	50.0	51.7		ug/L		103	75 - 133	14	17

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-86046-2 MSD
Matrix: Water
Analysis Batch: 279129

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	0.29	U	50.0	47.0		ug/L		94	42 - 147	2	16
Bromomethane	0.35	U	50.0	51.1		ug/L		102	16 - 163	13	50
Carbon disulfide	1.8		50.0	39.4		ug/L		75	48 - 152	13	21
Carbon tetrachloride	0.18	U	50.0	56.7		ug/L		113	62 - 164	14	19
Chlorobenzene	0.18	U	50.0	49.3		ug/L		99	80 - 129	2	14
Chlorodibromomethane	0.25	U	50.0	45.3		ug/L		91	66 - 140	1	15
Chloroethane	0.36	U	50.0	45.1		ug/L		90	58 - 137	14	20
Chloroform	0.23	U	50.0	53.7		ug/L		107	66 - 138	13	18
Chloromethane	0.36	U	50.0	36.4		ug/L		73	10 - 169	4	31
cis-1,2-Dichloroethene	0.21	U *	50.0	56.1		ug/L		112	68 - 138	14	17
cis-1,3-Dichloropropene	0.17	U	50.0	48.9		ug/L		98	71 - 141	1	15
Cyclohexane	0.13	U F1 *	50.0	62.9		ug/L		126	58 - 144	15	16
Dichlorobromomethane	0.17	U	50.0	43.9		ug/L		88	70 - 140	12	18
Dichlorodifluoromethane	0.19	J	50.0	49.6		ug/L		99	40 - 127	12	18
Ethylbenzene	0.19	U	50.0	54.1		ug/L		108	79 - 139	1	15
1,2-Dibromoethane	0.21	U	50.0	48.5		ug/L		97	75 - 137	2	15
Isopropylbenzene	0.33	U	50.0	57.4		ug/L		115	80 - 153	0	16
Methyl acetate	0.58	U	250	161		ug/L		64	30 - 165	18	31
Methyl tert-butyl ether	0.30	J	50.0	39.7		ug/L		79	66 - 141	15	16
Methylcyclohexane	0.090	U	50.0	48.6		ug/L		97	59 - 151	11	19
Methylene Chloride	0.22	U	50.0	39.5		ug/L		79	64 - 139	16	17
Styrene	0.28	U	50.0	55.9		ug/L		112	61 - 148	0	24
Tetrachloroethene	0.14	U	50.0	48.5		ug/L		97	72 - 145	2	16
Toluene	0.71	J	50.0	49.8		ug/L		98	75 - 136	0	15
trans-1,2-Dichloroethene	0.23	U	50.0	41.0		ug/L		82	66 - 143	14	16
trans-1,3-Dichloropropene	0.17	U	50.0	50.1		ug/L		100	59 - 135	0	14
Trichloroethene	0.20	U	50.0	45.3		ug/L		91	73 - 144	13	17
Trichlorofluoromethane	0.21	U	50.0	46.7		ug/L		93	58 - 139	18	18
Vinyl chloride	0.18	U	50.0	48.1		ug/L		96	56 - 129	11	17
1,2-Dichloroethane	0.20	U	50.0	56.0		ug/L		112	64 - 136	13	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*

Lab Sample ID: MB 490-279465/6
Matrix: Water
Analysis Batch: 279465

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/05/15 16:48	1
Freon-113	0.15	U	1.0	0.15	ug/L			09/05/15 16:48	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/05/15 16:48	1
1,1,2-Trichloroethane	0.19	U	1.0	0.19	ug/L			09/05/15 16:48	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/05/15 16:48	1
1,1-Dichloroethene	0.25	U	1.0	0.25	ug/L			09/05/15 16:48	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 490-279465/6
Matrix: Water
Analysis Batch: 279465

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.20	U	1.0	0.20	ug/L			09/05/15 16:48	1
1,2-Dibromo-3-Chloropropane	0.94	U	10	0.94	ug/L			09/05/15 16:48	1
1,2-Dichlorobenzene	0.19	U	1.0	0.19	ug/L			09/05/15 16:48	1
1,2-Dichloropropane	0.25	U	1.0	0.25	ug/L			09/05/15 16:48	1
1,3-Dichlorobenzene	0.18	U	1.0	0.18	ug/L			09/05/15 16:48	1
1,4-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			09/05/15 16:48	1
2-Butanone (MEK)	2.6	U	50	2.6	ug/L			09/05/15 16:48	1
2-Hexanone	1.3	U	10	1.3	ug/L			09/05/15 16:48	1
4-Methyl-2-pentanone (MIBK)	0.81	U	10	0.81	ug/L			09/05/15 16:48	1
Acetone	2.7	U	25	2.7	ug/L			09/05/15 16:48	1
Benzene	0.20	U	1.0	0.20	ug/L			09/05/15 16:48	1
Bromoform	0.29	U	1.0	0.29	ug/L			09/05/15 16:48	1
Bromomethane	0.35	U	1.0	0.35	ug/L			09/05/15 16:48	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/05/15 16:48	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			09/05/15 16:48	1
Chlorobenzene	0.18	U	1.0	0.18	ug/L			09/05/15 16:48	1
Chlorodibromomethane	0.25	U	1.0	0.25	ug/L			09/05/15 16:48	1
Chloroethane	0.36	U	1.0	0.36	ug/L			09/05/15 16:48	1
Chloroform	0.23	U	1.0	0.23	ug/L			09/05/15 16:48	1
Chloromethane	0.36	U	1.0	0.36	ug/L			09/05/15 16:48	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			09/05/15 16:48	1
cis-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/05/15 16:48	1
Cyclohexane	0.13	U	5.0	0.13	ug/L			09/05/15 16:48	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			09/05/15 16:48	1
Dichlorodifluoromethane	0.17	U	1.0	0.17	ug/L			09/05/15 16:48	1
Ethylbenzene	0.19	U	1.0	0.19	ug/L			09/05/15 16:48	1
1,2-Dibromoethane	0.21	U	1.0	0.21	ug/L			09/05/15 16:48	1
Isopropylbenzene	0.33	U	1.0	0.33	ug/L			09/05/15 16:48	1
Methyl acetate	0.58	U	10	0.58	ug/L			09/05/15 16:48	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/L			09/05/15 16:48	1
Methylcyclohexane	0.090	U	5.0	0.090	ug/L			09/05/15 16:48	1
Methylene Chloride	0.439	J	5.0	0.22	ug/L			09/05/15 16:48	1
Styrene	0.28	U	1.0	0.28	ug/L			09/05/15 16:48	1
Tetrachloroethene	0.14	U	6.0	0.14	ug/L			09/05/15 16:48	1
Toluene	0.17	U	1.0	0.17	ug/L			09/05/15 16:48	1
trans-1,2-Dichloroethene	0.23	U	1.0	0.23	ug/L			09/05/15 16:48	1
trans-1,3-Dichloropropene	0.17	U	1.0	0.17	ug/L			09/05/15 16:48	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			09/05/15 16:48	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			09/05/15 16:48	1
Vinyl chloride	0.18	U	1.0	0.18	ug/L			09/05/15 16:48	1
Xylenes, Total	0.58	U	3.0	0.58	ug/L			09/05/15 16:48	1
1,2-Dichloroethane	0.20	U	1.0	0.20	ug/L			09/05/15 16:48	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/05/15 16:48*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 490-279465/6
Matrix: Water
Analysis Batch: 279465

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*09/05/15 16:48*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*09/05/15 16:48*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/05/15 16:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*		*09/05/15 16:48*	*1*

Lab Sample ID: LCS 490-279465/3
Matrix: Water
Analysis Batch: 279465

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	20.6		ug/L		103	78 - 135
Freon-113	20.0	25.4		ug/L		127	77 - 129
1,1,2,2-Tetrachloroethane	20.0	21.6		ug/L		108	69 - 131
1,1,2-Trichloroethane	20.0	20.5		ug/L		102	80 - 124
1,1-Dichloroethane	20.0	23.2		ug/L		116	78 - 125
1,1-Dichloroethene	20.0	22.9		ug/L		114	79 - 124
1,2,4-Trichlorobenzene	20.0	16.3		ug/L		81	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	19.6		ug/L		98	54 - 125
1,2-Dichlorobenzene	20.0	19.4		ug/L		97	80 - 121
1,2-Dichloropropane	20.0	20.4		ug/L		102	75 - 120
1,3-Dichlorobenzene	20.0	19.3		ug/L		96	80 - 122
1,4-Dichlorobenzene	20.0	19.4		ug/L		97	80 - 120
2-Butanone (MEK)	100	99.8		ug/L		100	62 - 133
2-Hexanone	100	88.8		ug/L		89	60 - 142
4-Methyl-2-pentanone (MIBK)	100	89.3		ug/L		89	60 - 137
Acetone	100	104		ug/L		104	54 - 145
Benzene	20.0	21.7		ug/L		109	80 - 121
Bromoform	20.0	21.6		ug/L		108	46 - 145
Bromomethane	20.0	13.1		ug/L		65	41 - 150
Carbon disulfide	20.0	23.8		ug/L		119	77 - 126
Carbon tetrachloride	20.0	23.0		ug/L		115	64 - 147
Chlorobenzene	20.0	21.2		ug/L		106	80 - 120
Chlorodibromomethane	20.0	20.8		ug/L		104	69 - 133
Chloroethane	20.0	21.0		ug/L		105	72 - 120
Chloroform	20.0	20.2		ug/L		101	73 - 129
Chloromethane	20.0	14.5		ug/L		72	12 - 150
cis-1,2-Dichloroethene	20.0	21.1		ug/L		105	76 - 125
cis-1,3-Dichloropropene	20.0	19.8		ug/L		99	74 - 140
Cyclohexane	20.0	24.3		ug/L		122	73 - 122
Dichlorobromomethane	20.0	19.8		ug/L		99	75 - 129
Dichlorodifluoromethane	20.0	17.9		ug/L		90	37 - 127
Ethylbenzene	20.0	20.6		ug/L		103	80 - 130
1,2-Dibromoethane	20.0	19.6		ug/L		98	80 - 129
Isopropylbenzene	20.0	19.4		ug/L		97	80 - 141
Methyl acetate	100	99.3		ug/L		99	64 - 150
Methyl tert-butyl ether	20.0	17.2		ug/L		86	72 - 133
Methylcyclohexane	20.0	19.2		ug/L		96	71 - 129
Methylene Chloride	20.0	19.3		ug/L		96	79 - 123

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 490-279465/3
Matrix: Water
Analysis Batch: 279465

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Styrene			20.0	20.2		ug/L		101	80 - 127		
Tetrachloroethene			20.0	22.5		ug/L		113	80 - 126		
Toluene			20.0	21.0		ug/L		105	80 - 126		
trans-1,2-Dichloroethene			20.0	20.8		ug/L		104	79 - 126		
trans-1,3-Dichloropropene			20.0	21.0	E	ug/L		105	63 - 134		
Trichloroethene			20.0	23.0		ug/L		115	80 - 123		
Trichlorofluoromethane			20.0	19.2		ug/L		96	65 - 124		
Vinyl chloride			20.0	20.7		ug/L		103	68 - 120		
1,2-Dichloroethane			20.0	18.3		ug/L		91	77 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*

Lab Sample ID: LCSD 490-279465/4
Matrix: Water
Analysis Batch: 279465

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			20.0	20.3		ug/L		101	78 - 135	2	17
Freon-113			20.0	25.5		ug/L		127	77 - 129	0	18
1,1,2,2-Tetrachloroethane			20.0	23.0		ug/L		115	69 - 131	6	20
1,1,2-Trichloroethane			20.0	20.9		ug/L		104	80 - 124	2	15
1,1-Dichloroethane			20.0	22.3		ug/L		111	78 - 125	4	17
1,1-Dichloroethene			20.0	23.2		ug/L		116	79 - 124	1	17
1,2,4-Trichlorobenzene			20.0	16.5		ug/L		83	63 - 133	2	19
1,2-Dibromo-3-Chloropropane			20.0	19.3		ug/L		97	54 - 125	1	24
1,2-Dichlorobenzene			20.0	19.8		ug/L		99	80 - 121	2	15
1,2-Dichloropropane			20.0	20.2		ug/L		101	75 - 120	1	17
1,3-Dichlorobenzene			20.0	19.5		ug/L		97	80 - 122	1	15
1,4-Dichlorobenzene			20.0	19.5		ug/L		97	80 - 120	0	15
2-Butanone (MEK)			100	95.9		ug/L		96	62 - 133	4	19
2-Hexanone			100	92.2		ug/L		92	60 - 142	4	15
4-Methyl-2-pentanone (MIBK)			100	95.4		ug/L		95	60 - 137	7	17
Acetone			100	83.9		ug/L		84	54 - 145	21	21
Benzene			20.0	21.7		ug/L		109	80 - 121	0	17
Bromoform			20.0	22.7		ug/L		114	46 - 145	5	16
Bromomethane			20.0	14.1		ug/L		70	41 - 150	7	50
Carbon disulfide			20.0	23.6		ug/L		118	77 - 126	1	21
Carbon tetrachloride			20.0	21.8		ug/L		109	64 - 147	5	19
Chlorobenzene			20.0	21.9		ug/L		110	80 - 120	3	14
Chlorodibromomethane			20.0	21.3		ug/L		106	69 - 133	2	15
Chloroethane			20.0	19.8		ug/L		99	72 - 120	6	20
Chloroform			20.0	19.5		ug/L		98	73 - 129	3	18
Chloromethane			20.0	11.8		ug/L		59	12 - 150	21	31
cis-1,2-Dichloroethene			20.0	20.3		ug/L		101	76 - 125	4	17

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 490-279465/4
Matrix: Water
Analysis Batch: 279465

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene			20.0	20.4		ug/L		102	74 - 140	3	15
Cyclohexane			20.0	23.4		ug/L		117	73 - 122	4	16
Dichlorobromomethane			20.0	19.8		ug/L		99	75 - 129	0	18
Dichlorodifluoromethane			20.0	17.1		ug/L		85	37 - 127	5	18
Ethylbenzene			20.0	21.0		ug/L		105	80 - 130	2	15
1,2-Dibromoethane			20.0	20.1		ug/L		100	80 - 129	2	15
Isopropylbenzene			20.0	20.1		ug/L		100	80 - 141	4	16
Methyl acetate			100	99.5		ug/L		99	64 - 150	0	31
Methyl tert-butyl ether			20.0	17.6		ug/L		88	72 - 133	2	16
Methylcyclohexane			20.0	19.3		ug/L		96	71 - 129	0	19
Methylene Chloride			20.0	19.2		ug/L		96	79 - 123	0	17
Styrene			20.0	21.1		ug/L		105	80 - 127	4	24
Tetrachloroethene			20.0	22.6		ug/L		113	80 - 126	0	16
Toluene			20.0	21.1		ug/L		106	80 - 126	1	15
trans-1,2-Dichloroethene			20.0	19.8		ug/L		99	79 - 126	5	16
trans-1,3-Dichloropropene			20.0	21.2	E	ug/L		106	63 - 134	1	14
Trichloroethene			20.0	22.6		ug/L		113	80 - 123	2	17
Trichlorofluoromethane			20.0	21.1		ug/L		106	65 - 124	10	18
Vinyl chloride			20.0	20.3		ug/L		102	68 - 120	2	17
1,2-Dichloroethane			20.0	18.0		ug/L		90	77 - 121	2	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*

Lab Sample ID: 490-86177-C-3 MS
Matrix: Water
Analysis Batch: 279465

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.19	U	50.0	51.5		ug/L		103	76 - 149
Freon-113	0.15	U	50.0	60.2		ug/L		120	72 - 148
1,1,2,2-Tetrachloroethane	0.19	U	50.0	48.2		ug/L		96	56 - 143
1,1,2-Trichloroethane	0.19	U	50.0	46.7		ug/L		93	74 - 134
1,1-Dichloroethane	0.24	U	50.0	52.5		ug/L		105	71 - 139
1,1-Dichloroethene	0.25	U	50.0	55.7		ug/L		111	70 - 142
1,2,4-Trichlorobenzene	0.20	U	50.0	36.7		ug/L		73	60 - 136
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	55.3	E	ug/L		111	52 - 126
1,2-Dichlorobenzene	0.19	U	50.0	42.7		ug/L		85	79 - 128
1,2-Dichloropropane	0.25	U	50.0	46.6		ug/L		93	67 - 131
1,3-Dichlorobenzene	0.18	U	50.0	41.7		ug/L		83	77 - 131
1,4-Dichlorobenzene	0.17	U	50.0	42.9		ug/L		86	78 - 126
2-Butanone (MEK)	2.6	U	250	237		ug/L		95	50 - 138
2-Hexanone	1.3	U	250	221		ug/L		88	50 - 150
4-Methyl-2-pentanone (MIBK)	0.81	U	250	216		ug/L		86	50 - 147
Acetone	2.7	U	250	202		ug/L		81	45 - 141

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-86177-C-3 MS
Matrix: Water
Analysis Batch: 279465

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.20	U	50.0	48.4		ug/L		97	75 - 133
Bromoform	0.29	U	50.0	63.5	E	ug/L		127	42 - 147
Bromomethane	0.35	U	50.0	37.4		ug/L		75	16 - 163
Carbon disulfide	0.22	U	50.0	52.5		ug/L		105	48 - 152
Carbon tetrachloride	0.18	U	50.0	59.6		ug/L		119	62 - 164
Chlorobenzene	0.18	U	50.0	48.7		ug/L		97	80 - 129
Chlorodibromomethane	0.25	U	50.0	58.6	E	ug/L		117	66 - 140
Chloroethane	0.36	U	50.0	55.3		ug/L		111	58 - 137
Chloroform	0.23	U	50.0	47.4		ug/L		95	66 - 138
Chloromethane	0.36	U	50.0	39.3		ug/L		79	10 - 169
cis-1,2-Dichloroethene	0.21	U	50.0	49.1		ug/L		98	68 - 138
cis-1,3-Dichloropropene	0.17	U	50.0	50.2		ug/L		100	71 - 141
Cyclohexane	0.13	U	50.0	53.3		ug/L		107	58 - 144
Dichlorobromomethane	0.17	U	50.0	52.9		ug/L		106	70 - 140
Dichlorodifluoromethane	0.17	U F1	50.0	68.9	F1	ug/L		138	40 - 127
Ethylbenzene	0.19	U	50.0	45.3		ug/L		91	79 - 139
1,2-Dibromoethane	0.21	U	50.0	47.1		ug/L		94	75 - 137
Isopropylbenzene	0.33	U	50.0	45.0		ug/L		90	80 - 153
Methyl acetate	0.58	U	250	215		ug/L		86	30 - 165
Methyl tert-butyl ether	0.17	U	50.0	37.3		ug/L		75	66 - 141
Methylcyclohexane	0.090	U	50.0	45.2		ug/L		90	59 - 151
Methylene Chloride	0.22	U	50.0	42.4		ug/L		85	64 - 139
Styrene	0.28	U	50.0	47.6		ug/L		95	61 - 148
Tetrachloroethene	0.14	U	50.0	51.4		ug/L		103	72 - 145
Toluene	0.17	U	50.0	45.8		ug/L		92	75 - 136
trans-1,2-Dichloroethene	0.23	U	50.0	47.3		ug/L		95	66 - 143
trans-1,3-Dichloropropene	0.17	U	50.0	54.5	E	ug/L		109	59 - 135
Trichloroethene	0.20	U	50.0	54.2		ug/L		108	73 - 144
Trichlorofluoromethane	0.21	U	50.0	60.3		ug/L		121	58 - 139
Vinyl chloride	0.18	U	50.0	58.1		ug/L		116	56 - 129
1,2-Dichloroethane	0.20	U	50.0	40.8		ug/L		82	64 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*

Lab Sample ID: 490-86177-D-3 MSD
Matrix: Water
Analysis Batch: 279465

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.19	U	50.0	52.1		ug/L		104	76 - 149	1	17
Freon-113	0.15	U	50.0	60.2		ug/L		120	72 - 148	0	18
1,1,2,2-Tetrachloroethane	0.19	U	50.0	49.5		ug/L		99	56 - 143	3	20
1,1,2-Trichloroethane	0.19	U	50.0	48.9		ug/L		98	74 - 134	5	15
1,1-Dichloroethane	0.24	U	50.0	53.5		ug/L		107	71 - 139	2	17

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-86177-D-3 MSD
Matrix: Water
Analysis Batch: 279465

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	0.25	U	50.0	57.2		ug/L		114	70 - 142	3	17
1,2,4-Trichlorobenzene	0.20	U	50.0	39.5		ug/L		79	60 - 136	7	19
1,2-Dibromo-3-Chloropropane	0.94	U	50.0	56.2	E	ug/L		112	52 - 126	2	24
1,2-Dichlorobenzene	0.19	U	50.0	43.4		ug/L		87	79 - 128	2	15
1,2-Dichloropropane	0.25	U	50.0	45.2		ug/L		90	67 - 131	3	17
1,3-Dichlorobenzene	0.18	U	50.0	42.7		ug/L		85	77 - 131	2	15
1,4-Dichlorobenzene	0.17	U	50.0	43.0		ug/L		86	78 - 126	0	15
2-Butanone (MEK)	2.6	U	250	246		ug/L		98	50 - 138	4	19
2-Hexanone	1.3	U	250	231		ug/L		92	50 - 150	5	15
4-Methyl-2-pentanone (MIBK)	0.81	U	250	231		ug/L		92	50 - 147	7	17
Acetone	2.7	U	250	215		ug/L		86	45 - 141	6	21
Benzene	0.20	U	50.0	48.6		ug/L		97	75 - 133	1	17
Bromoform	0.29	U	50.0	66.7	E	ug/L		133	42 - 147	5	16
Bromomethane	0.35	U	50.0	52.0	E	ug/L		104	16 - 163	33	50
Carbon disulfide	0.22	U	50.0	53.2		ug/L		106	48 - 152	1	21
Carbon tetrachloride	0.18	U	50.0	60.1		ug/L		120	62 - 164	1	19
Chlorobenzene	0.18	U	50.0	50.1		ug/L		100	80 - 129	3	14
Chlorodibromomethane	0.25	U	50.0	61.2	E	ug/L		122	66 - 140	4	15
Chloroethane	0.36	U	50.0	58.4		ug/L		117	58 - 137	5	20
Chloroform	0.23	U	50.0	47.7		ug/L		95	66 - 138	1	18
Chloromethane	0.36	U	50.0	45.4		ug/L		91	10 - 169	14	31
cis-1,2-Dichloroethene	0.21	U	50.0	50.0		ug/L		100	68 - 138	2	17
cis-1,3-Dichloropropene	0.17	U	50.0	52.4		ug/L		105	71 - 141	4	15
Cyclohexane	0.13	U	50.0	54.8		ug/L		110	58 - 144	3	16
Dichlorobromomethane	0.17	U	50.0	52.6		ug/L		105	70 - 140	0	18
Dichlorodifluoromethane	0.17	U F1	50.0	68.5	F1	ug/L		137	40 - 127	1	18
Ethylbenzene	0.19	U	50.0	47.1		ug/L		94	79 - 139	4	15
1,2-Dibromoethane	0.21	U	50.0	50.1		ug/L		100	75 - 137	6	15
Isopropylbenzene	0.33	U	50.0	46.8		ug/L		94	80 - 153	4	16
Methyl acetate	0.58	U	250	222		ug/L		89	30 - 165	3	31
Methyl tert-butyl ether	0.17	U	50.0	38.2		ug/L		76	66 - 141	2	16
Methylcyclohexane	0.090	U	50.0	45.8		ug/L		92	59 - 151	1	19
Methylene Chloride	0.22	U	50.0	43.3		ug/L		87	64 - 139	2	17
Styrene	0.28	U	50.0	48.9		ug/L		98	61 - 148	3	24
Tetrachloroethene	0.14	U	50.0	53.9		ug/L		108	72 - 145	5	16
Toluene	0.17	U	50.0	48.2		ug/L		96	75 - 136	5	15
trans-1,2-Dichloroethene	0.23	U	50.0	48.9		ug/L		98	66 - 143	3	16
trans-1,3-Dichloropropene	0.17	U	50.0	58.9	E	ug/L		118	59 - 135	8	14
Trichloroethene	0.20	U	50.0	54.6		ug/L		109	73 - 144	1	17
Trichlorofluoromethane	0.21	U	50.0	59.7		ug/L		119	58 - 139	1	18
Vinyl chloride	0.18	U	50.0	60.9		ug/L		122	56 - 129	5	17
1,2-Dichloroethane	0.20	U	50.0	41.3		ug/L		83	64 - 136	1	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
Dibromofluoromethane (Surr)	*106*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-278757/7
Matrix: Water
Analysis Batch: 278757

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.010	U	0.030	0.010	ug/L			09/03/15 13:02	1
1,2-Dibromo-3-Chloropropane	0.010	U	0.020	0.010	ug/L			09/03/15 13:02	1
1,4-Dioxane	0.27	U	10	0.27	ug/L			09/03/15 13:02	1
Ethylene Dibromide	0.010	U	0.030	0.010	ug/L			09/03/15 13:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*09/03/15 13:02*	*1*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*		*09/03/15 13:02*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*09/03/15 13:02*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/03/15 13:02*	*1*

Lab Sample ID: LCS 490-278757/3
Matrix: Water
Analysis Batch: 278757

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.500	0.478		ug/L		96	70 - 131		
1,2-Dibromo-3-Chloropropane			0.500	0.499		ug/L		100	40 - 160		
1,4-Dioxane			10.0	14.0		ug/L		140	40 - 160		
Ethylene Dibromide			0.500	0.478		ug/L		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 490-278757/4
Matrix: Water
Analysis Batch: 278757

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.500	0.502		ug/L		100	70 - 131	5	19
1,2-Dibromo-3-Chloropropane			0.500	0.498		ug/L		100	40 - 160	0	20
1,4-Dioxane			10.0	13.7		ug/L		137	40 - 160	2	20
Ethylene Dibromide			0.500	0.495		ug/L		99	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-86046-2 MS
Matrix: Water
Analysis Batch: 278757

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.010	U	0.500	0.542		ug/L		108	53 - 144
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.500		ug/L		100	40 - 160
1,4-Dioxane	4.7	J	10.0	12.7		ug/L		79	40 - 160
Ethylene Dibromide	0.010	U	0.500	0.498		ug/L		100	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: 490-86046-2 MSD
Matrix: Water
Analysis Batch: 278757

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.010	U	0.500	0.518		ug/L		104	53 - 144	5	19
1,2-Dibromo-3-Chloropropane	0.010	U	0.500	0.465		ug/L		93	40 - 160	7	20
1,4-Dioxane	4.7	J	10.0	14.1		ug/L		93	40 - 160	11	20
Ethylene Dibromide	0.010	U	0.500	0.483		ug/L		97	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-277997/1-A
Matrix: Water
Analysis Batch: 279300

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277997

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32	U	2.0	0.32	ug/L		09/01/15 09:06	09/04/15 18:55	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		09/01/15 09:06	09/04/15 18:55	1
2,3,4,6-Tetrachlorophenol	6.9	U	10	6.9	ug/L		09/01/15 09:06	09/04/15 18:55	1
2,4,5-Trichlorophenol	7.1	U	10	7.1	ug/L		09/01/15 09:06	09/04/15 18:55	1
2,4,6-Trichlorophenol	6.8	U	10	6.8	ug/L		09/01/15 09:06	09/04/15 18:55	1
2,4-Dichlorophenol	5.6	U	10	5.6	ug/L		09/01/15 09:06	09/04/15 18:55	1
2,4-Dimethylphenol	4.2	U	10	4.2	ug/L		09/01/15 09:06	09/04/15 18:55	1
2,4-Dinitrophenol	5.9	U	25	5.9	ug/L		09/01/15 09:06	09/04/15 18:55	1
2,4-Dinitrotoluene	3.2	U	10	3.2	ug/L		09/01/15 09:06	09/04/15 18:55	1
2,6-Dinitrotoluene	2.3	U	10	2.3	ug/L		09/01/15 09:06	09/04/15 18:55	1
2-Chloronaphthalene	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/04/15 18:55	1
2-Chlorophenol	4.8	U	10	4.8	ug/L		09/01/15 09:06	09/04/15 18:55	1
2-Methylnaphthalene	0.40	U	2.0	0.40	ug/L		09/01/15 09:06	09/04/15 18:55	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-277997/1-A
Matrix: Water
Analysis Batch: 279300

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277997

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	2.3	U	10	2.3	ug/L		09/01/15 09:06	09/04/15 18:55	1
2-Nitroaniline	3.7	U	25	3.7	ug/L		09/01/15 09:06	09/04/15 18:55	1
2-Nitrophenol	5.3	U	10	5.3	ug/L		09/01/15 09:06	09/04/15 18:55	1
3,3'-Dichlorobenzidine	3.3	U	10	3.3	ug/L		09/01/15 09:06	09/04/15 18:55	1
3 & 4 Methylphenol	2.2	U	10	2.2	ug/L		09/01/15 09:06	09/04/15 18:55	1
3-Nitroaniline	2.7	U	25	2.7	ug/L		09/01/15 09:06	09/04/15 18:55	1
4,6-Dinitro-2-methylphenol	9.3	U	25	9.3	ug/L		09/01/15 09:06	09/04/15 18:55	1
4-Bromophenyl phenyl ether	2.7	U	10	2.7	ug/L		09/01/15 09:06	09/04/15 18:55	1
4-Chloro-3-methylphenol	4.5	U	10	4.5	ug/L		09/01/15 09:06	09/04/15 18:55	1
4-Chloroaniline	4.2	U	10	4.2	ug/L		09/01/15 09:06	09/04/15 18:55	1
4-Chlorophenyl phenyl ether	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/04/15 18:55	1
4-Nitroaniline	3.1	U	25	3.1	ug/L		09/01/15 09:06	09/04/15 18:55	1
4-Nitrophenol	5.4	U	25	5.4	ug/L		09/01/15 09:06	09/04/15 18:55	1
Acenaphthylene	0.35	U	2.0	0.35	ug/L		09/01/15 09:06	09/04/15 18:55	1
Acetophenone	2.3	U	10	2.3	ug/L		09/01/15 09:06	09/04/15 18:55	1
Anthracene	0.38	U	2.0	0.38	ug/L		09/01/15 09:06	09/04/15 18:55	1
Benzaldehyde	5.7	U	10	5.7	ug/L		09/01/15 09:06	09/04/15 18:55	1
Benzo[g,h,i]perylene	0.62	U	2.0	0.62	ug/L		09/01/15 09:06	09/04/15 18:55	1
Benzo[k]fluoranthene	0.37	U	2.0	0.37	ug/L		09/01/15 09:06	09/04/15 18:55	1
Bis(2-chloroethoxy)methane	3.1	U	10	3.1	ug/L		09/01/15 09:06	09/04/15 18:55	1
Bis(2-chloroethyl)ether	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/04/15 18:55	1
Butyl benzyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:06	09/04/15 18:55	1
Bis(2-ethylhexyl) phthalate	6.0	U	10	6.0	ug/L		09/01/15 09:06	09/04/15 18:55	1
Carbazole	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/04/15 18:55	1
Caprolactam	2.4	U	10	2.4	ug/L		09/01/15 09:06	09/04/15 18:55	1
Chrysene	0.33	U	2.0	0.33	ug/L		09/01/15 09:06	09/04/15 18:55	1
Dibenz(a,h)anthracene	0.45	U	2.0	0.45	ug/L		09/01/15 09:06	09/04/15 18:55	1
Dibenzofuran	2.9	U	10	2.9	ug/L		09/01/15 09:06	09/04/15 18:55	1
Diethyl phthalate	3.0	U	10	3.0	ug/L		09/01/15 09:06	09/04/15 18:55	1
Dimethyl phthalate	3.1	U	10	3.1	ug/L		09/01/15 09:06	09/04/15 18:55	1
Di-n-butyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:06	09/04/15 18:55	1
Fluoranthene	0.32	U	2.0	0.32	ug/L		09/01/15 09:06	09/04/15 18:55	1
Fluorene	0.32	U	2.0	0.32	ug/L		09/01/15 09:06	09/04/15 18:55	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		09/01/15 09:06	09/04/15 18:55	1
Hexachloroethane	1.9	U	10	1.9	ug/L		09/01/15 09:06	09/04/15 18:55	1
Indeno[1,2,3-cd]pyrene	0.41	U	2.0	0.41	ug/L		09/01/15 09:06	09/04/15 18:55	1
Isophorone	3.1	U	10	3.1	ug/L		09/01/15 09:06	09/04/15 18:55	1
Naphthalene	0.37	U	2.0	0.37	ug/L		09/01/15 09:06	09/04/15 18:55	1
Nitrobenzene	2.7	U	10	2.7	ug/L		09/01/15 09:06	09/04/15 18:55	1
N-Nitrosodi-n-propylamine	3.4	U	10	3.4	ug/L		09/01/15 09:06	09/04/15 18:55	1
N-Nitrosodiphenylamine	3.6	U	10	3.6	ug/L		09/01/15 09:06	09/04/15 18:55	1
Phenanthrene	0.42	U	2.0	0.42	ug/L		09/01/15 09:06	09/04/15 18:55	1
Phenol	1.5	U	10	1.5	ug/L		09/01/15 09:06	09/04/15 18:55	1
Pyrene	0.35	U	2.0	0.35	ug/L		09/01/15 09:06	09/04/15 18:55	1
Diphenyl	2.2	U	10	2.2	ug/L		09/01/15 09:06	09/04/15 18:55	1
Di-n-octyl phthalate	2.5	U	10	2.5	ug/L		09/01/15 09:06	09/04/15 18:55	1
2,2'-oxybis[1-chloropropane]	2.8	U	10	2.8	ug/L		09/01/15 09:06	09/04/15 18:55	1
Atrazine	2.9	U	10	2.9	ug/L		09/01/15 09:06	09/04/15 18:55	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-277997/1-A
Matrix: Water
Analysis Batch: 279300

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277997

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L				09/01/15 09:06	09/04/15 18:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	100		10 - 120	09/01/15 09:06	09/04/15 18:55	1
2-Fluorobiphenyl (Surr)	89		29 - 120	09/01/15 09:06	09/04/15 18:55	1
2-Fluorophenol (Surr)	51		10 - 120	09/01/15 09:06	09/04/15 18:55	1
Nitrobenzene-d5 (Surr)	87		27 - 120	09/01/15 09:06	09/04/15 18:55	1
Phenol-d5 (Surr)	34		10 - 120	09/01/15 09:06	09/04/15 18:55	1
Terphenyl-d14 (Surr)	107		13 - 120	09/01/15 09:06	09/04/15 18:55	1

Lab Sample ID: LCS 490-277997/2-A
Matrix: Water
Analysis Batch: 279300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277997

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	40.0	27.7		ug/L		69	46 - 120
1,2,4,5-Tetrachlorobenzene	40.0	27.6		ug/L		69	25 - 120
2,3,4,6-Tetrachlorophenol	40.0	30.5		ug/L		76	31 - 148
2,4,5-Trichlorophenol	40.0	29.5		ug/L		74	40 - 129
2,4,6-Trichlorophenol	40.0	28.9		ug/L		72	39 - 135
2,4-Dichlorophenol	40.0	27.4		ug/L		68	38 - 120
2,4-Dimethylphenol	40.0	26.1		ug/L		65	21 - 126
2,4-Dinitrophenol	80.0	35.9		ug/L		45	20 - 150
2,4-Dinitrotoluene	40.0	29.4		ug/L		73	46 - 132
2,6-Dinitrotoluene	40.0	28.9		ug/L		72	54 - 128
2-Chloronaphthalene	40.0	26.7		ug/L		67	39 - 120
2-Chlorophenol	40.0	24.9		ug/L		62	40 - 120
2-Methylnaphthalene	40.0	26.2		ug/L		66	31 - 120
2-Methylphenol	40.0	22.9		ug/L		57	38 - 120
2-Nitroaniline	40.0	28.5		ug/L		71	46 - 131
2-Nitrophenol	40.0	27.8		ug/L		70	32 - 120
3,3'-Dichlorobenzidine	40.0	34.3		ug/L		86	46 - 129
3 & 4 Methylphenol	40.0	20.9		ug/L		52	33 - 120
3-Nitroaniline	40.0	27.0		ug/L		67	54 - 121
4,6-Dinitro-2-methylphenol	80.0	57.2		ug/L		72	19 - 150
4-Bromophenyl phenyl ether	40.0	29.5		ug/L		74	47 - 127
4-Chloro-3-methylphenol	40.0	27.6		ug/L		69	44 - 120
4-Chloroaniline	40.0	25.4		ug/L		64	44 - 120
4-Chlorophenyl phenyl ether	40.0	27.9		ug/L		70	50 - 120
4-Nitroaniline	40.0	27.1		ug/L		68	55 - 123
4-Nitrophenol	80.0	25.2		ug/L		31	10 - 120
Acenaphthylene	40.0	26.6		ug/L		66	48 - 120
Acetophenone	40.0	26.4		ug/L		66	52 - 133
Anthracene	40.0	28.8		ug/L		72	58 - 130
Benzaldehyde	40.0	56.2	*	ug/L		141	34 - 120
Benzo[g,h,i]perylene	40.0	29.4		ug/L		73	51 - 123
Benzo[k]fluoranthene	40.0	29.8		ug/L		74	51 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-277997/2-A
Matrix: Water
Analysis Batch: 279300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277997

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethoxy)methane	40.0	26.8		ug/L		67	44 - 120
Bis(2-chloroethyl)ether	40.0	26.6		ug/L		66	47 - 120
Butyl benzyl phthalate	40.0	31.5		ug/L		79	51 - 146
Bis(2-ethylhexyl) phthalate	40.0	32.5		ug/L		81	47 - 138
Carbazole	40.0	28.7		ug/L		72	54 - 123
Caprolactam	40.0	8.96	J	ug/L		22	10 - 120
Chrysene	40.0	28.3		ug/L		71	55 - 120
Dibenz(a,h)anthracene	40.0	31.0		ug/L		77	50 - 125
Dibenzofuran	40.0	26.8		ug/L		67	50 - 120
Diethyl phthalate	40.0	26.9		ug/L		67	54 - 128
Dimethyl phthalate	40.0	28.0		ug/L		70	53 - 127
Di-n-butyl phthalate	40.0	31.5		ug/L		79	54 - 140
Fluoranthene	40.0	29.3		ug/L		73	56 - 120
Fluorene	40.0	27.0		ug/L		68	52 - 120
Hexachlorocyclopentadiene	40.0	27.1		ug/L		68	17 - 120
Hexachloroethane	40.0	25.7		ug/L		64	30 - 120
Indeno[1,2,3-cd]pyrene	40.0	28.6		ug/L		72	54 - 125
Isophorone	40.0	27.7		ug/L		69	47 - 120
Naphthalene	40.0	26.4		ug/L		66	37 - 120
Nitrobenzene	40.0	27.1		ug/L		68	36 - 120
N-Nitrosodi-n-propylamine	40.0	27.1		ug/L		68	51 - 120
N-Nitrosodiphenylamine	80.0	56.3		ug/L		70	58 - 149
Phenanthrene	40.0	27.0		ug/L		67	56 - 120
Phenol	40.0	10.9		ug/L		27	14 - 120
Pyrene	40.0	29.1		ug/L		73	53 - 129
Diphenyl	40.0	26.8		ug/L		67	10 - 146
Di-n-octyl phthalate	40.0	33.4		ug/L		83	50 - 142
2,2'-oxybis[1-chloropropane]	40.0	25.4		ug/L		63	44 - 120
Atrazine	40.0	32.6		ug/L		82	24 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*87*		*10 - 120*
2-Fluorobiphenyl (Surr)	*76*		*29 - 120*
2-Fluorophenol (Surr)	*45*		*10 - 120*
Nitrobenzene-d5 (Surr)	*78*		*27 - 120*
Phenol-d5 (Surr)	*30*		*10 - 120*
Terphenyl-d14 (Surr)	*89*		*13 - 120*

Lab Sample ID: 490-86046-2 MS
Matrix: Water
Analysis Batch: 279300

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA
Prep Batch: 277997

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.32	U	40.0	35.4		ug/L		88	46 - 120
1,2,4,5-Tetrachlorobenzene	2.1	U	40.0	36.1		ug/L		90	10 - 200
2,3,4,6-Tetrachlorophenol	6.9	U	40.0	43.0		ug/L		108	10 - 200
2,4,5-Trichlorophenol	7.1	U	40.0	40.1		ug/L		100	40 - 129
2,4,6-Trichlorophenol	6.8	U	40.0	38.1		ug/L		95	39 - 135

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-86046-2 MS | **Client Sample ID: RW-2 (452-462)-082515**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 279300 | **Prep Batch: 277997**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dichlorophenol	5.6	U	40.0	35.8		ug/L		90	38 - 120
2,4-Dimethylphenol	4.2	U	40.0	32.8		ug/L		82	11 - 130
2,4-Dinitrophenol	6.5	J	80.0	75.2		ug/L		86	10 - 176
2,4-Dinitrotoluene	3.2	U	40.0	38.8		ug/L		97	46 - 134
2,6-Dinitrotoluene	2.3	U	40.0	37.7		ug/L		94	54 - 128
2-Chloronaphthalene	2.8	U	40.0	33.6		ug/L		84	39 - 120
2-Chlorophenol	4.8	U	40.0	30.9		ug/L		77	40 - 120
2-Methylnaphthalene	0.40	U	40.0	33.1		ug/L		83	31 - 120
2-Methylphenol	2.3	U	40.0	28.1		ug/L		70	36 - 120
2-Nitroaniline	3.7	U	40.0	36.5		ug/L		91	46 - 131
2-Nitrophenol	5.3	U	40.0	36.1		ug/L		90	32 - 120
3,3'-Dichlorobenzidine	3.3	U	40.0	23.0		ug/L		58	10 - 130
3 & 4 Methylphenol	2.2	U	40.0	25.6		ug/L		64	32 - 120
3-Nitroaniline	2.7	U	40.0	33.0		ug/L		83	38 - 121
4,6-Dinitro-2-methylphenol	9.3	U	80.0	78.6		ug/L		98	10 - 157
4-Bromophenyl phenyl ether	2.7	U	40.0	38.0		ug/L		95	47 - 127
4-Chloro-3-methylphenol	4.5	U	40.0	35.9		ug/L		90	38 - 120
4-Chloroaniline	4.2	U	40.0	31.1		ug/L		78	35 - 120
4-Chlorophenyl phenyl ether	2.8	U	40.0	36.1		ug/L		90	50 - 120
4-Nitroaniline	3.1	U	40.0	33.6		ug/L		84	47 - 124
4-Nitrophenol	5.4	U	80.0	32.3		ug/L		40	10 - 120
Acenaphthylene	0.35	U	40.0	33.5		ug/L		84	48 - 120
Acetophenone	2.3	U	40.0	34.4		ug/L		86	10 - 200
Anthracene	0.38	U	40.0	36.1		ug/L		90	56 - 130
Benzaldehyde	5.7	U *	40.0	68.1		ug/L		170	10 - 200
Benzo[g,h,i]perylene	0.62	U	40.0	38.5		ug/L		96	48 - 137
Benzo[k]fluoranthene	0.37	U	40.0	36.2		ug/L		90	44 - 134
Bis(2-chloroethoxy)methane	3.1	U	40.0	32.2		ug/L		81	41 - 120
Bis(2-chloroethyl)ether	2.8	U	40.0	32.7		ug/L		82	42 - 120
Butyl benzyl phthalate	2.5	U	40.0	40.9		ug/L		102	51 - 146
Bis(2-ethylhexyl) phthalate	6.0	U	40.0	40.9		ug/L		102	44 - 138
Carbazole	2.8	U	40.0	36.2		ug/L		91	53 - 123
Caprolactam	2.4	U	40.0	10.7		ug/L		27	10 - 200
Chrysene	0.33	U	40.0	35.7		ug/L		89	54 - 123
Dibenz(a,h)anthracene	0.45	U	40.0	41.4		ug/L		103	50 - 136
Dibenzofuran	2.9	U	40.0	34.1		ug/L		85	50 - 120
Diethyl phthalate	3.0	U	40.0	34.0		ug/L		85	53 - 128
Dimethyl phthalate	3.1	U	40.0	35.6		ug/L		89	53 - 127
Di-n-butyl phthalate	2.5	U	40.0	39.5		ug/L		99	54 - 140
Fluoranthene	0.32	U	40.0	36.6		ug/L		92	56 - 120
Fluorene	0.32	U	40.0	35.0		ug/L		87	52 - 120
Hexachlorocyclopentadiene	1.8	U	40.0	32.2		ug/L		81	10 - 120
Hexachloroethane	1.9	U	40.0	31.4		ug/L		78	26 - 120
Indeno[1,2,3-cd]pyrene	0.41	U	40.0	37.7		ug/L		94	50 - 136
Isophorone	3.1	U	40.0	34.0		ug/L		85	42 - 120
Naphthalene	0.37	U	40.0	33.1		ug/L		83	32 - 120
Nitrobenzene	2.7	U	40.0	33.4		ug/L		83	36 - 120
N-Nitrosodi-n-propylamine	3.4	U	40.0	33.3		ug/L		83	50 - 121

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-86046-2 MS
Matrix: Water
Analysis Batch: 279300

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA
Prep Batch: 277997

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Nitrosodiphenylamine	3.6	U	80.0	69.5		ug/L		87	45 - 149
Phenanthrene	0.42	U	40.0	34.2		ug/L		86	53 - 120
Phenol	10		40.0	22.7		ug/L		32	10 - 120
Pyrene	0.35	U	40.0	39.6		ug/L		99	50 - 129
Diphenyl	2.2	U	40.0	33.6		ug/L		84	10 - 200
Di-n-octyl phthalate	2.5	U	40.0	39.2		ug/L		98	50 - 142
2,2'-oxybis[1-chloropropane]	2.8	U	40.0	30.4		ug/L		76	44 - 120
Atrazine	2.9	U	40.0	42.4		ug/L		106	10 - 200

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*116*		*10 - 120*
2-Fluorobiphenyl (Surr)	*91*		*29 - 120*
2-Fluorophenol (Surr)	*49*		*10 - 120*
Nitrobenzene-d5 (Surr)	*92*		*27 - 120*
Phenol-d5 (Surr)	*32*		*10 - 120*
Terphenyl-d14 (Surr)	*116*		*13 - 120*

Lab Sample ID: 490-86046-2 MSD
Matrix: Water
Analysis Batch: 279300

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA
Prep Batch: 277997

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	0.32	U	40.0	32.7		ug/L		82	46 - 120	8	31
1,2,4,5-Tetrachlorobenzene	2.1	U	40.0	33.3		ug/L		83	10 - 200	8	50
2,3,4,6-Tetrachlorophenol	6.9	U	40.0	41.3		ug/L		103	10 - 200	4	50
2,4,5-Trichlorophenol	7.1	U	40.0	37.9		ug/L		95	40 - 129	6	34
2,4,6-Trichlorophenol	6.8	U	40.0	36.3		ug/L		91	39 - 135	5	40
2,4-Dichlorophenol	5.6	U	40.0	33.3		ug/L		83	38 - 120	7	30
2,4-Dimethylphenol	4.2	U	40.0	30.3		ug/L		76	11 - 130	8	48
2,4-Dinitrophenol	6.5	J	80.0	71.5		ug/L		81	10 - 176	5	31
2,4-Dinitrotoluene	3.2	U	40.0	37.2		ug/L		93	46 - 134	4	26
2,6-Dinitrotoluene	2.3	U	40.0	36.0		ug/L		90	54 - 128	5	29
2-Chloronaphthalene	2.8	U	40.0	31.6		ug/L		79	39 - 120	6	36
2-Chlorophenol	4.8	U	40.0	28.8		ug/L		72	40 - 120	7	46
2-Methylnaphthalene	0.40	U	40.0	30.9		ug/L		77	31 - 120	7	35
2-Methylphenol	2.3	U	40.0	26.4		ug/L		66	36 - 120	6	32
2-Nitroaniline	3.7	U	40.0	34.5		ug/L		86	46 - 131	6	24
2-Nitrophenol	5.3	U	40.0	33.9		ug/L		85	32 - 120	7	31
3,3'-Dichlorobenzidine	3.3	U	40.0	26.9		ug/L		67	10 - 130	16	30
3 & 4 Methylphenol	2.2	U	40.0	24.1		ug/L		60	32 - 120	6	34
3-Nitroaniline	2.7	U	40.0	32.0		ug/L		80	38 - 121	3	26
4,6-Dinitro-2-methylphenol	9.3	U	80.0	75.5		ug/L		94	10 - 157	4	34
4-Bromophenyl phenyl ether	2.7	U	40.0	36.3		ug/L		91	47 - 127	4	29
4-Chloro-3-methylphenol	4.5	U	40.0	33.5		ug/L		84	38 - 120	7	22
4-Chloroaniline	4.2	U	40.0	29.6		ug/L		74	35 - 120	5	26
4-Chlorophenyl phenyl ether	2.8	U	40.0	33.7		ug/L		84	50 - 120	7	29
4-Nitroaniline	3.1	U	40.0	32.8		ug/L		82	47 - 124	2	26
4-Nitrophenol	5.4	U	80.0	32.5		ug/L		41	10 - 120	1	38

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-86046-2 MSD
Matrix: Water
Analysis Batch: 279300

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA
Prep Batch: 277997

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	0.35	U	40.0	31.6		ug/L		79	48 - 120	6	31
Acetophenone	2.3	U	40.0	31.4		ug/L		79	10 - 200	9	50
Anthracene	0.38	U	40.0	34.9		ug/L		87	56 - 130	3	28
Benzaldehyde	5.7	U *	40.0	63.2		ug/L		158	10 - 200	8	50
Benzo[g,h,i]perylene	0.62	U	40.0	36.5		ug/L		91	48 - 137	5	27
Benzo[k]fluoranthene	0.37	U	40.0	34.7		ug/L		87	44 - 134	4	32
Bis(2-chloroethoxy)methane	3.1	U	40.0	29.8		ug/L		74	41 - 120	8	31
Bis(2-chloroethyl)ether	2.8	U	40.0	29.4		ug/L		74	42 - 120	11	38
Butyl benzyl phthalate	2.5	U	40.0	39.0		ug/L		98	51 - 146	5	31
Bis(2-ethylhexyl) phthalate	6.0	U	40.0	39.6		ug/L		99	44 - 138	3	28
Carbazole	2.8	U	40.0	35.1		ug/L		88	53 - 123	3	29
Caprolactam	2.4	U	40.0	10.6		ug/L		26	10 - 200	1	50
Chrysene	0.33	U	40.0	34.7		ug/L		87	54 - 123	3	27
Dibenz(a,h)anthracene	0.45	U	40.0	39.3		ug/L		98	50 - 136	5	28
Dibenzofuran	2.9	U	40.0	32.2		ug/L		81	50 - 120	6	29
Diethyl phthalate	3.0	U	40.0	32.3		ug/L		81	53 - 128	5	28
Dimethyl phthalate	3.1	U	40.0	33.4		ug/L		84	53 - 127	6	27
Di-n-butyl phthalate	2.5	U	40.0	37.9		ug/L		95	54 - 140	4	27
Fluoranthene	0.32	U	40.0	35.8		ug/L		89	56 - 120	2	28
Fluorene	0.32	U	40.0	32.8		ug/L		82	52 - 120	6	28
Hexachlorocyclopentadiene	1.8	U	40.0	29.1		ug/L		73	10 - 120	10	43
Hexachloroethane	1.9	U	40.0	29.3		ug/L		73	26 - 120	7	45
Indeno[1,2,3-cd]pyrene	0.41	U	40.0	36.1		ug/L		90	50 - 136	5	27
Isophorone	3.1	U	40.0	31.4		ug/L		79	42 - 120	8	31
Naphthalene	0.37	U	40.0	30.7		ug/L		77	32 - 120	7	37
Nitrobenzene	2.7	U	40.0	31.2		ug/L		78	36 - 120	7	28
N-Nitrosodi-n-propylamine	3.4	U	40.0	30.6		ug/L		76	50 - 121	8	37
N-Nitrosodiphenylamine	3.6	U	80.0	66.3		ug/L		83	45 - 149	5	26
Phenanthrene	0.42	U	40.0	32.8		ug/L		82	53 - 120	4	26
Phenol	10		40.0	21.6		ug/L		29	10 - 120	5	42
Pyrene	0.35	U	40.0	37.7		ug/L		94	50 - 129	5	29
Diphenyl	2.2	U	40.0	31.4		ug/L		78	10 - 200	7	50
Di-n-octyl phthalate	2.5	U	40.0	37.1		ug/L		93	50 - 142	5	28
2,2'-oxybis[1-chloropropane]	2.8	U	40.0	27.9		ug/L		70	44 - 120	9	36
Atrazine	2.9	U	40.0	40.4		ug/L		101	10 - 200	5	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*112*		*10 - 120*
2-Fluorobiphenyl (Surr)	*87*		*29 - 120*
2-Fluorophenol (Surr)	*47*		*10 - 120*
Nitrobenzene-d5 (Surr)	*86*		*27 - 120*
Phenol-d5 (Surr)	*32*		*10 - 120*
Terphenyl-d14 (Surr)	*113*		*13 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 490-277972/1-A
Matrix: Water
Analysis Batch: 278060

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 12:12	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 12:12	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		09/01/15 05:42	09/01/15 12:12	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		09/01/15 05:42	09/01/15 12:12	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		09/01/15 05:42	09/01/15 12:12	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		09/01/15 05:42	09/01/15 12:12	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		09/01/15 05:42	09/01/15 12:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*63*		*10 - 120*	*09/01/15 05:42*	*09/01/15 12:12*	*1*
2-Fluorobiphenyl (Surr)	*64*		*29 - 120*	*09/01/15 05:42*	*09/01/15 12:12*	*1*
Nitrobenzene-d5	*63*		*27 - 120*	*09/01/15 05:42*	*09/01/15 12:12*	*1*
Terphenyl-d14	*77*		*13 - 120*	*09/01/15 05:42*	*09/01/15 12:12*	*1*
2-Fluorophenol	*50*		*10 - 120*	*09/01/15 05:42*	*09/01/15 12:12*	*1*
Phenol-d5	*34*		*10 - 120*	*09/01/15 05:42*	*09/01/15 12:12*	*1*

Lab Sample ID: LCS 490-277972/2-A
Matrix: Water
Analysis Batch: 278060

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.780		ug/L		97	57 - 120
Benzo[a]pyrene	0.800	0.648		ug/L		81	57 - 124
Benzo[b]fluoranthene	0.800	0.613		ug/L		77	51 - 125
Hexachlorobenzene	0.800	0.573		ug/L		72	48 - 131
Hexachlorobutadiene	0.800	0.570		ug/L		71	28 - 120
N-Nitrosodimethylamine	0.800	0.428	J	ug/L		54	20 - 120
Pentachlorophenol	1.60	1.05		ug/L		66	21 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*81*		*10 - 120*
2-Fluorobiphenyl (Surr)	*74*		*29 - 120*
Nitrobenzene-d5	*85*		*27 - 120*
Terphenyl-d14	*86*		*13 - 120*
2-Fluorophenol	*57*		*10 - 120*
Phenol-d5	*41*		*10 - 120*

Lab Sample ID: LCSD 490-277972/3-A
Matrix: Water
Analysis Batch: 278060

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 277972

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	0.621		ug/L		78	57 - 120	23	27
Benzo[a]pyrene	0.800	0.549		ug/L		69	57 - 124	16	27
Benzo[b]fluoranthene	0.800	0.474		ug/L		59	51 - 125	26	39
Hexachlorobenzene	0.800	0.456		ug/L		57	48 - 131	23	28
Hexachlorobutadiene	0.800	0.423		ug/L		53	28 - 120	30	30

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 490-277972/3-A
Matrix: Water
Analysis Batch: 278060

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 277972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
N-Nitrosodimethylamine			0.800	0.310	J	ug/L		39	20 - 120	32	32
Pentachlorophenol			1.60	0.669	*	ug/L		42	21 - 150	44	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*64*		*10 - 120*
2-Fluorobiphenyl (Surr)	*55*		*29 - 120*
Nitrobenzene-d5	*65*		*27 - 120*
Terphenyl-d14	*65*		*13 - 120*
2-Fluorophenol	*41*		*10 - 120*
Phenol-d5	*29*		*10 - 120*

Lab Sample ID: 490-86046-2 MS
Matrix: Water
Analysis Batch: 278060

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA
Prep Batch: 277972

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.025	U	0.800	0.671		ug/L		84	57 - 122
Benzo[a]pyrene	0.025	U	0.800	0.553		ug/L		69	46 - 138
Benzo[b]fluoranthene	0.025	U	0.800	0.544		ug/L		68	45 - 138
Hexachlorobenzene	0.014	U	0.800	0.490		ug/L		61	48 - 131
Hexachlorobutadiene	0.20	U	0.800	0.476		ug/L		60	28 - 120
N-Nitrosodimethylamine	0.20	U	0.800	0.389	J	ug/L		49	10 - 200
Pentachlorophenol	0.10	U *	1.60	1.43		ug/L		90	21 - 159

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol	*77*		*10 - 120*
2-Fluorobiphenyl (Surr)	*58*		*29 - 120*
Nitrobenzene-d5	*90*		*27 - 120*
Terphenyl-d14	*71*		*13 - 120*
2-Fluorophenol	*46*		*10 - 120*
Phenol-d5	*32*		*10 - 120*

Lab Sample ID: 490-86046-2 MSD
Matrix: Water
Analysis Batch: 278060

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA
Prep Batch: 277972

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.025	U	0.800	0.660		ug/L		82	57 - 122	2	27
Benzo[a]pyrene	0.025	U	0.800	0.542		ug/L		68	46 - 138	2	27
Benzo[b]fluoranthene	0.025	U	0.800	0.498		ug/L		62	45 - 138	9	39
Hexachlorobenzene	0.014	U	0.800	0.491		ug/L		61	48 - 131	0	28
Hexachlorobutadiene	0.20	U	0.800	0.439		ug/L		55	28 - 120	8	30
N-Nitrosodimethylamine	0.20	U	0.800	0.347	J	ug/L		43	10 - 200	12	32
Pentachlorophenol	0.10	U *	1.60	1.45		ug/L		90	21 - 159	1	31

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*73*		*10 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 490-86046-2 MSD
Matrix: Water
Analysis Batch: 278060

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA
Prep Batch: 277972

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*54*		*29 - 120*
Nitrobenzene-d5	*69*		*27 - 120*
Terphenyl-d14	*66*		*13 - 120*
2-Fluorophenol	*39*		*10 - 120*
Phenol-d5	*28*		*10 - 120*

Lab Sample ID: MB 490-278994/1-A
Matrix: Water
Analysis Batch: 279221

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 278994

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	U	0.050	0.025	ug/L		09/03/15 17:40	09/04/15 14:25	1
Benzo[a]pyrene	0.025	U	0.050	0.025	ug/L		09/03/15 17:40	09/04/15 14:25	1
Benzo[b]fluoranthene	0.025	U	0.050	0.025	ug/L		09/03/15 17:40	09/04/15 14:25	1
Hexachlorobenzene	0.014	U	0.020	0.014	ug/L		09/03/15 17:40	09/04/15 14:25	1
Hexachlorobutadiene	0.20	U	0.40	0.20	ug/L		09/03/15 17:40	09/04/15 14:25	1
N-Nitrosodimethylamine	0.20	U	0.80	0.20	ug/L		09/03/15 17:40	09/04/15 14:25	1
Pentachlorophenol	0.10	U	0.30	0.10	ug/L		09/03/15 17:40	09/04/15 14:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*71*		*10 - 120*	*09/03/15 17:40*	*09/04/15 14:25*	*1*
2-Fluorobiphenyl (Surr)	*66*		*29 - 120*	*09/03/15 17:40*	*09/04/15 14:25*	*1*
Nitrobenzene-d5	*64*		*27 - 120*	*09/03/15 17:40*	*09/04/15 14:25*	*1*
Terphenyl-d14	*82*		*13 - 120*	*09/03/15 17:40*	*09/04/15 14:25*	*1*
2-Fluorophenol	*51*		*10 - 120*	*09/03/15 17:40*	*09/04/15 14:25*	*1*
Phenol-d5	*35*		*10 - 120*	*09/03/15 17:40*	*09/04/15 14:25*	*1*

Lab Sample ID: LCS 490-278994/2-A
Matrix: Water
Analysis Batch: 279221

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 278994

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	3.03	*	ug/L		379	57 - 120
Benzo[a]pyrene	0.800	2.29	*	ug/L		287	57 - 124
Benzo[b]fluoranthene	0.800	1.75	*	ug/L		219	51 - 125
Hexachlorobenzene	0.800	0.435		ug/L		54	48 - 131
Hexachlorobutadiene	0.800	0.434		ug/L		54	28 - 120
N-Nitrosodimethylamine	0.800	0.335	J	ug/L		42	20 - 120
Pentachlorophenol	1.60	0.566		ug/L		35	21 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*64*		*10 - 120*
2-Fluorobiphenyl (Surr)	*55*		*29 - 120*
Nitrobenzene-d5	*60*		*27 - 120*
Terphenyl-d14	*66*		*13 - 120*
2-Fluorophenol	*43*		*10 - 120*
Phenol-d5	*30*		*10 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 490-278994/3-A
Matrix: Water
Analysis Batch: 279221

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 278994

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	0.763	*	ug/L		95	57 - 120	120	27
Benzo[a]pyrene	0.800	0.656	*	ug/L		82	57 - 124	111	27
Benzo[b]fluoranthene	0.800	0.667	*	ug/L		83	51 - 125	90	39
Hexachlorobenzene	0.800	0.542		ug/L		68	48 - 131	22	28
Hexachlorobutadiene	0.800	0.495		ug/L		62	28 - 120	13	30
N-Nitrosodimethylamine	0.800	0.388	J	ug/L		49	20 - 120	15	32
Pentachlorophenol	1.60	0.778	*	ug/L		49	21 - 150	32	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*80*		*10 - 120*
2-Fluorobiphenyl (Surr)	*68*		*29 - 120*
Nitrobenzene-d5	*70*		*27 - 120*
Terphenyl-d14	*87*		*13 - 120*
2-Fluorophenol	*51*		*10 - 120*
Phenol-d5	*35*		*10 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-279971/1-A
Matrix: Water
Analysis Batch: 280337

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		09/09/15 06:16	09/09/15 22:22	1
PCB-1221	0.34	U	0.50	0.34	ug/L		09/09/15 06:16	09/09/15 22:22	1
PCB-1232	0.40	U	0.50	0.40	ug/L		09/09/15 06:16	09/09/15 22:22	1
PCB-1242	0.22	U	0.50	0.22	ug/L		09/09/15 06:16	09/09/15 22:22	1
PCB-1248	0.15	U	0.50	0.15	ug/L		09/09/15 06:16	09/09/15 22:22	1
PCB-1254	0.17	U	0.50	0.17	ug/L		09/09/15 06:16	09/09/15 22:22	1
PCB-1260	0.18	U	0.50	0.18	ug/L		09/09/15 06:16	09/09/15 22:22	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		09/09/15 06:16	09/09/15 22:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*90*		*10 - 150*	*09/09/15 06:16*	*09/09/15 22:22*	*1*
Tetrachloro-m-xylene	*96*		*10 - 150*	*09/09/15 06:16*	*09/09/15 22:22*	*1*

Lab Sample ID: LCS 490-279971/2-A
Matrix: Water
Analysis Batch: 280337

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279971

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	3.98		ug/L		99	23 - 139
PCB-1260	4.00	3.56		ug/L		89	36 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*91*		*10 - 150*
Tetrachloro-m-xylene	*98*		*10 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 490-278255/6
Matrix: Water
Analysis Batch: 278255

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			09/01/15 15:12	1
Sulfate	0.60	U	1.00	0.60	mg/L			09/01/15 15:12	1

Lab Sample ID: LCS 490-278255/7
Matrix: Water
Analysis Batch: 278255

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	97.47		mg/L		97	80 - 120
Sulfate	100	98.46		mg/L		98	80 - 120

Lab Sample ID: LCSD 490-278255/8
Matrix: Water
Analysis Batch: 278255

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	97.26		mg/L		97	80 - 120	0	20
Sulfate	100	98.21		mg/L		98	80 - 120	0	20

Lab Sample ID: 490-86046-2 MS
Matrix: Water
Analysis Batch: 278255

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	601	F1	500	923.2	F1	mg/L		65	80 - 120
Sulfate	167	F1	500	560.8	F1	mg/L		79	80 - 120

Lab Sample ID: 490-86046-2 MSD
Matrix: Water
Analysis Batch: 278255

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	601	F1	500	912.6	F1	mg/L		62	80 - 120	1	20
Sulfate	167	F1	500	554.2	F1	mg/L		77	80 - 120	1	20

Lab Sample ID: MB 490-279081/3
Matrix: Water
Analysis Batch: 279081

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.70	U	1.00	0.70	mg/L			09/04/15 05:04	1
Sulfate	0.60	U	1.00	0.60	mg/L			09/04/15 05:04	1

Lab Sample ID: LCS 490-279081/4
Matrix: Water
Analysis Batch: 279081

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	100.1		mg/L		100	80 - 120

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 490-279081/4
Matrix: Water
Analysis Batch: 279081

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	100	99.13		mg/L		99	80 - 120

Lab Sample ID: LCSD 490-279081/5
Matrix: Water
Analysis Batch: 279081

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	100.1		mg/L		100	80 - 120	0	20
Sulfate	100	99.56		mg/L		100	80 - 120	0	20

Lab Sample ID: 490-86046-5 MS
Matrix: Water
Analysis Batch: 279081

Client Sample ID: RW-11D (262-267)-082615
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	40.5		100	131.5		mg/L		91	80 - 120
Sulfate	40.6		100	135.8		mg/L		95	80 - 120

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 490-277578/1-A
Matrix: Water
Analysis Batch: 277984

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277578

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/30/15 10:12	08/31/15 19:08	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:08	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:08	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:08	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:08	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/30/15 10:12	08/31/15 19:08	1
Calcium	0.13	U	1.0	0.13	mg/L		08/30/15 10:12	08/31/15 19:08	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:08	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:08	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:08	1
Iron	0.010	U	0.025	0.010	mg/L		08/30/15 10:12	08/31/15 19:08	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/30/15 10:12	08/31/15 19:08	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/30/15 10:12	08/31/15 19:08	1
Manganese	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:08	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:08	1
Potassium	0.13	U	1.0	0.13	mg/L		08/30/15 10:12	08/31/15 19:08	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/30/15 10:12	08/31/15 19:08	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/30/15 10:12	08/31/15 19:08	1
Sodium	0.13	U	1.0	0.13	mg/L		08/30/15 10:12	08/31/15 19:08	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/30/15 10:12	08/31/15 19:08	1
Vanadium	0.00114	J	0.0020	0.00010	mg/L		08/30/15 10:12	08/31/15 19:08	1
Zinc	0.010	U	0.025	0.010	mg/L		08/30/15 10:12	08/31/15 19:08	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 490-277578/2-A
Matrix: Water
Analysis Batch: 277984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277578

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	0.992		mg/L		99	80 - 120
Antimony	0.100	0.100		mg/L		100	80 - 120
Arsenic	0.100	0.0996		mg/L		100	80 - 120
Barium	0.100	0.106		mg/L		106	80 - 120
Beryllium	0.100	0.101		mg/L		101	80 - 120
Cadmium	0.100	0.0998		mg/L		100	80 - 120
Calcium	10.0	9.91		mg/L		99	80 - 120
Chromium	0.100	0.104		mg/L		104	80 - 120
Cobalt	0.100	0.104		mg/L		104	80 - 120
Copper	0.100	0.0986		mg/L		99	80 - 120
Iron	1.00	1.05		mg/L		105	80 - 120
Lead	0.100	0.105		mg/L		105	80 - 120
Magnesium	10.0	10.02		mg/L		100	80 - 120
Manganese	0.100	0.104		mg/L		104	80 - 120
Nickel	0.100	0.102		mg/L		102	80 - 120
Potassium	10.0	10.12		mg/L		101	80 - 120
Selenium	0.100	0.0912		mg/L		91	80 - 120
Silver	0.100	0.0825		mg/L		83	80 - 120
Sodium	10.0	10.08		mg/L		101	80 - 120
Thallium	0.100	0.102		mg/L		102	80 - 120
Vanadium	0.100	0.105		mg/L		105	80 - 120
Zinc	0.100	0.0896		mg/L		90	80 - 120

Lab Sample ID: 490-86046-2 MS
Matrix: Water
Analysis Batch: 277984

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA
Prep Batch: 277578

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.10		1.00	1.09		mg/L		99	75 - 125
Antimony	0.00050	U	0.100	0.100		mg/L		100	75 - 125
Arsenic	0.0054		0.100	0.105		mg/L		99	75 - 125
Barium	0.059		0.100	0.168		mg/L		109	75 - 125
Beryllium	0.00050	U	0.100	0.101		mg/L		101	75 - 125
Cadmium	0.00040	U	0.100	0.101		mg/L		101	75 - 125
Chromium	0.00058	J	0.100	0.101		mg/L		100	75 - 125
Cobalt	0.00050	U	0.100	0.0990		mg/L		99	75 - 125
Copper	0.0010	J	0.100	0.0915		mg/L		90	75 - 125
Iron	0.021	J	1.00	1.04		mg/L		102	75 - 125
Lead	0.00020	J	0.100	0.104		mg/L		104	75 - 125
Magnesium	0.13	U	10.0	9.63		mg/L		96	75 - 125
Manganese	0.00050	U	0.100	0.0998		mg/L		100	75 - 125
Nickel	0.0083		0.100	0.103		mg/L		95	75 - 125
Selenium	0.0036		0.100	0.0934		mg/L		90	75 - 125
Silver	0.00050	U	0.100	0.0787		mg/L		79	75 - 125
Thallium	0.00051	J	0.100	0.102		mg/L		102	75 - 125
Vanadium	0.040	B	0.100	0.139		mg/L		99	75 - 125
Zinc	0.010	U	0.100	0.0950		mg/L		95	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-86046-2 MS
Matrix: Water
Analysis Batch: 278353

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA
Prep Batch: 277578

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	132		10.0	137.1	4	mg/L		49	75 - 125
Potassium	103		10.0	119.9	4	mg/L		166	75 - 125
Sodium	371		10.0	360.3	4	mg/L		-107	75 - 125

Lab Sample ID: 490-86046-2 MSD
Matrix: Water
Analysis Batch: 277984

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA
Prep Batch: 277578

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.10		1.00	1.14		mg/L		104	75 - 125	4	20
Antimony	0.00050	U	0.100	0.104		mg/L		104	75 - 125	3	20
Arsenic	0.0054		0.100	0.104		mg/L		99	75 - 125	1	20
Barium	0.059		0.100	0.170		mg/L		110	75 - 125	1	20
Beryllium	0.00050	U	0.100	0.102		mg/L		102	75 - 125	1	20
Cadmium	0.00040	U	0.100	0.102		mg/L		102	75 - 125	1	20
Chromium	0.00058	J	0.100	0.0999		mg/L		99	75 - 125	1	20
Cobalt	0.00050	U	0.100	0.0987		mg/L		99	75 - 125	0	20
Copper	0.0010	J	0.100	0.0941		mg/L		93	75 - 125	3	20
Iron	0.021	J	1.00	1.03		mg/L		101	75 - 125	1	20
Lead	0.00020	J	0.100	0.105		mg/L		105	75 - 125	1	20
Magnesium	0.13	U	10.0	9.97		mg/L		100	75 - 125	4	20
Manganese	0.00050	U	0.100	0.0986		mg/L		99	75 - 125	1	20
Nickel	0.0083		0.100	0.102		mg/L		94	75 - 125	1	20
Selenium	0.0036		0.100	0.0967		mg/L		93	75 - 125	3	20
Silver	0.00050	U	0.100	0.0805		mg/L		80	75 - 125	2	20
Thallium	0.00051	J	0.100	0.103		mg/L		103	75 - 125	1	20
Vanadium	0.040	B	0.100	0.145		mg/L		105	75 - 125	5	20
Zinc	0.010	U	0.100	0.0971		mg/L		97	75 - 125	2	20

Lab Sample ID: 490-86046-2 MSD
Matrix: Water
Analysis Batch: 278353

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA
Prep Batch: 277578

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	132		10.0	152.0	4	mg/L		198	75 - 125	10	20
Potassium	103		10.0	128.1	4	mg/L		248	75 - 125	7	20
Sodium	371		10.0	380.1	4	mg/L		92	75 - 125	5	20

Lab Sample ID: MB 490-277068/1-B
Matrix: Water
Analysis Batch: 279070

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 277083

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0096	U	0.020	0.0096	mg/L		08/28/15 10:18	09/03/15 10:49	1
Antimony	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 10:49	1
Arsenic	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 10:49	1
Barium	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 10:49	1
Beryllium	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 10:49	1
Cadmium	0.00040	U	0.0010	0.00040	mg/L		08/28/15 10:18	09/03/15 10:49	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 490-277068/1-B
Matrix: Water
Analysis Batch: 279070

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 277083

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.13	U	1.0	0.13	mg/L		08/28/15 10:18	09/03/15 10:49	1
Chromium	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 10:49	1
Cobalt	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 10:49	1
Copper	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 10:49	1
Iron	0.010	U	0.025	0.010	mg/L		08/28/15 10:18	09/03/15 10:49	1
Lead	0.00020	U	0.0020	0.00020	mg/L		08/28/15 10:18	09/03/15 10:49	1
Magnesium	0.13	U	1.0	0.13	mg/L		08/28/15 10:18	09/03/15 10:49	1
Manganese	0.00153	J	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 10:49	1
Nickel	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 10:49	1
Potassium	0.13	U	1.0	0.13	mg/L		08/28/15 10:18	09/03/15 10:49	1
Selenium	0.00060	U	0.0020	0.00060	mg/L		08/28/15 10:18	09/03/15 10:49	1
Silver	0.00050	U	0.0020	0.00050	mg/L		08/28/15 10:18	09/03/15 10:49	1
Sodium	0.13	U	1.0	0.13	mg/L		08/28/15 10:18	09/03/15 10:49	1
Thallium	0.00020	U	0.0020	0.00020	mg/L		08/28/15 10:18	09/03/15 10:49	1
Vanadium	0.000876	J	0.0020	0.00010	mg/L		08/28/15 10:18	09/03/15 10:49	1
Zinc	0.010	U	0.025	0.010	mg/L		08/28/15 10:18	09/03/15 10:49	1

Lab Sample ID: LCS 490-277068/2-B
Matrix: Water
Analysis Batch: 279070

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 277083

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.00		mg/L		100	80 - 120
Antimony	0.100	0.107		mg/L		107	80 - 120
Arsenic	0.100	0.106		mg/L		106	80 - 120
Barium	0.100	0.105		mg/L		105	80 - 120
Beryllium	0.100	0.104		mg/L		104	80 - 120
Cadmium	0.100	0.103		mg/L		103	80 - 120
Calcium	10.0	10.44		mg/L		104	80 - 120
Chromium	0.100	0.111		mg/L		111	80 - 120
Cobalt	0.100	0.112		mg/L		112	80 - 120
Copper	0.100	0.100		mg/L		100	80 - 120
Iron	1.00	1.10		mg/L		110	80 - 120
Lead	0.100	0.103		mg/L		103	80 - 120
Magnesium	10.0	9.89		mg/L		99	80 - 120
Manganese	0.100	0.111		mg/L		111	80 - 120
Nickel	0.100	0.104		mg/L		104	80 - 120
Potassium	10.0	9.96		mg/L		100	80 - 120
Selenium	0.100	0.102		mg/L		102	80 - 120
Silver	0.100	0.109		mg/L		109	80 - 120
Sodium	10.0	9.94		mg/L		99	80 - 120
Thallium	0.100	0.103		mg/L		103	80 - 120
Vanadium	0.100	0.103		mg/L		103	80 - 120
Zinc	0.100	0.103		mg/L		103	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-86046-2 MS
Matrix: Water
Analysis Batch: 279070

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Dissolved
Prep Batch: 277083

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.14		1.00	1.16		mg/L		102	75 - 125
Antimony	0.0025	U	0.100	0.113		mg/L		113	75 - 125
Arsenic	0.0056	J	0.100	0.113		mg/L		107	75 - 125
Barium	0.070		0.100	0.176		mg/L		105	75 - 125
Beryllium	0.0025	U	0.100	0.105		mg/L		105	75 - 125
Cadmium	0.0020	U	0.100	0.108		mg/L		108	75 - 125
Calcium	145		10.0	147.1	4	mg/L		23	75 - 125
Chromium	0.0025	U	0.100	0.109		mg/L		109	75 - 125
Cobalt	0.0025	U	0.100	0.104		mg/L		104	75 - 125
Copper	0.0025	U	0.100	0.105		mg/L		105	75 - 125
Iron	0.050	U	1.00	1.13		mg/L		113	75 - 125
Lead	0.0010	U	0.100	0.105		mg/L		105	75 - 125
Magnesium	0.63	U	10.0	10.60		mg/L		106	75 - 125
Manganese	0.0025	U	0.100	0.109		mg/L		109	75 - 125
Nickel	0.0088	J	0.100	0.116		mg/L		107	75 - 125
Potassium	129		10.0	125.7	4	mg/L		-31	75 - 125
Selenium	0.0049	J	0.100	0.107		mg/L		102	75 - 125
Silver	0.0025	U	0.100	0.104		mg/L		104	75 - 125
Sodium	382		10.0	357.8	4	mg/L		-247	75 - 125
Thallium	0.0029	J	0.100	0.101		mg/L		98	75 - 125
Vanadium	0.040	B	0.100	0.140		mg/L		101	75 - 125
Zinc	0.050	U	0.100	0.106	J	mg/L		106	75 - 125

Lab Sample ID: 490-86046-2 MSD
Matrix: Water
Analysis Batch: 279070

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Dissolved
Prep Batch: 277083

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.14		1.00	1.16		mg/L		102	75 - 125	0	20
Antimony	0.0025	U	0.100	0.116		mg/L		116	75 - 125	3	20
Arsenic	0.0056	J	0.100	0.113		mg/L		107	75 - 125	0	20
Barium	0.070		0.100	0.179		mg/L		108	75 - 125	2	20
Beryllium	0.0025	U	0.100	0.107		mg/L		107	75 - 125	2	20
Cadmium	0.0020	U	0.100	0.110		mg/L		110	75 - 125	2	20
Calcium	145		10.0	149.3	4	mg/L		45	75 - 125	1	20
Chromium	0.0025	U	0.100	0.109		mg/L		109	75 - 125	0	20
Cobalt	0.0025	U	0.100	0.105		mg/L		105	75 - 125	1	20
Copper	0.0025	U	0.100	0.105		mg/L		105	75 - 125	0	20
Iron	0.050	U	1.00	1.15		mg/L		115	75 - 125	2	20
Lead	0.0010	U	0.100	0.110		mg/L		110	75 - 125	4	20
Magnesium	0.63	U	10.0	10.59		mg/L		106	75 - 125	0	20
Manganese	0.0025	U	0.100	0.111		mg/L		111	75 - 125	2	20
Nickel	0.0088	J	0.100	0.116		mg/L		107	75 - 125	1	20
Potassium	129		10.0	126.1	4	mg/L		-27	75 - 125	0	20
Selenium	0.0049	J	0.100	0.106		mg/L		101	75 - 125	1	20
Silver	0.0025	U	0.100	0.106		mg/L		106	75 - 125	2	20
Sodium	382		10.0	359.8	4	mg/L		-227	75 - 125	1	20
Thallium	0.0029	J	0.100	0.104		mg/L		101	75 - 125	3	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-86046-2 MSD — **Client Sample ID: RW-2 (452-462)-082515**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 279070 — **Prep Batch: 277083**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	0.040	B	0.100	0.142		mg/L		102	75 - 125	1	20
Zinc	0.050	U	0.100	0.105	J	mg/L		105	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 490-277940/1-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 278590 — **Prep Batch: 278310**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		08/31/15 19:53	09/02/15 14:34	1

Lab Sample ID: LCS 490-277940/2-B — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 278590 — **Prep Batch: 278310**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.00101		mg/L		101	80 - 120

Lab Sample ID: 490-86046-2 MS — **Client Sample ID: RW-2 (452-462)-082515**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 278590 — **Prep Batch: 278310**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.00107		mg/L		107	75 - 125

Lab Sample ID: 490-86046-2 MSD — **Client Sample ID: RW-2 (452-462)-082515**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 278590 — **Prep Batch: 278310**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.00101		mg/L		101	75 - 125	5	20

Method: 7470A - 7470A – Mercury (CVAA) – Aqueous Matrix

Lab Sample ID: MB 490-278247/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 278710 — **Prep Batch: 278247**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	U	0.00020	0.00015	mg/L		09/01/15 16:15	09/02/15 16:28	1

Lab Sample ID: LCS 490-278247/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 278710 — **Prep Batch: 278247**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000953		mg/L		95	80 - 120

Method: 7470A - 7470A – Mercury (CVAA) – Aqueous Matrix (Continued)

Lab Sample ID: 490-86046-2 MS — **Client Sample ID: RW-2 (452-462)-082515**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 278710 — **Prep Batch: 278247**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00015	U	0.00100	0.00108		mg/L		108	75 - 125

Lab Sample ID: 490-86046-2 MSD — **Client Sample ID: RW-2 (452-462)-082515**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 278710 — **Prep Batch: 278247**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00015	U	0.00100	0.00103		mg/L		103	75 - 125	5	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 490-277534/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 277627 — **Prep Batch: 277534**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0070	U	0.010	0.0070	mg/L		08/29/15 15:11	08/30/15 14:15	1

Lab Sample ID: LCS 490-277534/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 277627 — **Prep Batch: 277534**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0942		mg/L		94	90 - 110

Lab Sample ID: 490-86046-2 MS — **Client Sample ID: RW-2 (452-462)-082515**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 277627 — **Prep Batch: 277534**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0070	U F1	0.100	0.00900	J F1	mg/L		9	70 - 130

Lab Sample ID: 490-86046-2 MSD — **Client Sample ID: RW-2 (452-462)-082515**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 277627 — **Prep Batch: 277534**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0070	U F1	0.100	0.00993	J F1	mg/L		10	70 - 130	10	46

Lab Sample ID: 490-86046-5 DU — **Client Sample ID: RW-11D (262-267)-082615**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 277627 — **Prep Batch: 277534**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.0070	U	0.0070	U	mg/L		NC	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 490-277090/33
Matrix: Water
Analysis Batch: 277090

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/27/15 20:50	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/27/15 20:50	1

Lab Sample ID: MB 490-277090/5
Matrix: Water
Analysis Batch: 277090

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/27/15 17:47	1
Total Alkalinity as CaCO3	5.0	U	10.0	5.0	mg/L			08/27/15 17:47	1

Lab Sample ID: LCS 490-277090/34
Matrix: Water
Analysis Batch: 277090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	100	93.37		mg/L		93	90 - 110

Lab Sample ID: LCS 490-277090/6
Matrix: Water
Analysis Batch: 277090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	100	90.71		mg/L		91	90 - 110

Lab Sample ID: 490-85953-D-1 DU
Matrix: Water
Analysis Batch: 277090

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	115		113.4		mg/L		1	20
Total Alkalinity as CaCO3	115		113.4		mg/L		1	20

Lab Sample ID: 490-85957-S-1 DU
Matrix: Water
Analysis Batch: 277090

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	166		163.9		mg/L		1	20
Total Alkalinity as CaCO3	166		163.9		mg/L		1	20

Lab Sample ID: 490-86046-2 DU
Matrix: Water
Analysis Batch: 277090

Client Sample ID: RW-2 (452-462)-082515
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	U	mg/L		NC	20
Total Alkalinity as CaCO3	127		133.7		mg/L		5	20

GC/MS VOA

Analysis Batch: 278757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	8260C SIM	
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	8260C SIM	
490-86046-2 MS	RW-2 (452-462)-082515	Total/NA	Water	8260C SIM	
490-86046-2 MSD	RW-2 (452-462)-082515	Total/NA	Water	8260C SIM	
490-86046-3	Dup-04-082515	Total/NA	Water	8260C SIM	
490-86046-4	TB-14-082515	Total/NA	Water	8260C SIM	
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	8260C SIM	
LCS 490-278757/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-278757/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
MB 490-278757/7	Method Blank	Total/NA	Water	8260C SIM	

Analysis Batch: 279129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	8260C	
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	8260C	
490-86046-2 MS	RW-2 (452-462)-082515	Total/NA	Water	8260C	
490-86046-2 MSD	RW-2 (452-462)-082515	Total/NA	Water	8260C	
490-86046-3	Dup-04-082515	Total/NA	Water	8260C	
490-86046-4	TB-14-082515	Total/NA	Water	8260C	
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	8260C	
LCS 490-279129/3	Lab Control Sample	Total/NA	Water	8260C	
MB 490-279129/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 279465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1 - RA	RW-3DS (155-160)-082515	Total/NA	Water	8260C	
490-86046-3 - RA	Dup-04-082515	Total/NA	Water	8260C	
490-86177-C-3 MS	Matrix Spike	Total/NA	Water	8260C	
490-86177-D-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	
LCS 490-279465/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-279465/4	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 490-279465/6	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 277972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	3510C	
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	3510C	
490-86046-2 MS	RW-2 (452-462)-082515	Total/NA	Water	3510C	
490-86046-2 MSD	RW-2 (452-462)-082515	Total/NA	Water	3510C	
490-86046-3	Dup-04-082515	Total/NA	Water	3510C	
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	3510C	
LCS 490-277972/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-277972/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 490-277972/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 277997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 277997 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	3510C	
490-86046-2 MS	RW-2 (452-462)-082515	Total/NA	Water	3510C	
490-86046-2 MSD	RW-2 (452-462)-082515	Total/NA	Water	3510C	
490-86046-3	Dup-04-082515	Total/NA	Water	3510C	
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	3510C	
LCS 490-277997/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-277997/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 278060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	8270D SIM	277972
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	8270D SIM	277972
490-86046-2 MS	RW-2 (452-462)-082515	Total/NA	Water	8270D SIM	277972
490-86046-2 MSD	RW-2 (452-462)-082515	Total/NA	Water	8270D SIM	277972
490-86046-3	Dup-04-082515	Total/NA	Water	8270D SIM	277972
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	8270D SIM	277972
LCS 490-277972/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	277972
LCSD 490-277972/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	277972
MB 490-277972/1-A	Method Blank	Total/NA	Water	8270D SIM	277972

Prep Batch: 278994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	3510C	
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	3510C	
490-86046-2 MS	RW-2 (452-462)-082515	Total/NA	Water	3510C	
490-86046-2 MSD	RW-2 (452-462)-082515	Total/NA	Water	3510C	
490-86046-3	Dup-04-082515	Total/NA	Water	3510C	
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	3510C	
LCS 490-278994/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-278994/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 490-278994/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 279221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	8270D SIM	278994
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	8270D SIM	278994
490-86046-2 MS	RW-2 (452-462)-082515	Total/NA	Water	8270D SIM	278994
490-86046-2 MSD	RW-2 (452-462)-082515	Total/NA	Water	8270D SIM	278994
490-86046-3	Dup-04-082515	Total/NA	Water	8270D SIM	278994
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	8270D SIM	278994
LCS 490-278994/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	278994
LCSD 490-278994/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	278994
MB 490-278994/1-A	Method Blank	Total/NA	Water	8270D SIM	278994

Analysis Batch: 279300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	8270D	277997
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	8270D	277997
490-86046-2 MS	RW-2 (452-462)-082515	Total/NA	Water	8270D	277997
490-86046-2 MSD	RW-2 (452-462)-082515	Total/NA	Water	8270D	277997
490-86046-3	Dup-04-082515	Total/NA	Water	8270D	277997

GC/MS Semi VOA (Continued)

Analysis Batch: 279300 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	8270D	277997
LCS 490-277997/2-A	Lab Control Sample	Total/NA	Water	8270D	277997
MB 490-277997/1-A	Method Blank	Total/NA	Water	8270D	277997

GC Semi VOA

Prep Batch: 279971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	3510C	
490-86046-3	Dup-04-082515	Total/NA	Water	3510C	
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	3510C	
LCS 490-279971/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-279971/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 280337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	8082A	279971
490-86046-3	Dup-04-082515	Total/NA	Water	8082A	279971
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	8082A	279971
LCS 490-279971/2-A	Lab Control Sample	Total/NA	Water	8082A	279971
MB 490-279971/1-A	Method Blank	Total/NA	Water	8082A	279971

HPLC/IC

Analysis Batch: 278255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	9056A	
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	9056A	
490-86046-2 MS	RW-2 (452-462)-082515	Total/NA	Water	9056A	
490-86046-2 MSD	RW-2 (452-462)-082515	Total/NA	Water	9056A	
490-86046-3	Dup-04-082515	Total/NA	Water	9056A	
LCS 490-278255/7	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-278255/8	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-278255/6	Method Blank	Total/NA	Water	9056A	

Analysis Batch: 279081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	9056A	
490-86046-5 MS	RW-11D (262-267)-082615	Total/NA	Water	9056A	
LCS 490-279081/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-279081/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 490-279081/3	Method Blank	Total/NA	Water	9056A	

Metals

Filtration Batch: 277068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Dissolved	Water	Filtration	
490-86046-2	RW-2 (452-462)-082515	Dissolved	Water	Filtration	
490-86046-2 MS	RW-2 (452-462)-082515	Dissolved	Water	Filtration	

Metals (Continued)

Filtration Batch: 277068 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-2 MSD	RW-2 (452-462)-082515	Dissolved	Water	Filtration	
490-86046-3	Dup-04-082515	Dissolved	Water	Filtration	
490-86046-5	RW-11D (262-267)-082615	Dissolved	Water	Filtration	
LCS 490-277068/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-277068/1-B	Method Blank	Dissolved	Water	Filtration	

Prep Batch: 277083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Dissolved	Water	3005A	277068
490-86046-2	RW-2 (452-462)-082515	Dissolved	Water	3005A	277068
490-86046-2 MS	RW-2 (452-462)-082515	Dissolved	Water	3005A	277068
490-86046-2 MSD	RW-2 (452-462)-082515	Dissolved	Water	3005A	277068
490-86046-3	Dup-04-082515	Dissolved	Water	3005A	277068
490-86046-5	RW-11D (262-267)-082615	Dissolved	Water	3005A	277068
LCS 490-277068/2-B	Lab Control Sample	Dissolved	Water	3005A	277068
MB 490-277068/1-B	Method Blank	Dissolved	Water	3005A	277068

Prep Batch: 277578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	3010A	
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	3010A	
490-86046-2 MS	RW-2 (452-462)-082515	Total/NA	Water	3010A	
490-86046-2 MSD	RW-2 (452-462)-082515	Total/NA	Water	3010A	
490-86046-3	Dup-04-082515	Total/NA	Water	3010A	
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	3010A	
LCS 490-277578/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-277578/1-A	Method Blank	Total/NA	Water	3010A	

Filtration Batch: 277940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Dissolved	Water	Filtration	
490-86046-2	RW-2 (452-462)-082515	Dissolved	Water	Filtration	
490-86046-2 MS	RW-2 (452-462)-082515	Dissolved	Water	Filtration	
490-86046-2 MSD	RW-2 (452-462)-082515	Dissolved	Water	Filtration	
490-86046-3	Dup-04-082515	Dissolved	Water	Filtration	
490-86046-5	RW-11D (262-267)-082615	Dissolved	Water	Filtration	
LCS 490-277940/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-277940/1-B	Method Blank	Dissolved	Water	Filtration	

Analysis Batch: 277984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	6020A	277578
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	6020A	277578
490-86046-2 MS	RW-2 (452-462)-082515	Total/NA	Water	6020A	277578
490-86046-2 MSD	RW-2 (452-462)-082515	Total/NA	Water	6020A	277578
490-86046-3	Dup-04-082515	Total/NA	Water	6020A	277578
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	6020A	277578
LCS 490-277578/2-A	Lab Control Sample	Total/NA	Water	6020A	277578
MB 490-277578/1-A	Method Blank	Total/NA	Water	6020A	277578

Metals (Continued)

Prep Batch: 278247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	7470A	
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	7470A	
490-86046-2 MS	RW-2 (452-462)-082515	Total/NA	Water	7470A	
490-86046-2 MSD	RW-2 (452-462)-082515	Total/NA	Water	7470A	
490-86046-3	Dup-04-082515	Total/NA	Water	7470A	
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	7470A	
LCS 490-278247/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 490-278247/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 278310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Dissolved	Water	7470A	277940
490-86046-2	RW-2 (452-462)-082515	Dissolved	Water	7470A	277940
490-86046-2 MS	RW-2 (452-462)-082515	Dissolved	Water	7470A	277940
490-86046-2 MSD	RW-2 (452-462)-082515	Dissolved	Water	7470A	277940
490-86046-3	Dup-04-082515	Dissolved	Water	7470A	277940
490-86046-5	RW-11D (262-267)-082615	Dissolved	Water	7470A	277940
LCS 490-277940/2-B	Lab Control Sample	Dissolved	Water	7470A	277940
MB 490-277940/1-B	Method Blank	Dissolved	Water	7470A	277940

Analysis Batch: 278353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	6020A	277578
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	6020A	277578
490-86046-2 MS	RW-2 (452-462)-082515	Total/NA	Water	6020A	277578
490-86046-2 MSD	RW-2 (452-462)-082515	Total/NA	Water	6020A	277578
490-86046-3	Dup-04-082515	Total/NA	Water	6020A	277578
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	6020A	277578

Analysis Batch: 278590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Dissolved	Water	7470A	278310
490-86046-2	RW-2 (452-462)-082515	Dissolved	Water	7470A	278310
490-86046-2 MS	RW-2 (452-462)-082515	Dissolved	Water	7470A	278310
490-86046-2 MSD	RW-2 (452-462)-082515	Dissolved	Water	7470A	278310
490-86046-3	Dup-04-082515	Dissolved	Water	7470A	278310
490-86046-5	RW-11D (262-267)-082615	Dissolved	Water	7470A	278310
LCS 490-277940/2-B	Lab Control Sample	Dissolved	Water	7470A	278310
MB 490-277940/1-B	Method Blank	Dissolved	Water	7470A	278310

Analysis Batch: 278710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	7470A	278247
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	7470A	278247
490-86046-2 MS	RW-2 (452-462)-082515	Total/NA	Water	7470A	278247
490-86046-2 MSD	RW-2 (452-462)-082515	Total/NA	Water	7470A	278247
490-86046-3	Dup-04-082515	Total/NA	Water	7470A	278247
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	7470A	278247
LCS 490-278247/2-A	Lab Control Sample	Total/NA	Water	7470A	278247
MB 490-278247/1-A	Method Blank	Total/NA	Water	7470A	278247

Metals (Continued)

Analysis Batch: 279070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Dissolved	Water	6020A	277083
490-86046-2	RW-2 (452-462)-082515	Dissolved	Water	6020A	277083
490-86046-2 MS	RW-2 (452-462)-082515	Dissolved	Water	6020A	277083
490-86046-2 MSD	RW-2 (452-462)-082515	Dissolved	Water	6020A	277083
490-86046-3	Dup-04-082515	Dissolved	Water	6020A	277083
490-86046-5	RW-11D (262-267)-082615	Dissolved	Water	6020A	277083
LCS 490-277068/2-B	Lab Control Sample	Dissolved	Water	6020A	277083
MB 490-277068/1-B	Method Blank	Dissolved	Water	6020A	277083

General Chemistry

Analysis Batch: 277090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85953-D-1 DU	Duplicate	Total/NA	Water	SM 2320B	
490-85957-S-1 DU	Duplicate	Total/NA	Water	SM 2320B	
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	SM 2320B	
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	SM 2320B	
490-86046-2 DU	RW-2 (452-462)-082515	Total/NA	Water	SM 2320B	
490-86046-3	Dup-04-082515	Total/NA	Water	SM 2320B	
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	SM 2320B	
LCS 490-277090/34	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 490-277090/6	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 490-277090/33	Method Blank	Total/NA	Water	SM 2320B	
MB 490-277090/5	Method Blank	Total/NA	Water	SM 2320B	

Prep Batch: 277534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	9012B	
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	9012B	
490-86046-2 MS	RW-2 (452-462)-082515	Total/NA	Water	9012B	
490-86046-2 MSD	RW-2 (452-462)-082515	Total/NA	Water	9012B	
490-86046-3	Dup-04-082515	Total/NA	Water	9012B	
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	9012B	
490-86046-5 DU	RW-11D (262-267)-082615	Total/NA	Water	9012B	
LCS 490-277534/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 490-277534/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 277627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-86046-1	RW-3DS (155-160)-082515	Total/NA	Water	9012B	277534
490-86046-2	RW-2 (452-462)-082515	Total/NA	Water	9012B	277534
490-86046-2 MS	RW-2 (452-462)-082515	Total/NA	Water	9012B	277534
490-86046-2 MSD	RW-2 (452-462)-082515	Total/NA	Water	9012B	277534
490-86046-3	Dup-04-082515	Total/NA	Water	9012B	277534
490-86046-5	RW-11D (262-267)-082615	Total/NA	Water	9012B	277534
490-86046-5 DU	RW-11D (262-267)-082615	Total/NA	Water	9012B	277534
LCS 490-277534/2-A	Lab Control Sample	Total/NA	Water	9012B	277534
MB 490-277534/1-A	Method Blank	Total/NA	Water	9012B	277534

Client Sample ID: RW-3DS (155-160)-082515

Lab Sample ID: 490-86046-1

Date Collected: 08/25/15 08:40

Matrix: Water

Date Received: 08/27/15 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	279129	09/04/15 23:15	JJR	TAL NSH
Total/NA	Analysis	8260C	RA	1	5 mL	5 mL	279465	09/05/15 19:20	KS	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278757	09/03/15 17:49	PS	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277997	09/01/15 09:06	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	279300	09/05/15 00:06	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277972	09/01/15 05:42	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	278060	09/01/15 17:12	BES	TAL NSH
Total/NA	Prep	3510C			290 mL	1 mL	278994	09/03/15 17:40	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	290 mL	1 mL	279221	09/04/15 15:47	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	279971	09/09/15 06:16	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	280337	09/09/15 22:53	HMT	TAL NSH
Total/NA	Analysis	9056A		5	10 mL		278255	09/01/15 16:50	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277083	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277068	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Analysis	6020A		5	50 mL	50 mL	279070	09/03/15 11:25	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	277578	08/30/15 10:12	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277984	08/31/15 19:44	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	277578	08/30/15 10:12	ZLN	TAL NSH
Total/NA	Analysis	6020A		50	50 mL	50 mL	278353	09/01/15 17:27	CME	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	278310	08/31/15 19:53	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	277940	08/31/15 19:53	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	278590	09/02/15 14:51	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	278247	09/01/15 16:15	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278710	09/02/15 16:40	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	277534	08/29/15 15:11	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	277627	08/30/15 14:17	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	277090	08/27/15 20:12	SMB	TAL NSH

Client Sample ID: RW-2 (452-462)-082515

Lab Sample ID: 490-86046-2

Date Collected: 08/25/15 13:30

Matrix: Water

Date Received: 08/27/15 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	279129	09/04/15 17:21	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278757	09/03/15 18:18	PS	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277997	09/01/15 09:06	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	279300	09/05/15 00:32	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277972	09/01/15 05:42	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	278060	09/01/15 17:40	BES	TAL NSH
Total/NA	Prep	3510C			290 mL	1 mL	278994	09/03/15 17:40	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	290 mL	1 mL	279221	09/04/15 16:15	KKH	TAL NSH
Total/NA	Analysis	9056A		5	10 mL		278255	09/01/15 17:14	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277083	08/28/15 10:18	ZLN	TAL NSH

Client Sample ID: RW-2 (452-462)-082515

Date Collected: 08/25/15 13:30
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	Filtration			50 mL	50 mL	277068	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Analysis	6020A		5	50 mL	50 mL	279070	09/03/15 10:59	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	277578	08/30/15 10:12	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277984	08/31/15 19:18	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	277578	08/30/15 10:12	ZLN	TAL NSH
Total/NA	Analysis	6020A		50	50 mL	50 mL	278353	09/01/15 17:06	CME	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	278310	08/31/15 19:53	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	277940	08/31/15 19:53	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	278590	09/02/15 14:43	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	278247	09/01/15 16:15	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278710	09/02/15 16:33	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	277534	08/29/15 15:11	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	277627	08/30/15 14:18	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	277090	08/27/15 21:16	SMB	TAL NSH

Client Sample ID: Dup-04-082515

Date Collected: 08/25/15 12:00
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	279129	09/04/15 17:48	JJR	TAL NSH
Total/NA	Analysis	8260C	RA	1	5 mL	5 mL	279465	09/05/15 19:47	KS	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278757	09/03/15 18:47	PS	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277997	09/01/15 09:06	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	279300	09/05/15 01:48	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277972	09/01/15 05:42	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	278060	09/01/15 19:02	BES	TAL NSH
Total/NA	Prep	3510C			290 mL	1 mL	278994	09/03/15 17:40	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	290 mL	1 mL	279221	09/04/15 17:39	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	279971	09/09/15 06:16	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	280337	09/09/15 23:08	HMT	TAL NSH
Total/NA	Analysis	9056A		5	10 mL		278255	09/01/15 18:26	CLN	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277083	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277068	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Analysis	6020A		5	50 mL	50 mL	279070	09/03/15 11:30	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	277578	08/30/15 10:12	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277984	08/31/15 19:50	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	277578	08/30/15 10:12	ZLN	TAL NSH
Total/NA	Analysis	6020A		50	50 mL	50 mL	278353	09/01/15 17:32	CME	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	278310	08/31/15 19:53	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	277940	08/31/15 19:53	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	278590	09/02/15 14:53	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	278247	09/01/15 16:15	RDF	TAL NSH

Client Sample ID: Dup-04-082515

Lab Sample ID: 490-86046-3

Date Collected: 08/25/15 12:00

Matrix: Water

Date Received: 08/27/15 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7470A		1	30 mL	30 mL	278710	09/02/15 16:48	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	277534	08/29/15 15:11	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	277627	08/30/15 14:20	DRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	277090	08/27/15 20:19	SMB	TAL NSH

Client Sample ID: TB-14-082515

Lab Sample ID: 490-86046-4

Date Collected: 08/26/15 01:00

Matrix: Water

Date Received: 08/27/15 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	279129	09/04/15 15:59	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278757	09/03/15 14:00	PS	TAL NSH

Client Sample ID: RW-11D (262-267)-082615

Lab Sample ID: 490-86046-5

Date Collected: 08/26/15 10:30

Matrix: Water

Date Received: 08/27/15 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	279129	09/04/15 19:10	JJR	TAL NSH
Total/NA	Analysis	8260C SIM		1	10 mL	10 mL	278757	09/03/15 19:15	PS	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277997	09/01/15 09:06	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	279300	09/05/15 02:14	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	277972	09/01/15 05:42	ET	TAL NSH
Total/NA	Analysis	8270D SIM		1	250 mL	1 mL	278060	09/01/15 19:29	BES	TAL NSH
Total/NA	Prep	3510C			290 mL	1 mL	278994	09/03/15 17:40	MLT	TAL NSH
Total/NA	Analysis	8270D SIM		1	290 mL	1 mL	279221	09/04/15 18:07	KKH	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	279971	09/09/15 06:16	ET	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	280337	09/09/15 23:24	HMT	TAL NSH
Total/NA	Analysis	9056A		1	10 mL		279081	09/04/15 06:04	JHS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	277083	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	277068	08/28/15 10:18	ZLN	TAL NSH
Dissolved	Analysis	6020A		5	50 mL	50 mL	279070	09/03/15 11:46	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	277578	08/30/15 10:12	ZLN	TAL NSH
Total/NA	Analysis	6020A		1	50 mL	50 mL	277984	08/31/15 19:55	KKK	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	277578	08/30/15 10:12	ZLN	TAL NSH
Total/NA	Analysis	6020A		50	50 mL	50 mL	278353	09/01/15 17:37	CME	TAL NSH
Dissolved	Prep	7470A			30 mL	30 mL	278310	08/31/15 19:53	RDF	TAL NSH
Dissolved	Filtration	Filtration			30 mL	30 mL	277940	08/31/15 19:53	RDF	TAL NSH
Dissolved	Analysis	7470A		1	30 mL	30 mL	278590	09/02/15 14:55	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	278247	09/01/15 16:15	RDF	TAL NSH
Total/NA	Analysis	7470A		1	30 mL	30 mL	278710	09/02/15 16:50	RDF	TAL NSH
Total/NA	Prep	9012B			50 mL	50 mL	277534	08/29/15 15:11	ADJ	TAL NSH
Total/NA	Analysis	9012B		1	50 mL	50 mL	277627	08/30/15 14:21	DRM	TAL NSH

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Client Sample ID: RW-11D (262-267)-082615
Date Collected: 08/26/15 10:30
Date Received: 08/27/15 10:00

Lab Sample ID: 490-86046-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1	35 mL	35 mL	277090	08/27/15 20:30	SMB	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
9056A	Anions, Ion Chromatography	SW846	TAL NSH
6020A	Metals (ICP/MS)	SW846	TAL NSH
7470A	Mercury (CVAA)	SW846	TAL NSH
7470A	7470A – Mercury (CVAA) – Aqueous Matrix	SW846	TAL NSH
9012B	Cyanide, Total andor Amenable	SW846	TAL NSH
SM 2320B	Alkalinity	SM	TAL NSH

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-86046-1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	TN965	09-30-15

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
8270D	3510C	Water	1,4-Dioxane

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total
8260C		Water	Dichlorobromomethane
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	1,4-Dioxane
8260C SIM		Water	Ethylene Dibromide
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-86046 Chain of Custody

Cooler Received/Opened On 8/27/2015 @ 1000

1. Tracking # 3445 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 1.9 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES..NO..NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES..NO..NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO...NA

b. Was there any observable headspace present in any VOA vial? YES..NO..NA

14. Was there a Trip Blank in this cooler? YES..NO..NA If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES..NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO...#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
86046

Cooler Received/Opened On 8/27/2015 @ 1000

1. Tracking # 3434 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 17960357

2. Temperature of rep. sample or temp blank when opened: 4.3 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) HG

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Loc: 490
86046

Client Information	Sampler: Robert Loutenberg	Lab PM: Brown, Shali	Carrie
Client Contact: Tim Roeper	Phone: 8456950200	E-Mail: shali.brown@testamericainc.com	
Company: Cornerstone Environmental Group, LLC/ FORD			
Address: 100 Crystal Run Road Suite 101	Due Date Requested:		
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package		
State, Zip: NY, 10941			
Phone: 845-695-0252(Tel)	PO #:		
Email: tim.roeper@cornerstoneeg.com	WO #:		
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864		
Site:	SSOW#:		

COC No: 490-41539-14078.2
Page:
Job #:

Analysis Requeste

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate	Total Number of containers	Special Instructions/Note:
				Preservation Code:														
RW-3DS(155-160)-082515	8/25/15	08:40	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
RW-2(452-462)-082515 MS/MSD	8/25/15	13:30	G	Water	N	Y	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Dup-04-082515	8/25/15	12:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
TB-14-082615	8/26/15	—	—	Water	N	N	✓	✓										
RW-11D(262-267)-082615	8/26/15	10:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
				Water														
				Water														
				Water														
				Water														
				Water														
				Water														

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	8/26/15 1225	Cornerstone	James Thiessen	8/26/15 12:25	TA.
James Thiessen	8/26/15 1615	TA	[signature] 4.3/1.9	8/27/15 1000	TAN

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 490-86046-1

Login Number: 86046
List Number: 1
Creator: Gundi, Hozar K

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-85948-2
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Tim Roeper

Authorized for release by:
11/20/2015 12:45:52 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-85948-4	RW-5A-082415	Water	08/24/15 10:25	08/26/15 11:53
490-85948-6	RW-4A (113-123)-082415	Water	08/24/15 09:35	08/26/15 11:53

Job ID: 490-85948-2

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 490-85948-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 8/26/2015 11:53 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.3º C, 1.2º C and 1.8º C.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples RW-5A-082415 (490-85948-4) and RW-4A (113-123)-082415 (490-85948-6) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 11/17/2015 and analyzed on 11/18/2015.

Original analysis of these samples were reported in TestAmerica job 490-85948-1. Re-analysis from additional containers from original submittal was requested.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-299311.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-2

Client Sample ID: RW-5A-082415
Date Collected: 08/24/15 10:25
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-4
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.38	U	0.45	0.38	ug/L		11/17/15 16:28	11/18/15 13:40	1
PCB-1221	0.30	U	0.45	0.30	ug/L		11/17/15 16:28	11/18/15 13:40	1
PCB-1232	0.36	U	0.45	0.36	ug/L		11/17/15 16:28	11/18/15 13:40	1
PCB-1242	0.20	U	0.45	0.20	ug/L		11/17/15 16:28	11/18/15 13:40	1
PCB-1248	0.13	U	0.45	0.13	ug/L		11/17/15 16:28	11/18/15 13:40	1
PCB-1254	0.15	U	0.45	0.15	ug/L		11/17/15 16:28	11/18/15 13:40	1
PCB-1260	0.16	U	0.45	0.16	ug/L		11/17/15 16:28	11/18/15 13:40	1
Polychlorinated biphenyls, Total	0.38	U	0.45	0.38	ug/L		11/17/15 16:28	11/18/15 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*103*		*10 - 150*	*11/17/15 16:28*	*11/18/15 13:40*	*1*
Tetrachloro-m-xylene	*102*		*10 - 150*	*11/17/15 16:28*	*11/18/15 13:40*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-2

Client Sample ID: RW-4A (113-123)-082415
Date Collected: 08/24/15 09:35
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-6
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		11/17/15 16:28	11/18/15 13:55	1
PCB-1221	0.34	U	0.50	0.34	ug/L		11/17/15 16:28	11/18/15 13:55	1
PCB-1232	0.40	U	0.50	0.40	ug/L		11/17/15 16:28	11/18/15 13:55	1
PCB-1242	0.22	U	0.50	0.22	ug/L		11/17/15 16:28	11/18/15 13:55	1
PCB-1248	0.15	U	0.50	0.15	ug/L		11/17/15 16:28	11/18/15 13:55	1
PCB-1254	0.17	U	0.50	0.17	ug/L		11/17/15 16:28	11/18/15 13:55	1
PCB-1260	0.18	U	0.50	0.18	ug/L		11/17/15 16:28	11/18/15 13:55	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		11/17/15 16:28	11/18/15 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*91*		*10 - 150*	*11/17/15 16:28*	*11/18/15 13:55*	*1*
Tetrachloro-m-xylene	*82*		*10 - 150*	*11/17/15 16:28*	*11/18/15 13:55*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-299311/1-A
Matrix: Water
Analysis Batch: 299485

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 299311

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.43	U	0.50	0.43	ug/L		11/17/15 16:28	11/18/15 13:08	1
PCB-1221	0.34	U	0.50	0.34	ug/L		11/17/15 16:28	11/18/15 13:08	1
PCB-1232	0.40	U	0.50	0.40	ug/L		11/17/15 16:28	11/18/15 13:08	1
PCB-1242	0.22	U	0.50	0.22	ug/L		11/17/15 16:28	11/18/15 13:08	1
PCB-1248	0.15	U	0.50	0.15	ug/L		11/17/15 16:28	11/18/15 13:08	1
PCB-1254	0.17	U	0.50	0.17	ug/L		11/17/15 16:28	11/18/15 13:08	1
PCB-1260	0.18	U	0.50	0.18	ug/L		11/17/15 16:28	11/18/15 13:08	1
Polychlorinated biphenyls, Total	0.43	U	0.50	0.43	ug/L		11/17/15 16:28	11/18/15 13:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*113*		*10 - 150*	*11/17/15 16:28*	*11/18/15 13:08*	*1*
Tetrachloro-m-xylene	*97*		*10 - 150*	*11/17/15 16:28*	*11/18/15 13:08*	*1*

Lab Sample ID: LCS 490-299311/2-A
Matrix: Water
Analysis Batch: 299485

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 299311

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	3.69		ug/L		92	23 - 139
PCB-1260	4.00	3.68		ug/L		92	36 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*94*		*10 - 150*
Tetrachloro-m-xylene	*85*		*10 - 150*

QC Association Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-2

GC Semi VOA

Prep Batch: 299311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-4	RW-5A-082415	Total/NA	Water	3510C	
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	3510C	
LCS 490-299311/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-299311/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 299485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-85948-4	RW-5A-082415	Total/NA	Water	8082A	299311
490-85948-6	RW-4A (113-123)-082415	Total/NA	Water	8082A	299311
LCS 490-299311/2-A	Lab Control Sample	Total/NA	Water	8082A	299311
MB 490-299311/1-A	Method Blank	Total/NA	Water	8082A	299311

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-2

Client Sample ID: RW-5A-082415

Date Collected: 08/24/15 10:25
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			280 mL	1 mL	299311	11/17/15 16:28	MRM	TAL NSH
Total/NA	Analysis	8082A		1	280 mL	1 mL	299485	11/18/15 13:40	MGH	TAL NSH

Client Sample ID: RW-4A (113-123)-082415

Date Collected: 08/24/15 09:35
Date Received: 08/26/15 11:53

Lab Sample ID: 490-85948-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	299311	11/17/15 16:28	MRM	TAL NSH
Total/NA	Analysis	8082A		1	250 mL	1 mL	299485	11/18/15 13:55	MGH	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-2

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 490-85948-2

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	TN965	11-30-15

The following analytes are included in this report, but are not certified under this certification:

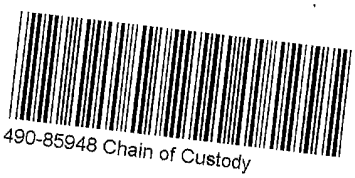
Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	PCB-1016
8082A	3510C	Water	PCB-1221
8082A	3510C	Water	PCB-1232
8082A	3510C	Water	PCB-1242
8082A	3510C	Water	PCB-1248
8082A	3510C	Water	PCB-1254
8082A	3510C	Water	PCB-1260

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FOR



Cooler Received/Opened On: 8/26/2015 @0915

1. Tracking # 3364 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 1.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES..NO..NA

If yes, how many and where: 0

5. Were the seals intact, signed, and dated correctly? YES...NO..NA

6. Were custody papers inside cooler? YES..NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) HKG

7. Were custody seals on containers: YES NO and Intact YES...NO..NA

Were these signed and dated correctly? YES...NO..NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO...NA

b. Was there any observable headspace present in any VOA vial? YES..NO..NA

14. Was there a Trip Blank in this cooler? YES..NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES..NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

S(Loc: 490 y
85948

Cooler Received/Opened On: 8/26/2015 @0915

1. Tracking # 3375 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 0.3 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where: 0

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? YES..(NO)..NA

I certify that I opened the cooler and answered questions 1-6 (intial) HKG

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

Were these signed and dated correctly? YES...NO..(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? (YES)..NO...NA

b. Was there any observable headspace present in any VOA vial? YES..(NO)..NA

14. Was there a Trip Blank in this cooler? YES..(NO)..NA If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? (YES).NO..NA

b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA

16. Was residual chlorine present? YES..(NO)..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

11/20/2015

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FO

S Loc: 490 ey
85948
#1
K

Cooler Received/Opened On: 8/26/2015 @0915

1. Tracking # 3386 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 1.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO. NA

4. Were custody seals on outside of cooler? YES..NO..NA

If yes, how many and where: ∅

5. Were the seals intact, signed, and dated correctly? YES...NO..NA

6. Were custody papers inside cooler? YES..NO..NA

I certify that I opened the cooler and answered questions 1-6 (intial) ∅

7. Were custody seals on containers: YES NO and Intact YES...NO..NA

Were these signed and dated correctly? YES...NO..NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES..NO...NA

14. Was there a Trip Blank in this cooler? YES..NO..NA If multiple coolers, sequence # 3

I certify that I unloaded the cooler and answered questions 7-14 (intial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES.NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES..NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HKG

I certify that I attached a label with the unique LIMS number to each container (intial) HKG

21. Were there Non-Conformance issues at login? YES. NO Was a NCM generated? YES. NO .#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
85948
#1
L

TestAmerica

11/20/2015

Client Information	Sampler: Robert Lauterberg	Lab PM: Brown, Shali	Carrier Tr	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filterl)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalimity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
OB-15B-082415	8/24/15	1115	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
RW-13(21-91)-082415	8/24/15	13:35	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
FB-01-082415	8/24/15	07:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
RW-5A-082415	8/24/15	10:25	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
OB-7-082415	8/24/15	12:50	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
RW-4A(113-123)-082415	8/24/15	09:35	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
RW-4(333-343)-082415	8/24/15	11:25	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
TB-13-082515	8/25/15	—	—	Water	N	N	✓	✓													
				Water																	
				Water																	
				Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8/25/15 0800	Cornerstone		8/25/15 0800	TA
James Thiessen	8-25-15 1140	TA		8/26/15 915	TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 490-85948-2

Login Number: 85948
List Number: 1
Creator: Gundi, Hozar K

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

ATTACHMENT D

DATA VALIDATION REPORTS (ON COMPACT DISC)

E-Mail Date: 2015-10-04
E-Mail To: tim.roeper@cornerstoneeg.com
cc:

U.S. Mail: Tim Roeper
Cornerstone Environmental Group
100 Crystal Run Road, Suite 101
Middletown, NY 10941

ANALYTICAL DATA VALIDATION REPORT
Ringwood Mines/Landfill
Ford Motor Company
CLIENT PROJECT NUMBER - not available
CADENA PROJECT E203361
SAMPLES COLLECTED August 2015
SUBMITTAL #: 490-84420-1

PREPARED BY:
CADENA, INC.
1099 Highland Drive
Ann Arbor, MI 48108
Telephone: 517-819-0356
Fax: 734-975-6709
Contact: Jim Tomalia (jtomalia@cadenaco.com)
Date: 2015-10-04
www.CADENACO.com

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1.0 INTRODUCTION

The following document details an assessment of the analytical data reported by TestAmerica-Nashville Laboratory the data in the submittals listed below which were collected from the Ringwood Mines/Landfill site as noted. A sampling and analysis summary that lists all sample ID's and testing as related to the laboratory submittal numbers is presented in Appendix 1. A summary of all of the analytical data is presented in Appendix 3. Copies of sample Chain of Custody (COC) documents and cooler receipt forms for samples discussed in this report are included in Attachment A.

Table 1.1

Laboratory Submittal	***Sample Date***	***Laboratory Receipt Date***
490-84420-1	8/04/2015	8/06/2015

The samples noted below were validated against the associated method/parameter in order to achieve the validation requirements for this SDG:

Table 1.2

Parameter	***Reference Method***	***Analyte Listing***
Volatile Organics	OSW-8260C	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8260CSIM	1,2-Dibromo-3-Chloropropane,1,4-Dioxane,EthyleneDibromide,1,2,3-Trichloropropane
Semi-Volatile Organics	OSW-8270D	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8270DSIM	Benzo(a)anthracene,Benzo(a)pyrene, Benzo(b)fluoranthene,Hexachlorobenzene, Hexachlorobutadiene,N-Nitrosodimethylamine,Pentachlorophenol
PCB	OSW-8082A	7 Standard Aroclors
Metals	OSW-6020A/7470A	Total and dissolved TAL Metals
Ion Chromatography	OSW-9056A	Chloride and Sulfate
Total Cyanide	OSW-9021B	Total and Amenable Cyanide
General Chemistry	APHA-2320B	Total and Bicarbonate Alkalinity

All "SW" analytical methods were referenced from "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition, November 1986 (with all subsequent revisions). The "SM" analytical method was referenced from the "Standard Methods for the Examination of Water and Waste water", latest promulgated revision. "EPA" methods were referenced from the revisions noted.

Laboratory Standard Operating Procedures (SOPs) associated with the methods utilized for this laboratory submittal were not available to CADENA for the purpose of validating this SDG.

Level IV data review provides a comprehensive or extensive review of the analytical data allowing for the complete reconstruction of the chemical analysis. A Level IV (Tier 3) data review was performed on the samples listed in Table 1.2 above by (CADENA).

All of the data that was recalculated was consistent with the reported results to within at least 2 significant figures. Final results may not recalculate exactly beyond this level of precision, in some cases, due to differences in available significant figures between the hardcopy raw data provided and the data utilized for calculations by the laboratory that came directly from the instrument. A table of the laboratory documents reviewed in preparing this report is included in Appendix 2.

The data was reviewed in accordance with the analytical methods and the documents listed below: (NOTE: laboratory criteria – control limits – were utilized to evaluate the data where available. Comparison to NFG criteria are noted when lab criteria was not available or for informational purposes when lab data exceeds NFG criteria).

i.) "Standard Operating Procedure HW-6 Rev12 March 2001: CLP Organics Data Review and Preliminary Review" USEPA Region 2 as identified in project QAPP.
ii.) "Standard Operating Procedure HW-2, Rev11, Jan 1992: Evaluation of Metals Data for the CLP Program" as identified in the project QAPP.

The Level VI review findings are presented in the following subsections.

An overview of the review findings is presented in table format. Several data qualifier flags were utilized in the review process. The definitions of these qualifier flags are as follows:

- J Indicates an estimated value.
- U Indicates the compound or analyte was analyzed for, but not detected at or above the stated limit.
- UJ The analyte/compound was not detected above the reported sample quantitation limit. However, the quantitation limit is considered to be approximate due to associated quality assurance results.
- UB The analyte was detected in the sample at a level between the MDL and RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the reporting limit.
- B The analyte was detected in the sample at a level above the RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the concentration reported.
- R The analyte/compound results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte/compound cannot be verified.

All flags have been incorporated into the data tables in this report.

1.1 VALIDATION QUALIFIER EXECUTIVE SUMMARY

VALIDATION SUMMARY

GCMS VOC
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
GCMS SVOC-SIM
Client samples -001 and -002 were re-analyzed outside of the referenced holding time (QC batch 272814) in response to low QC batch LCS recoveries for pentachlorophenol (QC batch 272220) so these re-analysis results should be considered to be estimated and qualified with UJ flags if non-detect and J flags if detected with the exception of pentachlorophenol results which are R flagged for both analyses.
PCB
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
METALS
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
INORGANICS
No additional qualifications were made beyond those determined from level 2 verification review as noted below.

The following observations **DID NOT** result in qualification but were noted during the validation review:
GCMS VOC – Initial Calibration – cyclohexane RRF and RSD values reported in summary sheet were based on calibration levels 2 through 7 (as opposed to levels 1 through 9). This is not immediately evident based on initial observations but was confirmed by recalculating RRF and RSD using only levels 2 through 7.
CCV – For sequence dated 8/15 had multiple outliers biased high that did not affect client sample results (associated results were non-detect). CCV response for 1,4-Dioxane was biased low but this analyte was not quantified as part of this analytical batch.
GCMS SVOC – ICV was used in place of CCV for sequence confirmation of 8/11. ICV outliers for Caprolactam (low bias) and Benzaldehyde (high bias) did not affect qualification of client sample results.
METALS – Sample 84420-2 Total Magnesium analysis QC summary form showed an internal standard failure biased low for Li-6. Raw data for this analysis showed internal standard results were within referenced criteria so qualification was not made based on the summary form alone.
CRQL's outside of lab criteria biased high did not affect qualification of client sample results.
PCB – internal standard technique was used for both columns. Some initial and continuing calibration outliers were observed for non-aroclor 1016/1260 peaks on the secondary columns but these outliers did not affect sample quantitation. There was no ending CCV reported for the sequence evaluated.

VERIFICATION SUMMARY

The following qualifications and associated data flags were applied based on the initial level 2 review of this data package.

The following significant QC anomalies were identified during verification of the analytical report:

GCMS SVOC QC batch LCS recoveries were outliers biased high for benzaldehyde and biased low and less than 10% for pentachlorophenol. Client samples -001 and -002 pentachlorophenol results should be considered to be unusable and qualified with R flags if non-detect and estimated with J flags if detected. Benzaldehyde results did not require qualification.

The following minor QC exceptions or missing information were noted:

GCMS VOC QC batch method blanks had detections below the RL for 1,2,4-trichlorobenzene, methylene chloride, hexachlorobutadiene and naphthalene. Qualification of client sample results was not required based on these method blank detections.

GCMS VOC trip blank had a detection below the RL for acetone. Qualification of client sample results was not required based on this trip blank detection.

GCMS VOC QC batch LCS recoveries were outliers biased high for cyclohexane. Client samples -001 and -002 results for this analyte should be considered to be estimated and qualified with J flags.

GCMS VOC QC batch MS recovery outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

GCMS VOC and GCMS SVOC TIC results should be considered to be estimated and qualified with NJ flags unless the TIC analyte detected is an instrument calibrated compound that is just not part of the TAL for this submittal in which case no qualification is required other than the TIC qualification code.

GCMS SVOC QC batch 272218 and PCB QC batch 272220 did not include MS recovery data due to insufficient sample volume available for spiking according to the laboratory submittal case narrative.

Metals method blanks had detections below the RL in QC batch 272053 for arsenic and vanadium and in QC batch 272304 for arsenic, copper and vanadium. Client samples -001 and -002 total and dissolved arsenic results and client samples -001 and -002 dissolved vanadium results should be considered to be non-detect at the RL and qualified with UB flags. Client samples -001 and -002 total vanadium results should be considered to be non-detect at the concentration reported and qualified with B flags.

Metals QC batch 272053 MS recovery outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

Cyanide sample -001 MSD recovery only was an outlier biased low so qualification was not required based on this QC outlier alone. QC batch sample duplicate RPD outlier was not determined using a sample from this submittal so qualification of client sample results was not required based on this sample-specific QC outlier.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

2.0 VOLATILE ORGANIC COMPOUNDS (VOCs) – METHOD SW846 8260C and SIM Analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

2.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) VOCs

2.1.1 TUNING AND MASS CALIBRATION – GC/MS VOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

2.1.2 INITIAL CALIBRATION – GC/MS VOCs

Initial calibration data for VOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS VOCs

Initial calibration verification (ICV) standards for VOC analyses were reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

2.2 CONTINUING CALIBRATION – GC/MS VOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.3 INTERNAL STANDARDS – GC/MS VOCs

Internal standard (IS) data were reviewed and met criteria without exception.

2.4 SURROGATE SPIKE RECOVERIES – GC/MS VOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

2.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS VOCs

A laboratory control sample (LCS) was prepared and analyzed for VOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

2.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS VOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

2.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS VOCs

There were no field duplicate comparisons performed as part of this validation request.

2.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS VOCs

All target analytes were reported based on comparison to project-specific criteria. Potential non-conformances with project requirements were not observed.

2.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS VOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable unless noted otherwise in verification/validation summary.

2.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS VOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

2.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS VOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

3.0 SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) – METHOD SW846 8270D and SIM analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

3.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) SVOCs

3.1.1 TUNING AND MASS CALIBRATION – GC/MS SVOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

3.1.2 INITIAL CALIBRATION – GC/MS SVOCs

Initial calibration data for SVOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

3.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS SVOCs

Initial calibration verification (ICV) standards for SVOC analyses were reviewed and met criteria specified by the laboratory with no exceptions.

3.2 CONTINUING CALIBRATION – GC/MS SVOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary

3.3 INTERNAL STANDARDS – GC/MS SVOCs

Internal standard (IS) data were reviewed and met criteria without exception.

3.4 SURROGATE SPIKE RECOVERIES – GC/MS SVOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

3.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS SVOCs

A laboratory control sample (LCS) was prepared and analyzed for SVOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

3.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS SVOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

3.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS SVOCs

There were no field duplicate comparisons performed as part of this validation request.

3.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS SVOCs

All target analytes were reported based on comparison to project-specific criteria. Potential non-conformances with project requirements are noted below:

3.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS SVOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable without exception.

3.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS SVOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

3.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS SVOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

4.0 POLYCHLORINATED BIPHENYLS (PCBs) – METHOD SW846 8082A

The target analyte list was defined by the client as the standard 7 aroclors.

4.1 CALIBRATION – GAS CHROMATOGRAPH-ECD
4.1.1 TUNING AND MASS CALIBRATION – PCB

Not applicable for this analysis.

4.1.2 INITIAL CALIBRATION – PCB

Initial calibration data for PCBs were reviewed and met the criteria for instrument sensitivity and linearity of response without exception.

4.1.3 INITIAL CALIBRATION VERIFICATION – PCB

Initial calibration verification (ICV) standards for PCB analyses were reviewed and met criteria specified by the laboratory with no exceptions.

4.2 CONTINUING CALIBRATION – PCBs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

4.3 INTERNAL STANDARDS – PCB

Internal standard (IS) data were reviewed and met criteria unless noted otherwise in verification/validation summary. (NOTE: Lab quantitation approach DID use internal standard quantitation for this submittal).

4.4 SURROGATE SPIKE RECOVERIES – PCB

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

4.5 LABORATORY CONTROL SAMPLE ANALYSES - PCB

A laboratory control sample (LCS) was prepared and analyzed for PCBs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary..

4.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - PCB

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

4.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - PCB

There were no field duplicate comparisons performed as part of this validation request.

4.8 EXTRACT CLEANUP - PCB

Extract cleanups were performed in accordance with laboratory SOP's and as noted in level 4 data package prep logs.

4.9 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - PCB

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable unless noted otherwise in verification/validation summary.

4.10 TENTATIVELY IDENTIFIED COMPOUNDS - PCB

Not requested for this analytical procedure.

4.11 BLANKS – METHOD/FIELD/CALIBRATION - PCB

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

5.0 HPLC/IC – METHOD SW846 9056A – CHLORIDE AND SULFATE

5.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

5.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

5.3 CONTINUTING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

5.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

5.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

5.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

5.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Reconciliation of laboratory target compounds and corresponding limits of detection against the client QAPP was not performed as part of this validation request.

5.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

6.0 METALS – ICPMS by Method 6020 TOTAL AND DISSOLVED and Mercury by Method 7470A

The following samples provided in this SDG underwent a Level IV review for either/and metals or mercury analyses:

- Method 6020A: ALL
- Method 7470A: ALL

6.1 ICP/MS TUNING AND MASS CALIBRATION

Instrument tuning data were reviewed. Tuning elements were analyzed. All tuning criteria were met for the analyses, indicating proper optimization of the instrumentation.

6.2 INITIAL CALIBRATION

Initial calibration data for metals and mercury were reviewed and met the criteria for linearity of response without exception.

6.3 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards for metals and mercury analyses were reviewed and met criteria without exception.

An initial calibration blank (ICB) was analyzed for metals and mercury analyses. Metals and mercury were reported as non-detect in each ICB analysis unless noted otherwise in verification/validation summary.

6.4 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for metals and mercury analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

6.5 INTERFERENCE CHECK STANDARD

The interference check standard results were reviewed and found to meet criteria.

6.6 INTERNAL STANDARDS

Internal standard (IS) data were reviewed and found to meet criteria unless noted otherwise in verification/validation summary..

6.7 LABORATORY CONTROL SAMPLE ANALYSIS

A laboratory control sample (LCS) was prepared and analyzed for metals and mercury. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

6.8 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE (MS/MSD) ANALYSES

The MS/MSD recoveries and RPD's were either not performed using a client sample or were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

6.9 CONTRACT REQUIRED DETECTION LIMIT STANDARD ANALYSES

Each contract required detection limit (CRDL) standard was analyzed at the proper frequency and were within laboratory control limits unless noted otherwise in verification/validation summary.

6.10 ICP SERIAL DILUTION

Serial dilutions were analyzed at the proper frequency and were either not performed using the client sample or were within laboratory control limits unless noted otherwise in verification/validation summary.

6.11 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

6.12 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Reconciliation of laboratory target compounds and corresponding limits of detection against the client QAPP was not performed as part of this validation request.

6.13 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

7.0 GENERAL CHEMISTRY- TOTAL AND AMENABLE CYANIDE AND ALKALINITY – METHODS 9012B and 2320B

7.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

7.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

7.3 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

7.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

7.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

7.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

7.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Reconciliation of laboratory target compounds and corresponding limits of detection against the client QAPP was not performed as part of this validation request.

7.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

8.0 REPRESENTATIVENESS EVALUATION

Representativeness is a qualitative evaluation of whether the data represents actual environmental conditions. Representativeness was evaluated using holding time criteria, which reflect the length of time after sample collection that a sample or extract remains representative of environmental conditions. Depending on the analysis, either one or two holding times were evaluated.

i.) For those analyses that do not include a sample extraction, only one holding time was evaluated: the length of time between sample collection and analysis.

ii.) For analyses that require sample extraction prior to analysis, two holding times were evaluated: the length of time from sampling until extraction and the length of time from extraction to analysis.

Holding times are compared to standard method specific holding times accepted or recommended by the United States Environmental Protection Agency (USEPA). Those holding times outside of USEPA acceptance criteria are qualitatively evaluated to determine their effect on sample representativeness.

Representativeness was also evaluated by analysis of laboratory method blanks and field equipment blanks. Laboratory method blanks and field equipment blanks are used to identify sources of contamination not associated with environmental conditions.

8.1 SAMPLE PRESERVATION AND HOLDING TIMES

Sample holding time and preservation requirements are summarized in Appendix 5.

All sample extractions and/or analyses were performed within the specified holding times unless noted otherwise in verification/validation summary.

All samples were properly preserved and cooled to 0-6°C after collection.

8.2 METHOD BLANK SUMMARY

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

Evaluation of blank contamination includes directions on the interpretation of the affected analytical results.

9.0 USABILITY AND COMPARABIILTY

Usability of data was evaluated by assuring that all the analytical requests were met, samples were received in the proper condition, and all analyses were performed within the appropriate holding times unless noted otherwise in verification/validation summary

No data evaluated within this delivery group was considered unusable (qualified with an R flag) due to sample integrity, sample matrix interference or batch quality control issues unless noted otherwise in verification/validation summary.

10.0 QC SUMMARY

All sample results meet the project specific QAPP standard for usability with exceptions defined by validation and verification qualifiers as applied. Please reference the following tables for a summary of the investigative field sample data and their valid qualifiers based on Level 4 technical review of the analytical data.

APPENDIX 1

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Nashville
Laboratory Submittal: 84420-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	Metals by ICP Spectroscopy(D)	Metals by ICP Mass Spectroscopy	(Manual Cold Vapor)(D)	(Manual Cold Vapor)	AMENABLE (AUTOMATED COLORIMETRI	Anions by IC	Alkalinity Prep
490844201	SC-1-080415	8/4/2015	10:40:00	X	X	X	X	X	X	X	X	X	X	X	X
490844202	RW-6A-080415	8/4/2015	2:15:00	X	X	X	X	X	X	X	X	X	X	X	X
490844203	TB-01-080515	8/4/2015	1:00:00	X	X										

APPENDIX 2

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-84420-1
August 2015

Description

- Standard Report Cover page
- Table of Contents
- SDG Case Narrative
- Sample Summary
- Executive Summary detection highlights
- Method Summary
- Method/Analyst Summary
- Analytical Results
- Surrogate Summary
- Quality Control Results
- Data Qualifiers
- QC Summary Association
- Lab Chronicle
- GCMS Volatiles Data - Method 8260C and SIM
  - QC Summary Data
    - Surrogate recoveries (form II)
    - Check Sample recoveries (form III)
    - Matrix spike/Matrix spike duplicate report (form III)
    - Method blank report (form IV)
    - Tuning and mass calibrations (form V)
    - Internal Standard and RT area summary (form VIII)
  - Sample Data
    - GCMS VOA Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Total Ion Profile Chromatogram
    - Ion profiles of detected target analyte peaks
    - Manual integration if applicable
    - Tentatively Identified Compound Reports (if applicable)
  - Standards Data
    - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
    - ICAL Raw integration data from instrument
    - ICAL Total Ion Profile Chromatogram
    - ICV check standard recovery report (Form VII)
    - ICV check standard total ion profile with integration
    - GCMS VOA Continuing Calibration Data (Form VII)
    - CCV raw integration data from instrument
    - CCV Total Ion Profile Chromatogram
    - Manual integration if applicable
  - Raw QC Data
    - Tune information (not included with SIM package)
    - FORM I - QC data
    - Method Blank integration/internal standard and total ion profile raw data
    - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
    - MS and MSD integration/internal standard and total ion profile raw data
  - Miscellaneous Data
    - Run logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
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E203361 - 490-84420-1
August 2015

Description

GCMS Semivolatiles Data - Method 8270D and SIM

- QC Summary Data
  - Surrogate recoveries (form II)
  - Check Sample recoveries (form III)
  - Method blank report (form IV)
  - Tuning and mass calibrations (form V) (not applicable for SIM)
  - Internal Standard and RT area summary (form VIII)
- Sample Data
  - GCMS VOA Organics Analysis Data Sheet (Form I)
  - Raw integration data from instrument
  - Total Ion Profile Chromatogram
  - Ion profiles of detected target analyte peaks
  - Manual integration if applicable
  - Tentatively Identified Compound Reports (if applicable)
- Standards Data
  - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
  - ICAL Raw integration data from instrument
  - ICAL Total Ion Profile Chromatogram
  - ICV check standard recovery report
  - ICV check standard total ion profile with integration
  - GCMS VOA Continuing Calibration Data (Form VII)
  - CCV raw integration data from instrument
  - CCV Total Ion Profile Chromatogram
  - Manual integration if applicable
- Raw QC Data
  - Tune information (not applicable for SIM)
  - Method Blank integration/internal standard and total ion profile raw data
  - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
- Miscellaneous Data
  - Instrument run logs
  - Extraction bench sheets

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-84420-1
August 2015

Description

- Polychlorinated Biphenyls Data (PCB)
  - QC Summary data
    - Surrogate recoveries (form II)
    - Check Sample Recovery data (form III)
    - Method Blank data (form IV)
    - Analytical sequence with RT check (Form VIII)
    - Identification Summary (Form X)
  - Sample Data
    - Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Chromatogram
  - Standards Data (both columns)
    - Initial Calibration Data External Standard RT Summary (Form VI)
    - Initial Calibration Data Summary with average RF
    - Raw integration data from instrument with manual integrations where applicable
    - ICAL chromatograms
    - Continuing Calibration Data (Form VII) with RT Summaries
    - ICV raw integration and chromatograms
    - CCV raw integration data from instrument
    - CCV chromatogram
  - Raw QC Data
    - LCS/LCSD sample data report and integration and chromatograms
    - Method blank integration and chromatograms
  - Miscellaneous Data
    - Sequence table (run log)
    - PCB Batch Worksheet
- HPLC/IC - 9056A ORGFM_28D - Anions, Ion Chromatography - Sulfate and Chloride
  - Raw Data and Data Summaries for:
    - LCS/LCSD (form III)
    - MS/MSD (form III)
    - METHOD BLANKS (Form IV)
    - SAMPLE DATA (Form I)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VI)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VII)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - QC DATA (Form I)
      - Raw instrument data and chromatography
    - Analysis Run Logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-84420-1
August 2015

Description

METALS DATA (ICPMS and mercury)
- Forms Data
  - Cover Page
  - Inorganic Analysis Data Sheet - Metals Dissolved/Total Recoverable (1A-IN)
  - CCV standard report - mercury and ICPMS (2A-IN)
  - CRQL report - mercury and ICPMS (2B-IN)
  - ICB report - mercury and ICPMS (3-IN)
  - Method blank report (3-IN)
  - Interference check standard A - ICPMS (4A-IN)
  - Interference check standard AB - ICPMS (4A-IN)
  - MS/MSD Sample recovery (5A-IN)
  - PDS Summary (5B-IN)
  - LCS Recovery form (7A-IN)
  - LCS Duplicate Recover (7D-IN)
  - ICP-MS Serial Dilutions (8-IN)
  - Detection Limits Form (9-IN)
  - Linear dynamic ranges - ICPMS (11-IN)
  - Prep log - mercury and ICPMS (12-IN)
  - Run log - ICPMS and Mercury (13-IN)
  - ICP-MS TUNE (14-IN)
  - ICPMS Internal Standards Relative Intensity Summary (15-IN)
- Instrument Printouts
  - ICP-MS Raw instrument data
  - Mercury raw instrument data, run logs and calibrations
- Miscellaneous Data
  - Metals Batch Worksheet

GENERAL CHEMISTRY - Total and Amenable Cyanide and Alkalinity
- Cover Page
- Raw Data and Data Summaries for:
  - Sample Data (Form 1B-IN)
  - CCV/CCB (Form 2-IN)
  - METHOD BLANKS (Form 3-IN)
  - MATRIX SPIKES (Form 5-IN)
  - Sample DUPLICATES (Form 6-IN)
  - LCS/LCSD (Form 7-IN)
  - Detection Limits Form (9-IN)
  - Prep log (12-IN)
  - Analysis Run Logs (13-IN)
  - Raw Data - instrument sample sequence and calibration curve
  - Alkalinity Reagents
  - Alkalinity pH meter calibration
  - Alkalinity sequence log and raw data
  - General Chemistry Batch Worksheets

Shipping and Receiving Documents
- COC forms
- Cooler Receipt Form, checklist and narrative

APPENDIX 3

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84420-1

		Sample Name:	SC-1-080415				RW-6A-080415				TB-01-080515			
		Lab Sample ID:	490844201				490844202				490844203			
		Sample Date:	8/4/2015				8/4/2015				8/4/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	0.42	1.0	ug/l	J	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trimethylbenzene - TIC	526-73-8	3.6	1.0	ug/l	---	13	1.0	ug/l	---				
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trimethylbenzene - TIC	95-63-6	4.7	1.0	ug/l	---								
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3,5-Trimethylbenzene - TIC	108-67-8	1.1	1.0	ug/l	---	2.6	1.0	ug/l	---				
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	0.27	1.0	ug/l	J	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Phenylbut-1-ene - TIC	934-10-1					4.3	---	ug/l	NJ				
4-Isopropyltoluene - TIC	99-87-6	0.26	1.0	ug/l	J								
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	5.9	25	ug/l	J
Benzene	71-43-2	1.3	1.0	ug/l	---	7.7	1.0	ug/l	---	ND	1.0	ug/l	---
Benzene, (1-methyl-1-propenyl)-, (E)- - TIC	768-00-3					4.7	---	ug/l	NJ				
Benzene, 1,2,3,4-tetramethyl- - TIC	488-23-3	5.7	---	ug/l	NJ	10	---	ug/l	NJ				
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7	3.4	---	ug/l	NJ								
Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2					3.8	---	ug/l	NJ				
Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9					13	---	ug/l	NJ				
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6	5.8	---	ug/l	NJ	15	---	ug/l	NJ				
Benzene, 2-ethyl-1,4-dimethyl- - TIC	1758-88-9	4.9	---	ug/l	NJ								
Benzene, 4-ethyl-1,2-dimethyl- - TIC	934-80-5					3.3	---	ug/l	NJ				
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	0.21	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	0.53	1.0	ug/l	J	2.0	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	2.0	5.0	ug/l	J	4.1	5.0	ug/l	J	ND	5.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7	3.3	---	ug/l	NJ	10	---	ug/l	NJ				
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethyl acrylate - TIC	140-88-5	0.63	5.0	ug/l	NJ								
Ethylbenzene	100-41-4	2.0	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Indane - TIC	496-11-7	4.5	---	ug/l	NJ	19	---	ug/l	NJ				
Isopropylbenzene	98-82-8	1.6	1.0	ug/l	---	4.6	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	1.1	5.0	ug/l	J	0.74	5.0	ug/l	J	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
n-Butylbenzene - TIC	104-51-8	0.95	1.0	ug/l	J	1.5	1.0	ug/l	---				
N-Propylbenzene - TIC	103-65-1	0.58	1.0	ug/l	J	4.8	1.0	ug/l	---				
Naphthalene - TIC	91-20-3	7.5	5.0	ug/l	---	8.1	5.0	ug/l	---				
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	0.61	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Total Alkanes - TIC	Tic1	0.00	---	ug/l	NJ	0.00	---	ug/l	NJ	0.00	---	ug/l	NJ
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	60	3.0	ug/l	---	12	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	0.39	10	ug/l	J	2.7	10	ug/l	J	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84420-1

		Sample Name:	SC-1-080415				RW-6A-080415				TB-01-080515			
		Lab Sample ID:	490844201				490844202				490844203			
		Sample Date:	8/4/2015				8/4/2015				8/4/2015			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS SVOC													
OSW-8270D													
.alpha.-Pinene - TIC	80-56-8					3.8	---	ug/l	NJ				
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---				
1-Phenyl-1-butene - TIC	824-90-8	4.4	---	ug/l	NJ	6.8	---	ug/l	NJ				
2(3H)-Benzothiazolone - TIC	934-34-9	6.3	---	ug/l	NJ	4.2	---	ug/l	NJ				
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---				
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---				
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---				
2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---	ND	25	ug/l	---				
2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---	ND	10	ug/l	---				
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---				
2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---				
2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---				
2-Nitroaniline	88-74-4	ND	25	ug/l	---	ND	25	ug/l	---				
2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---				
3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---	ND	10	ug/l	---				
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---				
3-Nitroaniline	99-09-2	ND	25	ug/l	---	ND	25	ug/l	---				
4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---	ND	25	ug/l	---				
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---				
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---				
4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---				
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---				
4-Nitroaniline	100-01-6	ND	25	ug/l	---	ND	25	ug/l	---				
4-Nitrophenol	100-02-7	ND	25	ug/l	---	ND	25	ug/l	---				
Acenaphthene	83-32-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Acenaphthylene	208-96-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Acetophenone	98-86-2	ND	10	ug/l	---	2.4	10	ug/l	J				
Anthracene	120-12-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Atrazine	1912-24-9	ND	10	ug/l	---	ND	10	ug/l	---				
Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---				
Benzene, 1,2,3,4-tetramethyl- - TIC	488-23-3	4.9	---	ug/l	NJ	7.0	---	ug/l	NJ				
Benzene, 1,2,3-trimethyl- - TIC	526-73-8	6.4	---	ug/l	NJ								
Benzene, 4-ethyl-1,2-dimethyl- - TIC	934-80-5	3.9	---	ug/l	NJ								
Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	80-30-8	8.0	---	ug/l	NJ								
Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	2437-95-8	4.0	---	ug/l	NJ								
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---				
Bis(2-chloroethyl)ether	111-44-4	2.9	10	ug/l	J	3.4	10	ug/l	J				
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---	ND	10	ug/l	---				
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---				
Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---				
Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---				
Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7					4.8	---	ug/l	NJ				
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---				
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---				
Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---				
Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---				
Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---				
Diphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---				
Fluoranthene	206-44-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Fluorene	86-73-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---				
Hexachloroethane	67-72-1	ND	10	ug/l	---	ND	10	ug/l	---				
Indane - TIC	496-11-7	3.6	---	ug/l	NJ	10	---	ug/l	NJ				
Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---				
N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---	ND	10	ug/l	---				
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---				
Naphthalene	91-20-3	5.5	2.0	ug/l	---	5.6	2.0	ug/l	---				
Nitrobenzene	98-95-3	ND	10	ug/l	---	ND	10	ug/l	---				
Phenanthrene	85-01-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---				
Phenol, 4,4'-(1-methylethylidene)bis- - TIC	80-05-7					13	---	ug/l	NJ				
Pyrene	129-00-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Squalene - TIC	7683-64-9	7.5	---	ug/l	NJ								

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84420-1

			Sample Name:	SC-1-080415			RW-6A-080415				TB-01-080515			
			Lab Sample ID:	490844201			490844202				490844203			
			Sample Date:	8/4/2015			8/4/2015				8/4/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---				
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---				
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	R	ND	0.30	ug/l	R				
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
Metals														
OSW-6020A														
	Aluminum	7429-90-5	0.056	0.020	mg/l	---	0.0098	0.020	mg/l	J				
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	ND	0.020	mg/l	---				
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Antimony - Dissolved	7440-36-0	0.00050	0.0020	mg/l	J	ND	0.0020	mg/l	---				
	Arsenic	7440-38-2	0.0011	0.0020	mg/l	UB	0.0014	0.0020	mg/l	UB				
	Arsenic - Dissolved	7440-38-2	0.00084	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB				
	Barium	7440-39-3	0.46	0.0020	mg/l	---	0.048	0.0020	mg/l	---				
	Barium - Dissolved	7440-39-3	0.40	0.0020	mg/l	---	0.036	0.0020	mg/l	---				
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---				
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---				
	Calcium	7440-70-2	42.5	1.0	mg/l	---	85.5	1.0	mg/l	---				
	Calcium - Dissolved	7440-70-2	39.0	1.0	mg/l	---	87.5	1.0	mg/l	---				
	Chromium	7440-47-3	0.0038	0.0020	mg/l	---	0.00080	0.0020	mg/l	J				
	Chromium - Dissolved	7440-47-3	0.00079	0.0020	mg/l	J	ND	0.0020	mg/l	---				
	Cobalt	7440-48-4	0.0034	0.0020	mg/l	---	0.019	0.0020	mg/l	---				
	Cobalt - Dissolved	7440-48-4	0.0030	0.0020	mg/l	---	0.019	0.0020	mg/l	---				
	Copper	7440-50-8	0.00053	0.0020	mg/l	J	0.00071	0.0020	mg/l	J				
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Iron	7439-89-6	70.1	0.025	mg/l	---	22.2	0.025	mg/l	---				
	Iron - Dissolved	7439-89-6	51.4	0.025	mg/l	---	9.8	0.025	mg/l	---				
	Lead	7439-92-1	0.013	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Lead - Dissolved	7439-92-1	0.0020	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Magnesium	7439-95-4	4.4	1.0	mg/l	---	19.3	1.0	mg/l	---				
	Magnesium - Dissolved	7439-95-4	4.1	1.0	mg/l	---	20.0	1.0	mg/l	---				
	Manganese	7439-96-5	0.75	0.0020	mg/l	---	15.7	0.040	mg/l	---				
	Manganese - Dissolved	7439-96-5	0.64	0.0020	mg/l	---	14.2	0.20	mg/l	---				
	Nickel	7440-02-0	0.013	0.0020	mg/l	---	0.0033	0.0020	mg/l	---				
	Nickel - Dissolved	7440-02-0	0.012	0.0020	mg/l	---	0.0041	0.0020	mg/l	---				
	Potassium	7440-09-7	2.4	1.0	mg/l	---	2.8	1.0	mg/l	---				
	Potassium - Dissolved	7440-09-7	2.2	1.0	mg/l	---	2.8	1.0	mg/l	---				
	Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Sodium	7440-23-5	4.1	1.0	mg/l	---	8.2	1.0	mg/l	---				
	Sodium - Dissolved	7440-23-5	3.5	1.0	mg/l	---	8.1	1.0	mg/l	---				
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Vanadium	7440-62-2	0.0039	0.0020	mg/l	B	0.0033	0.0020	mg/l	B				
	Vanadium - Dissolved	7440-62-2	0.0013	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB				
	Zinc	7440-66-6	0.034	0.025	mg/l	---	ND	0.025	mg/l	---				
	Zinc - Dissolved	7440-66-6	0.010	0.025	mg/l	J	ND	0.025	mg/l	---				
OSW-7470A														
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---				
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---				
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---				
OSW-9056A														
	Chloride	16887-00-6	1.45	1.00	mg/l	---	2.00	1.00	mg/l	---				
	Sulfate	14808-79-8	ND	1.00	mg/l	---	ND	1.00	mg/l	---				
Prep														
APHA-2320B														
	Bicarbonate Alkalinity as CaCO3	E-14508	217	10.0	mg/l	---	326	10.0	mg/l	---				
	Total Alkalinity as CaCO3	E-14506	217	10.0	mg/l	---	326	10.0	mg/l	---				

APPENDIX 4

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84420-1

			Sample Name:	SC-1-080415				RW-6A-080415				TB-01-080515			
			Lab Sample ID:	490844201				490844202				490844203			
			Sample Date:	8/4/2015				8/4/2015				8/4/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
	OSW-8260C													
	3-Phenylbut-1-ene - TIC	934-10-1					4.3	---	ug/l	NJ				
	4-Isopropyltoluene - TIC	99-87-6	0.26	1.0	ug/l	J								
	Benzene, (1-methyl-1-propenyl)-, (E)- - TIC	768-00-3					4.7	---	ug/l	NJ				
	Benzene, 1,2,3,4-tetramethyl- - TIC	488-23-3	5.7	---	ug/l	NJ	10	---	ug/l	NJ				
	Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7	3.4	---	ug/l	NJ								
	Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2					3.8	---	ug/l	NJ				
	Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9					13	---	ug/l	NJ				
	Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6	5.8	---	ug/l	NJ	15	---	ug/l	NJ				
	Benzene, 2-ethyl-1,4-dimethyl- - TIC	1758-88-9	4.9	---	ug/l	NJ								
	Benzene, 4-ethyl-1,2-dimethyl- - TIC	934-80-5					3.3	---	ug/l	NJ				
	Cyclohexane	110-82-7	2.0	5.0	ug/l	J	4.1	5.0	ug/l	J				
	Cyclopentane, methyl- - TIC	96-37-7	3.3	---	ug/l	NJ	10	---	ug/l	NJ				
	Ethyl acrylate - TIC	140-88-5	0.63	5.0	ug/l	NJ								
	Indane - TIC	496-11-7	4.5	---	ug/l	NJ	19	---	ug/l	NJ				
	n-Butylbenzene - TIC	104-51-8	0.95	1.0	ug/l	J								
	N-Propylbenzene - TIC	103-65-1	0.58	1.0	ug/l	J								
	Total Alkanes - TIC	Tic1	0.00	---	ug/l	NJ	0.00	---	ug/l	NJ	0.00	---	ug/l	NJ
GC/MS SVOC														
	OSW-8270D													
	.alpha.-Pinene - TIC	80-56-8					3.8	---	ug/l	NJ				
	1-Phenyl-1-butene - TIC	824-90-8	4.4	---	ug/l	NJ	6.8	---	ug/l	NJ				
	2(3H)-Benzothiazolone - TIC	934-34-9	6.3	---	ug/l	NJ	4.2	---	ug/l	NJ				
	Benzene, 1,2,3,4-tetramethyl- - TIC	488-23-3	4.9	---	ug/l	NJ	7.0	---	ug/l	NJ				
	Benzene, 1,2,3-trimethyl- - TIC	526-73-8	6.4	---	ug/l	NJ								
	Benzene, 4-ethyl-1,2-dimethyl- - TIC	934-80-5	3.9	---	ug/l	NJ								
	Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	80-30-8	8.0	---	ug/l	NJ								
	Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	2437-95-8	4.0	---	ug/l	NJ								
	Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7					4.8	---	ug/l	NJ				
	Indane - TIC	496-11-7	3.6	---	ug/l	NJ	10	---	ug/l	NJ				
	Phenol, 4,4'-(1-methylethylidene)bis- - TIC	80-05-7					13	---	ug/l	NJ				
	Squalene - TIC	7683-64-9	7.5	---	ug/l	NJ								
	OSW-8270DSim													
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	R	ND	0.30	ug/l	R				
Metals														
	OSW-6020A													
	Arsenic	7440-38-2	0.0011	0.0020	mg/l	UB	0.0014	0.0020	mg/l	UB				
	Arsenic - Dissolved	7440-38-2	0.00084	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB				
	Vanadium	7440-62-2	0.0039	0.0020	mg/l	B	0.0033	0.0020	mg/l	B				
	Vanadium - Dissolved	7440-62-2	0.0013	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB				

APPENDIX 5

EPA Sample Holding Time and Preservation Requirements

Parameter	*Reference Method*	*Matrix*	*Preservation & Storage*	*Holding Times*
Volatile Organics by GCMS	OSW-8260C/SIM	Water	Acidify ph<2 Refrigeration 0-6oC	14 days
Semivolatile Organics by GCMS	OSW-8270D/SIM	Water	Refrigeration 0-6oC	7 days Extraction 40 days Analysis
Polychlorinated Biphenyls by GC/ECD	OSW-8082A	Water	Refrigeration 0-6oC	365 days - Extraction - Analysis
Metals by ICP/ICPMS Spectroscopy	OSW-6010B OSW-6020A	Water	Acidify pH<2 Refrigeration 0-6oC	180 days
Mercury in Aqueous Waste	OSW-7470A	Water	Acidify pH<2 Refrigeration 0-6oC	28 days
Alkalinity	EPA 2320B	Water	Refrigeration 0-6oC	14 days
Chloride and Sulfate	OSW-9056A	Water	Refrigeration 0-6oC	28 days
Total and Amenable Cyanide	OSW-9012B	Water	Test for presence of Sulfide – if unknown collect two samples and treat one with Lead Carbonate. Then adjust sample to pH of greater than or equal to 12with NaOH. Refrigeration at 0-4C –(also may require treatment for aldehydes and chlorine/hypochlorite/sulfite)	14 days if preserved. 24 hours or sooner if unpreserved

ATTACHMENT A

CHAIN OF CUSTODY DOCUMENT(S)

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica

Loc: 490
84420

09/11/2015

Client Information	Sampler: Robert Lautenberg	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:

Address: 100 Crystal Run Road Suite 101	Due Date Requested:
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package
State, Zip: NY, 10941	
Phone: 845-695-0252(Tel)	PO #:
Email: tim.roeper@cornerstoneeg.com	WO #:
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864
Site:	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	8082A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filterl)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate			Total Number of containers	Special Instructions/Note:
				Preservation Code:																	
1	SC-1-080415	8/4/15	10:40	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
2	RW-6A-080415	8/4/15	14:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
3	TB-01-080515	8/5/15	-	-	Water	N	N	✓	✓												
					Water																
					Water																
					Water																
					Water																
					Water																
					Water																
					Water																
					Water																

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 8/5/2015 820	Company 1	Received by: James Thiessen	Date/Time: 8-5-2015 820	Company TA
Relinquished by: James Thiessen	Date/Time: 8/5/2015 1210	Company	Received by:	Date/Time: 8.6.15 @ 0850	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.3/0Bc

E-Mail Date: 2015-10-06
E-Mail To: tim.roeper@cornerstoneeg.com
cc:

U.S. Mail: Tim Roeper
Cornerstone Environmental Group
100 Crystal Run Road, Suite 101
Middletown, NY 10941

ANALYTICAL DATA VALIDATION REPORT
Ringwood Mines/Landfill
Ford Motor Company
CLIENT PROJECT NUMBER - not available
CADENA PROJECT E203361
SAMPLES COLLECTED August 2015
SUBMITTAL #: 490-84595-1

PREPARED BY:
CADENA, INC.
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ATTACHMENT A CHAIN OF CUSTODY DOCUMENT(S)

1.0 INTRODUCTION

The following document details an assessment of the analytical data reported by TestAmerica-Nashville Laboratory the data in the submittals listed below which were collected from the Ringwood Mines/Landfill site as noted. A sampling and analysis summary that lists all sample ID's and testing as related to the laboratory submittal numbers is presented in Appendix 1. A summary of all of the analytical data is presented in Appendix 3. Copies of sample Chain of Custody (COC) documents and cooler receipt forms for samples discussed in this report are included in Attachment A.

Table 1.1

Laboratory Submittal	***Sample Date***	***Laboratory Receipt Date***
490-84595-1	8/05-06/2015	8/07/2015

The samples noted below were validated against the associated method/parameter in order to achieve the validation requirements for this SDG:

Table 1.2

Parameter	***Reference Method***	***Analyte Listing***
Volatile Organics	OSW-8260C	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8260CSIM	1,2-Dibromo-3-Chloropropane,1,4-Dioxane,EthyleneDibromide,1,2,3-Trichloropropane
Semi-Volatile Organics	OSW-8270D	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8270DSIM	Benzo(a)anthracene,Benzo(a)pyrene, Benzo(b)fluoranthene,Hexachlorobenzene, Hexachlorobutadiene,N-Nitrosodimethylamine,Pentachlorophenol
PCB	OSW-8082A	7 Standard Aroclors
Metals	OSW-6020A/7470A	Total and dissolved TAL Metals
Ion Chromatography	OSW-9056A	Chloride and Sulfate
Total Cyanide	OSW-9021B	Total and Amenable Cyanide
General Chemistry	APHA-2320B	Total and Bicarbonate Alkalinity

All "SW" analytical methods were referenced from "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition, November 1986 (with all subsequent revisions). The "SM" analytical method was referenced from the "Standard Methods for the Examination of Water and Waste water", latest promulgated revision. "EPA" methods were referenced from the revisions noted.

Laboratory Standard Operating Procedures (SOPs) associated with the methods utilized for this laboratory submittal were not available to CADENA for the purpose of validating this SDG.

Level IV data review provides a comprehensive or extensive review of the analytical data allowing for the complete reconstruction of the chemical analysis. A Level IV (Tier 3) data review was performed on the samples listed in Table 1.2 above by (CADENA).

All of the data that was recalculated was consistent with the reported results to within at least 2 significant figures. Final results may not recalculate exactly beyond this level of precision, in some cases, due to differences in available significant figures between the hardcopy raw data provided and the data utilized for calculations by the laboratory that came directly from the instrument. A table of the laboratory documents reviewed in preparing this report is included in Appendix 2.

The data was reviewed in accordance with the analytical methods and the documents listed below: (NOTE: laboratory criteria – control limits – were utilized to evaluate the data where available. Comparison to NFG criteria are noted when lab criteria was not available or for informational purposes when lab data exceeds NFG criteria).

i.) "Standard Operating Procedure HW-6 Rev12 March 2001: CLP Organics Data Review and Preliminary Review" USEPA Region 2 as identified in project QAPP.
ii.) "Standard Operating Procedure HW-2, Rev11, Jan 1992: Evaluation of Metals Data for the CLP Program" as identified in the project QAPP.

The Level VI review findings are presented in the following subsections.

An overview of the review findings is presented in table format. Several data qualifier flags were utilized in the review process. The definitions of these qualifier flags are as follows:

- J Indicates an estimated value.
- U Indicates the compound or analyte was analyzed for, but not detected at or above the stated limit.
- UJ The analyte/compound was not detected above the reported sample quantitation limit. However, the quantitation limit is considered to be approximate due to associated quality assurance results.
- UB The analyte was detected in the sample at a level between the MDL and RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the reporting limit.
- B The analyte was detected in the sample at a level above the RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the concentration reported.
- R The analyte/compound results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte/compound cannot be verified.

All flags have been incorporated into the data tables in this report.

1.1 VALIDATION QUALIFIER EXECUTIVE SUMMARY

VALIDATION SUMMARY

GCMS VOC
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
GCMS SVOC-SIM
Client samples -001, -002, -003, -004 and -005 were re-analyzed outside of the referenced holding time (QC batch 273404) in response to low QC batch LCS recoveries for pentachlorophenol (QC batch 272220) so these re-analysis results should be considered to be estimated and qualified with UJ flags if non-detect and J flags if detected for pentachlorophenol results.
PCB
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
METALS
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
INORGANICS
No additional qualifications were made beyond those determined from level 2 verification review as noted below.

The following observations **DID NOT** result in qualification but were noted during the validation review:
GCMS VOC
CCV/ICV – Sequences had outliers biased high that did not affect client sample results (associated results were either non-detect or outliers were not associated with target analytes).
GCMS SVOC – ICV was used in place of CCV for sequence confirmation of 8/11. ICV outliers for Caprolactam (low bias) and Benzaldehyde (high bias) did not affect qualification of client sample results.
METALS – Internal standard outliers as noted in raw data were not associated with final reported sample results.
CRQL's outside of lab criteria biased high did not affect qualification of client sample results.
PCB – internal standard technique was used for both columns. Some initial and continuing calibration outliers were observed for non-aroclor 1016/1260 peaks on the secondary columns but these outliers did not affect sample quantitation. There was no ending CCV reported for the sequences evaluated.

VERIFICATION SUMMARY

The following qualifications and associated data flags were applied based on the initial level 2 review of this data package.

The following significant QC anomalies were identified during verification of the analytical report:

GCMS SVOC QC batch 272218 LCS recoveries were outliers biased high for benzaldehyde and QC batch 272220 biased low and less than 10% for pentachlorophenol. Client samples original analyses results for pentachlorophenol should be considered to be unusable and qualified with R flags if non-detect and estimated with J flags if detected. Sample re-analysis results for pentachlorophenol were prepped outside of the referenced holding time but with acceptable LCS recoveries so these re-analysis results should be considered to be estimated and qualified with J flags if detected and UJ flags if non-detect. Benzaldehyde results did not require qualification

The following minor QC exceptions or missing information were noted:

GCMS VOC QC batch 273831 method blank had a detection below the RL for carbon disulfide. Qualification of client sample results was not required based on these method blank detections.

GCMS VOC trip blank had a detection below the RL for acetone. Client sample -004 acetone results should be considered to be non-detect at the RL and qualified with a UB flag.

GCMS VOC and GCMS SVOC TIC results should be considered to be estimated and qualified with NJ flags unless the TIC analyte detected is an instrument calibrated compound that is just not part of the TAL for this submittal in which case no qualification is required other than the TIC qualification code.

GCMS SVOC QC batch 272218 and 272220 and GCMS VOC QC batch 274395 and 273958 and PCB QC batch did not include MS recovery data due to insufficient sample volume available for spiking according to the laboratory submittal case narrative.

Metals method blanks had detections below the RL in QC batch 272053 for arsenic and vanadium and in QC batch 272304 for arsenic and vanadium and in QC batch 272910 for vanadium. Client samples -001 and -003 total and dissolved arsenic results and client sample -005 dissolved arsenic results and client samples -001, -002, -003 and -005 dissolved vanadium results should be considered to be non-detect at the RL and qualified with UB flags. Client samples -002 dissolved arsenic results and client samples -001, -002, -003, -004, -005 total vanadium and sample -004 dissolved vanadium results should be considered to be non-detect at the concentration reported and qualified with B flags.

Metals QC batch 272053 and 272910 and Mercury QC batch 272423 and Cyanide QC batch 271876 MS recovery outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

2.0 VOLATILE ORGANIC COMPOUNDS (VOCs) – METHOD SW846 8260C and SIM Analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

2.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) VOCs

2.1.1 TUNING AND MASS CALIBRATION – GC/MS VOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

2.1.2 INITIAL CALIBRATION – GC/MS VOCs

Initial calibration data for VOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS VOCs

Initial calibration verification (ICV) standards for VOC analyses were reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

2.2 CONTINUING CALIBRATION – GC/MS VOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.3 INTERNAL STANDARDS – GC/MS VOCs

Internal standard (IS) data were reviewed and met criteria without exception.

2.4 SURROGATE SPIKE RECOVERIES – GC/MS VOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

2.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS VOCs

A laboratory control sample (LCS) was prepared and analyzed for VOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

2.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS VOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

2.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS VOCs

There were no field duplicate comparisons performed as part of this validation request.

2.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS VOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

2.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS VOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable unless noted otherwise in verification/validation summary.

2.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS VOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

2.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS VOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

3.0 SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) – METHOD SW846 8270D and SIM analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

3.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) SVOCs

3.1.1 TUNING AND MASS CALIBRATION – GC/MS SVOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

3.1.2 INITIAL CALIBRATION – GC/MS SVOCs

Initial calibration data for SVOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

3.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS SVOCs

Initial calibration verification (ICV) standards for SVOC analyses were reviewed and met criteria specified by the laboratory with no exceptions.

3.2 CONTINUING CALIBRATION – GC/MS SVOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary

3.3 INTERNAL STANDARDS – GC/MS SVOCs

Internal standard (IS) data were reviewed and met criteria without exception.

3.4 SURROGATE SPIKE RECOVERIES – GC/MS SVOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

3.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS SVOCs

A laboratory control sample (LCS) was prepared and analyzed for SVOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

3.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS SVOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

3.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS SVOCs

There were no field duplicate comparisons performed as part of this validation request.

3.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS SVOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

3.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS SVOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable without exception.

3.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS SVOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

3.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS SVOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

4.0 POLYCHLORINATED BIPHENYLS (PCBs) – METHOD SW846 8082A

The target analyte list was defined by the client as the standard 7 aroclors.

4.1 CALIBRATION – GAS CHROMATOGRAPH-ECD
4.1.1 TUNING AND MASS CALIBRATION – PCB

Not applicable for this analysis.

4.1.2 INITIAL CALIBRATION – PCB

Initial calibration data for PCBs were reviewed and met the criteria for instrument sensitivity and linearity of response without exception.

4.1.3 INITIAL CALIBRATION VERIFICATION – PCB

Initial calibration verification (ICV) standards for PCB analyses were reviewed and met criteria specified by the laboratory with no exceptions.

4.2 CONTINUING CALIBRATION – PCBs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

4.3 INTERNAL STANDARDS – PCB

Internal standard (IS) data were reviewed and met criteria unless noted otherwise in verification/validation summary. (NOTE: Lab quantitation approach DID use internal standard quantitation for this submittal).

4.4 SURROGATE SPIKE RECOVERIES – PCB

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

4.5 LABORATORY CONTROL SAMPLE ANALYSES - PCB

A laboratory control sample (LCS) was prepared and analyzed for PCBs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary..

4.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - PCB

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

4.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - PCB

There were no field duplicate comparisons performed as part of this validation request.

4.8 EXTRACT CLEANUP - PCB

Extract cleanups were performed in accordance with laboratory SOP's and as noted in level 4 data package prep logs.

4.9 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - PCB

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

4.10 TENTATIVELY IDENTIFIED COMPOUNDS - PCB

Not requested for this analytical procedure.

4.11 BLANKS – METHOD/FIELD/CALIBRATION - PCB

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

5.0 HPLC/IC – METHOD SW846 9056A – CHLORIDE AND SULFATE

5.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

5.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

5.3 CONTINUTING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

5.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

5.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

5.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

5.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

5.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

6.0 METALS – ICPMS by Method 6020 TOTAL AND DISSOLVED and Mercury by Method 7470A

The following samples provided in this SDG underwent a Level IV review for either/and metals or mercury analyses:

- Method 6020A: ALL
- Method 7470A: ALL

6.1 ICP/MS TUNING AND MASS CALIBRATION

Instrument tuning data were reviewed. Tuning elements were analyzed. All tuning criteria were met for the analyses, indicating proper optimization of the instrumentation.

6.2 INITIAL CALIBRATION

Initial calibration data for metals and mercury were reviewed and met the criteria for linearity of response without exception.

6.3 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards for metals and mercury analyses were reviewed and met criteria unless otherwise noted in verification/validation summary section of this document.

An initial calibration blank (ICB) was analyzed for metals and mercury analyses. Metals and mercury were reported as non-detect in each ICB analysis unless noted otherwise in verification/validation summary.

6.4 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for metals and mercury analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

6.5 INTERFERENCE CHECK STANDARD

The interference check standard results were reviewed and found to meet criteria.

6.6 INTERNAL STANDARDS

Internal standard (IS) data were reviewed and found to meet criteria unless noted otherwise in verification/validation summary.

6.7 LABORATORY CONTROL SAMPLE ANALYSIS

A laboratory control sample (LCS) was prepared and analyzed for metals and mercury. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

6.8 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE (MS/MSD) ANALYSES

The MS/MSD recoveries and RPD's were either not performed using a client sample or were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

6.9 CONTRACT REQUIRED DETECTION LIMIT STANDARD ANALYSES

Each contract required detection limit (CRDL) standard was analyzed at the proper frequency and were within laboratory control limits unless noted otherwise in verification/validation summary.

6.10 ICP SERIAL DILUTION

Serial dilutions were analyzed at the proper frequency and were either not performed using the client sample or were within laboratory control limits unless noted otherwise in verification/validation summary.

6.11 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

6.12 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

6.13 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

7.0 GENERAL CHEMISTRY- TOTAL AND AMENABLE CYANIDE AND ALKALINITY – METHODS 9012B and 2320B

7.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

7.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

7.3 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

7.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

7.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD’s were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

7.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

7.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

7.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

8.0 REPRESENTATIVENESS EVALUATION

Representativeness is a qualitative evaluation of whether the data represents actual environmental conditions. Representativeness was evaluated using holding time criteria, which reflect the length of time after sample collection that a sample or extract remains representative of environmental conditions. Depending on the analysis, either one or two holding times were evaluated.

i.) For those analyses that do not include a sample extraction, only one holding time was evaluated: the length of time between sample collection and analysis.

ii.) For analyses that require sample extraction prior to analysis, two holding times were evaluated: the length of time from sampling until extraction and the length of time from extraction to analysis.

Holding times are compared to standard method specific holding times accepted or recommended by the United States Environmental Protection Agency (USEPA). Those holding times outside of USEPA acceptance criteria are qualitatively evaluated to determine their effect on sample representativeness.

Representativeness was also evaluated by analysis of laboratory method blanks and field equipment blanks. Laboratory method blanks and field equipment blanks are used to identify sources of contamination not associated with environmental conditions.

8.1 SAMPLE PRESERVATION AND HOLDING TIMES

Sample holding time and preservation requirements are summarized in Appendix 5.

All sample extractions and/or analyses were performed within the specified holding times unless noted otherwise in verification/validation summary.

All samples were properly preserved and cooled to 0-6°C after collection.

8.2 METHOD BLANK SUMMARY

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

Evaluation of blank contamination includes directions on the interpretation of the affected analytical results.

9.0 USABILITY AND COMPARABIILTY

Usability of data was evaluated by assuring that all the analytical requests were met, samples were received in the proper condition, and all analyses were performed within the appropriate holding times unless noted otherwise in verification/validation summary

No data evaluated within this delivery group was considered unusable (qualified with an R flag) due to sample integrity, sample matrix interference or batch quality control issues unless noted otherwise in verification/validation summary.

10.0 QC SUMMARY

All sample results meet the project specific QAPP standard for usability with exceptions defined by validation and verification qualifiers as applied. Please reference the following tables for a summary of the investigative field sample data and their valid qualifiers based on Level 4 technical review of the analytical data.

APPENDIX 1

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Nashville
Laboratory Submittal: 84595-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	Metals by ICP Spectroscopy(D)	Metals by ICP Mass Spectroscopy	(Manual Cold Vapor)(D)	(Manual Cold Vapor)	AMENABLE (AUTOMATED COLORIMETRI	Anions by IC	Alkalinity Prep
490845951	RW-6-080515	8/5/2015	10:30:00	X	X	X	X	X	X	X	X	X	X	X	X
490845952	OB-20A-080515	8/5/2015	10:35:00	X	X	X	X	X	X	X	X	X	X	X	X
490845953	OB-19-080515	8/5/2015	10:40:00	X	X	X	X	X	X	X	X	X	X	X	X
490845954	RW-5-080515	8/5/2015	2:35:00	X	X	X	X	X	X	X	X	X	X	X	X
490845955	OB-20B-080515	8/5/2015	2:10:00	X	X	X	X	X	X	X	X	X	X	X	X
490845956	TB-02-080615	8/6/2015	1:01:00	X	X										
490845957	TB-02-080615	8/6/2015	1:01:00	X	X										

APPENDIX 2

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-84595-1
August 2015

Description

- Standard Report Cover page
- Table of Contents
- SDG Case Narrative
- Sample Summary
- Executive Summary detection highlights
- Method Summary
- Method/Analyst Summary
- Analytical Results
- Surrogate Summary
- Quality Control Results
- Data Qualifiers
- QC Summary Association
- Lab Chronicle
- GCMS Volatiles Data - Method 8260C and SIM
  - QC Summary Data
    - Surrogate recoveries (form II)
    - Check Sample recoveries (form III)
    - Matrix spike/Matrix spike duplicate report (form III)
    - Method blank report (form IV)
    - Tuning and mass calibrations (form V)
    - Internal Standard and RT area summary (form VIII)
  - Sample Data
    - GCMS VOA Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Total Ion Profile Chromatogram
    - Ion profiles of detected target analyte peaks
    - Manual integration if applicable
    - Tentatively Identified Compound Reports (if applicable)
  - Standards Data
    - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
    - ICAL Raw integration data from instrument
    - ICAL Total Ion Profile Chromatogram
    - ICV check standard recovery report (Form VII)
    - ICV check standard total ion profile with integration
    - GCMS VOA Continuing Calibration Data (Form VII)
    - CCV raw integration data from instrument
    - CCV Total Ion Profile Chromatogram
    - Manual integration if applicable
  - Raw QC Data
    - Tune information (not included with SIM package)
    - FORM I - QC data
    - Method Blank integration/internal standard and total ion profile raw data
    - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
    - MS and MSD integration/internal standard and total ion profile raw data
  - Miscellaneous Data
    - Run logs

APPENDIX 2
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NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
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August 2015

Description

GCMS Semivolatiles Data - Method 8270D and SIM

- QC Summary Data
  - Surrogate recoveries (form II)
  - Check Sample recoveries (form III)
  - Method blank report (form IV)
  - Tuning and mass calibrations (form V) (not applicable for SIM)
  - Internal Standard and RT area summary (form VIII)
- Sample Data
  - GCMS VOA Organics Analysis Data Sheet (Form I)
  - Raw integration data from instrument
  - Total Ion Profile Chromatogram
  - Ion profiles of detected target analyte peaks
  - Manual integration if applicable
  - Tentatively Identified Compound Reports (if applicable)
- Standards Data
  - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
  - ICAL Raw integration data from instrument
  - ICAL Total Ion Profile Chromatogram
  - ICV check standard recovery report
  - ICV check standard total ion profile with integration
  - GCMS VOA Continuing Calibration Data (Form VII)
  - CCV raw integration data from instrument
  - CCV Total Ion Profile Chromatogram
  - Manual integration if applicable
- Raw QC Data
  - Tune information (not applicable for SIM)
  - Method Blank integration/internal standard and total ion profile raw data
  - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
- Miscellaneous Data
  - Instrument run logs
  - Extraction bench sheets

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-84595-1
August 2015

Description

- Polychlorinated Biphenyls Data (PCB)
  - QC Summary data
    - Surrogate recoveries (form II)
    - Check Sample Recovery data (form III)
    - Method Blank data (form IV)
    - Analytical sequence with RT check (Form VIII)
    - Identification Summary (Form X)
  - Sample Data
    - Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Chromatogram
  - Standards Data (both columns)
    - Initial Calibration Data External Standard RT Summary (Form VI)
    - Initial Calibration Data Summary with average RF
    - Raw integration data from instrument with manual integrations where applicable
    - ICAL chromatograms
    - Continuing Calibration Data (Form VII) with RT Summaries
    - ICV raw integration and chromatograms
    - CCV raw integration data from instrument
    - CCV chromatogram
  - Raw QC Data
    - LCS/LCSD sample data report and integration and chromatograms
    - Method blank integration and chromatograms
  - Miscellaneous Data
    - Sequence table (run log)
    - PCB Batch Worksheet
- HPLC/IC - 9056A ORGFM_28D - Anions, Ion Chromatography - Sulfate and Chloride
  - Raw Data and Data Summaries for:
    - LCS/LCSD (form III)
    - MS/MSD (form III)
    - METHOD BLANKS (Form IV)
    - SAMPLE DATA (Form I)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VI)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VII)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - QC DATA (Form I)
      - Raw instrument data and chromatography
    - Analysis Run Logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-84595-1
August 2015

Description

METALS DATA (ICPMS and mercury)
- Forms Data
  - Cover Page
  - Inorganic Analysis Data Sheet - Metals Dissolved/Total Recoverable (1A-IN)
  - CCV standard report - mercury and ICPMS (2A-IN)
  - CRQL report - mercury and ICPMS (2B-IN)
  - ICB report - mercury and ICPMS (3-IN)
  - Method blank report (3-IN)
  - Interference check standard A - ICPMS (4A-IN)
  - Interference check standard AB - ICPMS (4A-IN)
  - MS/MSD Sample recovery (5A-IN)
  - PDS Summary (5B-IN)
  - LCS Recovery form (7A-IN)
  - LCS Duplicate Recover (7D-IN)
  - ICP-MS Serial Dilutions (8-IN)
  - Detection Limits Form (9-IN)
  - Linear dynamic ranges - ICPMS (11-IN)
  - Prep log - mercury and ICPMS (12-IN)
  - Run log - ICPMS and Mercury (13-IN)
  - ICP-MS TUNE (14-IN)
  - ICPMS Internal Standards Relative Intensity Summary (15-IN)
- Instrument Printouts
  - ICP-MS Raw instrument data
  - Mercury raw instrument data, run logs and calibrations
- Miscellaneous Data
  - Metals Batch Worksheet

GENERAL CHEMISTRY - Total and Amenable Cyanide and Alkalinity
- Cover Page
- Raw Data and Data Summaries for:
  - Sample Data (Form 1B-IN)
  - CCV/CCB (Form 2-IN)
  - METHOD BLANKS (Form 3-IN)
  - MATRIX SPIKES (Form 5-IN)
  - Sample DUPLICATES (Form 6-IN)
  - LCS/LCSD (Form 7-IN)
  - Detection Limits Form (9-IN)
  - Prep log (12-IN)
  - Analysis Run Logs (13-IN)
  - Raw Data - instrument sample sequence and calibration curve
  - Alkalinity Reagents
  - Alkalinity pH meter calibration
  - Alkalinity sequence log and raw data
  - General Chemistry Batch Worksheets

Shipping and Receiving Documents
- COC forms
- Cooler Receipt Form, checklist and narrative

APPENDIX 3

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84595-1

		Sample Name:	RW-6-080515				OB-20A-080515				OB-19-080515			
		Lab Sample ID:	490845951				490845952				490845953			
		Sample Date:	8/5/2015				8/5/2015				8/5/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	0.62	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trimethylbenzene - TIC	526-73-8												
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
Benzene	71-43-2	1.2	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Benzene, 1,4-diethyl- - TIC	105-05-5												
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6												
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	3.3	1.0	ug/l	---	ND	1.0	ug/l	---	0.39	1.0	ug/l	J
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	0.37	1.0	ug/l	J	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	0.48	5.0	ug/l	J	0.19	5.0	ug/l	J	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexane - TIC	110-54-3												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	0.33	5.0	ug/l	J	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	0.35	5.0	ug/l	J	ND	5.0	ug/l	---
Naphthalene - TIC	91-20-3												
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Total Alkanes TIC - TIC	Tic1												
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84595-1

		Sample Name:	RW-6-080515				OB-20A-080515				OB-19-080515			
		Lab Sample ID:	490845951				490845952				490845953			
		Sample Date:	8/5/2015				8/5/2015				8/5/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8260CSim														
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	1,4-Dioxane	123-91-1	1.5	10	ug/l	J	ND	10	ug/l	---	ND	10	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitroaniline	88-74-4	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Nitrophenol	100-02-7	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	Acenaphthene	83-32-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acenaphthylene	208-96-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Atrazine	1912-24-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	80-30-8	3.4	---	ug/l	NJ	4.2	---	ug/l	NJ				
	Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyltoluamide - TIC	134-62-3	7.4	---	ug/l	NJ								
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluoranthene	206-44-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Fluorene	86-73-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Nitrobenzene	98-95-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenanthrene	85-01-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Pyrene	129-00-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	0.1	0.30	ug/l	J	ND	0.30	ug/l	UJ	ND	0.30	ug/l	UJ

Analytical Results Summary

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		Sample Name:	RW-6-080515				OB-20A-080515				OB-19-080515			
		Lab Sample ID:	490845951				490845952				490845953			
		Sample Date:	8/5/2015				8/5/2015				8/5/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other													
OSW-8082A													
PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Metals													
OSW-6020A													
Aluminum	7429-90-5	0.012	0.020	mg/l	J	0.084	0.020	mg/l	---	0.071	0.020	mg/l	---
Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	ND	0.020	mg/l	---	ND	0.020	mg/l	---
Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Arsenic	7440-38-2	0.0015	0.0020	mg/l	UB	0.0071	0.0020	mg/l	---	0.0016	0.0020	mg/l	UB
Arsenic - Dissolved	7440-38-2	0.0011	0.0020	mg/l	UB	0.0020	0.0020	mg/l	B	0.00087	0.0020	mg/l	UB
Barium	7440-39-3	0.44	0.0020	mg/l	---	0.14	0.0020	mg/l	---	0.086	0.0020	mg/l	---
Barium - Dissolved	7440-39-3	0.38	0.0020	mg/l	---	0.12	0.0020	mg/l	---	0.076	0.0020	mg/l	---
Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
Calcium	7440-70-2	77.0	1.0	mg/l	---	28.2	1.0	mg/l	---	13.1	1.0	mg/l	---
Calcium - Dissolved	7440-70-2	75.4	1.0	mg/l	---	28.1	1.0	mg/l	---	12.7	1.0	mg/l	---
Chromium	7440-47-3	0.0029	0.0020	mg/l	---	0.0011	0.0020	mg/l	J	0.00095	0.0020	mg/l	J
Chromium - Dissolved	7440-47-3	0.00087	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Cobalt	7440-48-4	0.0016	0.0020	mg/l	J	0.00099	0.0020	mg/l	J	ND	0.0020	mg/l	---
Cobalt - Dissolved	7440-48-4	0.0014	0.0020	mg/l	J	0.00088	0.0020	mg/l	J	ND	0.0020	mg/l	---
Copper	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.0075	0.0020	mg/l	---
Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Iron	7439-89-6	36.3	0.025	mg/l	---	31.7	0.025	mg/l	---	16.5	0.025	mg/l	---
Iron - Dissolved	7439-89-6	26.1	0.025	mg/l	---	19.8	0.025	mg/l	---	4.7	0.025	mg/l	---
Lead	7439-92-1	0.00025	0.0020	mg/l	J	0.00044	0.0020	mg/l	J	0.00044	0.0020	mg/l	J
Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Magnesium	7439-95-4	13.6	1.0	mg/l	---	2.9	1.0	mg/l	---	2.5	1.0	mg/l	---
Magnesium - Dissolved	7439-95-4	13.7	1.0	mg/l	---	2.9	1.0	mg/l	---	2.4	1.0	mg/l	---
Manganese	7439-96-5	7.4	0.020	mg/l	---	0.76	0.0020	mg/l	---	0.29	0.0020	mg/l	---
Manganese - Dissolved	7439-96-5	7.4	0.020	mg/l	---	0.79	0.0020	mg/l	---	0.31	0.0020	mg/l	---
Nickel	7440-02-0	0.0011	0.0020	mg/l	J	0.0011	0.0020	mg/l	J	0.0020	0.0020	mg/l	---
Nickel - Dissolved	7440-02-0	0.0019	0.0020	mg/l	J	0.0018	0.0020	mg/l	J	0.0015	0.0020	mg/l	J
Potassium	7440-09-7	2.9	1.0	mg/l	---	2.1	1.0	mg/l	---	0.80	1.0	mg/l	J
Potassium - Dissolved	7440-09-7	2.9	1.0	mg/l	---	2.0	1.0	mg/l	---	0.79	1.0	mg/l	J
Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Selenium - Dissolved	7782-49-2	0.00066	0.0020	mg/l	J	ND	0.0020	mg/l	---	0.00069	0.0020	mg/l	J
Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Sodium	7440-23-5	6.8	1.0	mg/l	---	3.3	1.0	mg/l	---	3.3	1.0	mg/l	---
Sodium - Dissolved	7440-23-5	6.5	1.0	mg/l	---	3.1	1.0	mg/l	---	3.2	1.0	mg/l	---
Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Vanadium	7440-62-2	0.0027	0.0020	mg/l	B	0.0026	0.0020	mg/l	B	0.0041	0.0020	mg/l	B
Vanadium - Dissolved	7440-62-2	0.0014	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB
Zinc	7440-66-6	ND	0.025	mg/l	---	0.017	0.025	mg/l	J	ND	0.025	mg/l	---
Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
OSW-7470A													
Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry													
OSW-9012B													
Cyanide, Total	57-12-5	0.0072	0.010	mg/l	J	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A													
Chloride	16887-00-6	5.97	1.00	mg/l	---	1.75	1.00	mg/l	---	1.21	1.00	mg/l	---
Sulfate	14808-79-8	1.41	1.00	mg/l	---	ND	1.00	mg/l	---	1.14	1.00	mg/l	---
Prep													
APHA-2320B													
Bicarbonate Alkalinity as CaCO3	E-14508	284	10.0	mg/l	---	122	10.0	mg/l	---	53.0	10.0	mg/l	---
Total Alkalinity as CaCO3	E-14506	284	10.0	mg/l	---	122	10.0	mg/l	---	53.0	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84595-1

		Sample Name:	RW-5-080515				OB-20B-080515				TB-02-080615			
		Lab Sample ID:	490845954				490845955				490845956			
		Sample Date:	8/5/2015				8/5/2015				8/6/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	0.26	1.0	ug/l	J	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trimethylbenzene - TIC	526-73-8					0.26	1.0	ug/l	J				
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	4.9	25	ug/l	UB	ND	25	ug/l	---	7.5	25	ug/l	J
Benzene	71-43-2	ND	1.0	ug/l	---	0.27	1.0	ug/l	J	ND	1.0	ug/l	---
Benzene, 1,4-diethyl- - TIC	105-05-5					3.6	---	ug/l	NJ				
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6					2.8	---	ug/l	NJ				
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	1.4	1.0	ug/l	---	1.8	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	0.87	5.0	ug/l	J	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexane - TIC	110-54-3					0.21	2.0	ug/l	J				
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	0.54	5.0	ug/l	J	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Naphthalene - TIC	91-20-3					1.6	5.0	ug/l	J				
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Total Alkanes TIC - TIC	Tic1					0.21	---	ug/l	NJ				
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84595-1

		Sample Name:	RW-5-080515				OB-20B-080515				TB-02-080615			
		Lab Sample ID:	490845954				490845955				490845956			
		Sample Date:	8/5/2015				8/5/2015				8/6/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC													
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	6.7	10	ug/l	J	0.95	10	ug/l	J	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
OSW-8270D													
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---				
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---				
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---				
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---				
2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---	ND	25	ug/l	---				
2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---	ND	10	ug/l	---				
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---				
2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---				
2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---				
2-Nitroaniline	88-74-4	ND	25	ug/l	---	ND	25	ug/l	---				
2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---				
3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---	ND	10	ug/l	---				
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---				
3-Nitroaniline	99-09-2	ND	25	ug/l	---	ND	25	ug/l	---				
4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---	ND	25	ug/l	---				
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---				
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---				
4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---				
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---				
4-Nitroaniline	100-01-6	ND	25	ug/l	---	ND	25	ug/l	---				
4-Nitrophenol	100-02-7	ND	25	ug/l	---	ND	25	ug/l	---				
Acenaphthene	83-32-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Acenaphthylene	208-96-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---				
Anthracene	120-12-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Atrazine	1912-24-9	ND	10	ug/l	---	ND	10	ug/l	---				
Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---				
Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	80-30-8					4.4	---	ug/l	NJ				
Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---				
Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---	ND	10	ug/l	---				
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---	ND	10	ug/l	---				
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---				
Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---				
Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---				
Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---				
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---				
Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---				
Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---				
Diethyltoluamide - TIC	134-62-3												
Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---				
Diphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---				
Fluoranthene	206-44-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Fluorene	86-73-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---				
Hexachloroethane	67-72-1	ND	10	ug/l	---	ND	10	ug/l	---				
Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---				
N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---	ND	10	ug/l	---				
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---				
Naphthalene	91-20-3	ND	2.0	ug/l	---	1.0	2.0	ug/l	J				
Nitrobenzene	98-95-3	ND	10	ug/l	---	ND	10	ug/l	---				
Phenanthrene	85-01-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---				
Pyrene	129-00-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
OSW-8270DSim													
Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---				
Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---				
N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
Pentachlorophenol	87-86-5	ND	0.30	ug/l	UJ	ND	0.30	ug/l	UJ				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84595-1

		Sample Name:	RW-5-080515				OB-20B-080515				TB-02-080615			
		Lab Sample ID:	490845954				490845955				490845956			
		Sample Date:	8/5/2015				8/5/2015				8/6/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other													
OSW-8082A													
PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
Metals													
OSW-6020A													
Aluminum	7429-90-5	0.40	0.020	mg/l	---	0.066	0.020	mg/l	---				
Aluminum - Dissolved	7429-90-5	0.16	0.020	mg/l	---	ND	0.020	mg/l	---				
Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
Antimony - Dissolved	7440-36-0	0.00069	0.0020	mg/l	J	0.00050	0.0020	mg/l	J				
Arsenic	7440-38-2	0.0089	0.0020	mg/l	---	0.0015	0.0020	mg/l	J				
Arsenic - Dissolved	7440-38-2	0.0072	0.0020	mg/l	---	0.0011	0.0020	mg/l	UB				
Barium	7440-39-3	0.0094	0.0020	mg/l	---	0.084	0.0020	mg/l	---				
Barium - Dissolved	7440-39-3	0.0055	0.0020	mg/l	---	0.063	0.0020	mg/l	---				
Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---				
Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---				
Calcium	7440-70-2	17.7	1.0	mg/l	---	62.6	1.0	mg/l	---				
Calcium - Dissolved	7440-70-2	13.6	1.0	mg/l	---	58.9	1.0	mg/l	---				
Chromium	7440-47-3	0.0037	0.0020	mg/l	---	0.00069	0.0020	mg/l	J				
Chromium - Dissolved	7440-47-3	0.0014	0.0020	mg/l	J	ND	0.0020	mg/l	---				
Cobalt	7440-48-4	ND	0.0020	mg/l	---	0.030	0.0020	mg/l	---				
Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	0.028	0.0020	mg/l	---				
Copper	7440-50-8	0.0089	0.0020	mg/l	---	0.00065	0.0020	mg/l	J				
Copper - Dissolved	7440-50-8	0.0045	0.0020	mg/l	---	ND	0.0020	mg/l	---				
Iron	7439-89-6	2.3	0.025	mg/l	---	42.5	0.025	mg/l	---				
Iron - Dissolved	7439-89-6	0.73	0.025	mg/l	---	28.3	0.025	mg/l	---				
Lead	7439-92-1	0.0066	0.0020	mg/l	---	0.00028	0.0020	mg/l	J				
Lead - Dissolved	7439-92-1	0.0024	0.0020	mg/l	---	ND	0.0020	mg/l	---				
Magnesium	7439-95-4	3.2	1.0	mg/l	---	11.6	1.0	mg/l	---				
Magnesium - Dissolved	7439-95-4	2.6	1.0	mg/l	---	11.2	1.0	mg/l	---				
Manganese	7439-96-5	0.29	0.0020	mg/l	---	10.2	0.020	mg/l	---				
Manganese - Dissolved	7439-96-5	0.11	0.0020	mg/l	---	10.6	0.20	mg/l	---				
Nickel	7440-02-0	0.0036	0.0020	mg/l	---	0.0058	0.0020	mg/l	---				
Nickel - Dissolved	7440-02-0	0.0034	0.0020	mg/l	---	0.0072	0.0020	mg/l	---				
Potassium	7440-09-7	58.6	1.0	mg/l	---	3.0	1.0	mg/l	---				
Potassium - Dissolved	7440-09-7	53.5	1.0	mg/l	---	2.8	1.0	mg/l	---				
Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
Sodium	7440-23-5	44.0	1.0	mg/l	---	4.8	1.0	mg/l	---				
Sodium - Dissolved	7440-23-5	40.6	1.0	mg/l	---	4.8	1.0	mg/l	---				
Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
Vanadium	7440-62-2	0.0049	0.0020	mg/l	B	0.0039	0.0020	mg/l	B				
Vanadium - Dissolved	7440-62-2	0.0034	0.0020	mg/l	B	0.0011	0.0020	mg/l	UB				
Zinc	7440-66-6	0.22	0.025	mg/l	---	ND	0.025	mg/l	---				
Zinc - Dissolved	7440-66-6	0.069	0.025	mg/l	---	ND	0.025	mg/l	---				
OSW-7470A													
Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---				
Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---				
General Chemistry													
OSW-9012B													
Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---				
OSW-9056A													
Chloride	16887-00-6	1.54	1.00	mg/l	---	1.62	1.00	mg/l	---				
Sulfate	14808-79-8	16.0	1.00	mg/l	---	ND	1.00	mg/l	---				
Prep													
APHA-2320B													
Bicarbonate Alkalinity as CaCO3	E-14508	46.1	10.0	mg/l	---	261	10.0	mg/l	---				
Total Alkalinity as CaCO3	E-14506	178	10.0	mg/l	---	261	10.0	mg/l	---				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84595-1

Sample Name: TB-02-080615
Lab Sample ID: 490845957
Sample Date: 8/6/2015

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC					
OSW-8260C					
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---
1,2,3-Trimethylbenzene - TIC	526-73-8				
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---
Benzene, 1,4-diethyl- - TIC	105-05-5				
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6				
Bromoform	75-25-2	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---
Hexane - TIC	110-54-3				
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---
Naphthalene - TIC	91-20-3				
Styrene	100-42-5	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---
Total Alkanes TIC - TIC	Tic1				
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84595-1

Sample Name: TB-02-080615
Lab Sample ID: 490845957
Sample Date: 8/6/2015

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC					
OSW-8260CSim					
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---
OSW-8270D					
1,2,4,5-Tetrachlorobenzene	95-94-3				
2,2'-oxybis[1-chloropropane]	108-60-1				
2,3,4,6-Tetrachlorophenol	58-90-2				
2,4,5-Trichlorophenol	95-95-4				
2,4,6-Trichlorophenol	88-06-2				
2,4-Dichlorophenol	120-83-2				
2,4-Dimethylphenol	105-67-9				
2,4-Dinitrophenol	51-28-5				
2,4-Dinitrotoluene	121-14-2				
2,6-Dinitrotoluene	606-20-2				
2-Chloronaphthalene	91-58-7				
2-Chlorophenol	95-57-8				
2-Methylnaphthalene	91-57-6				
2-Methylphenol	95-48-7				
2-Nitroaniline	88-74-4				
2-Nitrophenol	88-75-5				
3 & 4 Methylphenol	65794-96-9				
3,3'-Dichlorobenzidine	91-94-1				
3-Nitroaniline	99-09-2				
4,6-Dinitro-2-methylphenol	534-52-1				
4-Bromophenyl phenyl ether	101-55-3				
4-Chloro-3-methylphenol	59-50-7				
4-Chloroaniline	106-47-8				
4-Chlorophenyl phenyl ether	7005-72-3				
4-Nitroaniline	100-01-6				
4-Nitrophenol	100-02-7				
Acenaphthene	83-32-9				
Acenaphthylene	208-96-8				
Acetophenone	98-86-2				
Anthracene	120-12-7				
Atrazine	1912-24-9				
Benzaldehyde	100-52-7				
Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	80-30-8				
Benzo[g,h,i]perylene	191-24-2				
Benzo[k]fluoranthene	207-08-9				
Bis(2-chloroethoxy)methane	111-91-1				
Bis(2-chloroethyl)ether	111-44-4				
Bis(2-ethylhexyl) phthalate	117-81-7				
Butyl benzyl phthalate	85-68-7				
Caprolactam	105-60-2				
Carbazole	86-74-8				
Chrysene	218-01-9				
Di-n-butyl phthalate	84-74-2				
Di-n-octyl phthalate	117-84-0				
Dibenz(a,h)anthracene	53-70-3				
Dibenzofuran	132-64-9				
Diethyl phthalate	84-66-2				
Diethyltoluamide - TIC	134-62-3				
Dimethyl phthalate	131-11-3				
Diphenyl	92-52-4				
Fluoranthene	206-44-0				
Fluorene	86-73-7				
Hexachlorocyclopentadiene	77-47-4				
Hexachloroethane	67-72-1				
Indeno[1,2,3-cd]pyrene	193-39-5				
Isophorone	78-59-1				
N-Nitrosodi-n-propylamine	621-64-7				
N-Nitrosodiphenylamine	86-30-6				
Naphthalene	91-20-3				
Nitrobenzene	98-95-3				
Phenanthrene	85-01-8				
Phenol	108-95-2				
Pyrene	129-00-0				
OSW-8270DSim					
Benzo[a]anthracene	56-55-3				
Benzo[a]pyrene	50-32-8				
Benzo[b]fluoranthene	205-99-2				
Hexachlorobenzene	118-74-1				
Hexachlorobutadiene	87-68-3				
N-Nitrosodimethylamine	62-75-9				
Pentachlorophenol	87-86-5				

APPENDIX 4

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84595-1

		Sample Name:	RW-6-080515				OB-20A-080515				OB-19-080515				RW-5-080515				OB-20B-080515			
		Lab Sample ID:	490845951				490845952				490845953				490845954				490845955			
		Sample Date:	8/5/2015				8/5/2015				8/5/2015				8/5/2015				8/5/2015			
Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																						
OSW-8260C																						
1,2,3-Trimethylbenzene - TIC	526-73-8																		0.26	1.0	ug/l	J
Acetone	67-64-1														4.9	25	ug/l	UB				
Benzene, 1,4-diethyl- - TIC	105-05-5																		3.6	---	ug/l	NJ
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6																		2.8	---	ug/l	NJ
Hexane - TIC	110-54-3																		0.21	2.0	ug/l	J
Naphthalene - TIC	91-20-3																		1.6	5.0	ug/l	J
Total Alkanes TIC - TIC	Tic1																		0.21	---	ug/l	NJ
GC/MS SVOC																						
OSW-8270D																						
Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	80-30-8		3.4	---	ug/l	NJ	4.2	---	ug/l	NJ									4.4	---	ug/l	NJ
Diethyltoluamide - TIC	134-62-3		7.4	---	ug/l	NJ																
OSW-8270DSim																						
Pentachlorophenol - original run	87-86-5		ND	0.30	ug/l	R	ND	0.30	ug/l	R	ND	0.30	ug/l	R	ND	0.30	ug/l	R	ND	0.30	ug/l	R
Pentachlorophenol - re-analysis	87-86-5		0.1	0.30	ug/l	J	ND	0.30	ug/l	UJ	ND	0.30	ug/l	UJ	ND	0.30	ug/l	UJ	ND	0.30	ug/l	UJ
Metals																						
OSW-6020A																						
Arsenic	7440-38-2		0.0015	0.0020	mg/l	UB					0.0016	0.0020	mg/l	UB								
Arsenic - Dissolved	7440-38-2		0.0011	0.0020	mg/l	UB	0.0020	0.0020	mg/l	B	0.00087	0.0020	mg/l	UB					0.0011	0.0020	mg/l	UB
Vanadium	7440-62-2		0.0027	0.0020	mg/l	B	0.0026	0.0020	mg/l	B	0.0041	0.0020	mg/l	B	0.0049	0.0020	mg/l	B	0.0039	0.0020	mg/l	B
Vanadium - Dissolved	7440-62-2		0.0014	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB	0.0034	0.0020	mg/l	B	0.0011	0.0020	mg/l	UB

APPENDIX 5

EPA Sample Holding Time and Preservation Requirements

Parameter	*Reference Method*	*Matrix*	*Preservation & Storage*	*Holding Times*
Volatile Organics by GCMS	OSW-8260C/SIM	Water	Acidify ph<2 Refrigeration 0-6oC	14 days
Semivolatile Organics by GCMS	OSW-8270D/SIM	Water	Refrigeration 0-6oC	7 days Extraction 40 days Analysis
Polychlorinated Biphenyls by GC/ECD	OSW-8082A	Water	Refrigeration 0-6oC	365 days - Extraction - Analysis
Metals by ICP/ICPMS Spectroscopy	OSW-6010B OSW-6020A	Water	Acidify pH<2 Refrigeration 0-6oC	180 days
Mercury in Aqueous Waste	OSW-7470A	Water	Acidify pH<2 Refrigeration 0-6oC	28 days
Alkalinity	EPA 2320B	Water	Refrigeration 0-6oC	14 days
Chloride and Sulfate	OSW-9056A	Water	Refrigeration 0-6oC	28 days
Total and Amenable Cyanide	OSW-9012B	Water	Test for presence of Sulfide – if unknown collect two samples and treat one with Lead Carbonate. Then adjust sample to pH of greater than or equal to 12with NaOH. Refrigeration at 0-4C –(also may require treatment for aldehydes and chlorine/hypochlorite/sulfite)	14 days if preserved. 24 hours or sooner if unpreserved

ATTACHMENT A

CHAIN OF CUSTODY DOCUMENT(S)

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
84595

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

09/14/2015

Client Information	Sampler: Robert Lowtenberg	Lab PM: Brown, Shali	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com	Page:
Company: Cornerstone Environmental Group, LLC/ FORD			Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:		
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package		
State, Zip: NY, 10941			
Phone: 845-695-0252(Tel)	PO #:		
Email: tim.roeper@cornerstoneeg.com	WO #:		
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
				Preservation Code:																		
1	RW-6-080515	8/5/15	10:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
2	OB-20A-080515	8/5/15	10:35	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
3	OB-19-080515	8/5/15	10:40	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
4	RW-5-080515	8/5/15	14:35	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
5	OB-20B-080515	8/5/15	14:10	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
6-7	TB-02-080615	8/6/15	–	–	Water	N	N	✓	✓													
					Water																	
					Water																	
					Water																	
					Water																	
					Water																	

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment.

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	8/6/15 810		James Thiesen	8/6/15 810	TA
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ANALYTICAL DATA VALIDATION REPORT
Ringwood Mines/Landfill
Ford Motor Company
CLIENT PROJECT NUMBER - not available
CADENA PROJECT E203361
SAMPLES COLLECTED August 2015
SUBMITTAL #: 490-84672-1

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1.0 INTRODUCTION

The following document details an assessment of the analytical data reported by TestAmerica-Nashville Laboratory the data in the submittals listed below which were collected from the Ringwood Mines/Landfill site as noted. A sampling and analysis summary that lists all sample ID's and testing as related to the laboratory submittal numbers is presented in Appendix 1. A summary of all of the analytical data is presented in Appendix 3. Copies of sample Chain of Custody (COC) documents and cooler receipt forms for samples discussed in this report are included in Attachment A.
Note: One field sample from this submittal was collected in triplicate to facilitate use of this sample as the QC batch MS/MSD for each analysis where appropriate (MS not required for alkalinity).

Table 1.1

Laboratory Submittal	***Sample Date***	***Laboratory Receipt Date***
490-84672-1	8/06-07/2015	8/08/2015

The samples noted below were validated against the associated method/parameter in order to achieve the validation requirements for this SDG:

Table 1.2

Parameter	***Reference Method***	***Analyte Listing***
Volatile Organics	OSW-8260C	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8260CSIM	1,2-Dibromo-3-Chloropropane,1,4-Dioxane,EthyleneDibromide,1,2,3-Trichloropropane
Semi-Volatile Organics	OSW-8270D	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8270DSIM	Extended list includes the following: Benzo(a)anthracene,Benzo(a)pyrene, Benzo(b)fluoranthene,Hexachlorobenzene, Hexachlorobutadiene,N-Nitrosodimethylamine,Pentachlorophenol
PCB	OSW-8082A	7 Standard Aroclors
Metals	OSW-6020A/7470A	Total and dissolved TAL Metals
Ion Chromatography	OSW-9056A	Chloride and Sulfate
Total Cyanide	OSW-9021B	Total and Amenable Cyanide
General Chemistry	APHA-2320B	Total and Bicarbonate Alkalinity

All "SW" analytical methods were referenced from "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition, November 1986 (with all subsequent revisions). The "SM" analytical method was referenced from the "Standard Methods for the Examination of Water and Waste water", latest promulgated revision. "EPA" methods were referenced from the revisions noted.

Laboratory Standard Operating Procedures (SOPs) associated with the methods utilized for this laboratory submittal were not available to CADENA for the purpose of validating this SDG.

Level IV data review provides a comprehensive or extensive review of the analytical data allowing for the complete reconstruction of the chemical analysis. A Level IV (Tier 3) data review was performed on the samples listed in Table 1.2 above by (CADENA).

All of the data that was recalculated was consistent with the reported results to within at least 2 significant figures. Final results may not recalculate exactly beyond this level of precision, in some cases, due to differences in available significant figures between the hardcopy raw data provided and the data utilized for calculations by the laboratory that came directly from the instrument. A table of the laboratory documents reviewed in preparing this report is included in Appendix 2.

The data was reviewed in accordance with the analytical methods and the documents listed below: (NOTE: laboratory criteria – control limits – were utilized to evaluate the data where available. Comparison to NFG criteria are noted when lab criteria was not available or for informational purposes when lab data exceeds NFG criteria).

i.) "Standard Operating Procedure HW-6 Rev12 March 2001: CLP Organics Data Review and Preliminary Review" USEPA Region 2 as identified in project QAPP.
ii.) "Standard Operating Procedure HW-2, Rev11, Jan 1992: Evaluation of Metals Data for the CLP Program" as identified in the project QAPP.

The Level VI review findings are presented in the following subsections.

An overview of the review findings is presented in table format. Several data qualifier flags were utilized in the review process. The definitions of these qualifier flags are as follows:

- J Indicates an estimated value.
- U Indicates the compound or analyte was analyzed for, but not detected at or above the stated limit.
- UJ The analyte/compound was not detected above the reported sample quantitation limit. However, the quantitation limit is considered to be approximate due to associated quality assurance results.
- UB The analyte was detected in the sample at a level between the MDL and RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the reporting limit.
- B The analyte was detected in the sample at a level above the RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the concentration reported.
- R The analyte/compound results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte/compound cannot be verified.

All flags have been incorporated into the data tables in this report.

1.1 VALIDATION QUALIFIER EXECUTIVE SUMMARY

VALIDATION SUMMARY

GCMS VOC and SIM
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
GCMS SVOC and SIM
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
PCB
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
METALS
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
INORGANICS
No additional qualifications were made beyond those determined from level 2 verification review as noted below.

The following observations **DID NOT** result in qualification but were noted during the validation review:
GCMS VOC
CCV/ICV – Sequences had outliers biased high that did not affect client sample results (associated results were either non-detect or outliers were not associated with target analytes).
GCMS VOC-SIM
QC batch 274966 MS recovery outliers were not determined using samples from this submittal so qualification was not required based on these sample-specific QC outliers.
GCMS SVOC – CCAL and ICV outliers were either biased high or not target analytes for this submittal so did not affect client sample results. This includes analytical batch 274426 CCV as noted below where target analyte benzo(a)pyrene was an outlier biased high – batch included analysis of sample -004 as well as the MBLK/LCS for prep batch 274147.
METALS – Internal standard outliers, serial dilution and PDS outliers as noted in raw data were not associated with final reported sample results.
CRQL's outside of lab criteria biased high did not affect qualification of client sample results.
PCB – internal standard technique was used for both columns. Some initial and continuing calibration outliers were observed for specific aroclor 1016/1260 peaks on the secondary columns but these outliers did not affect sample quantitation. There was no ending CCV reported for the sequences evaluated.

VERIFICATION SUMMARY
The following qualifications and associated data flags were applied based on the initial level 2 review of this data package.

GCMS VOC QC batch 273831 method blank had a detection below the RL for carbon disulfide. Qualification of client sample results was not required based on these method blank detections.

GCMS VOC trip blank was non-detect for all target analytes.

GCMS VOC and GCMS SVOC TIC results should be considered to be estimated and qualified with NJ flags unless the TIC analyte detected is an instrument calibrated compound that is just not part of the TAL for this submittal in which case no qualification is required other than the TIC qualification code or J flag if the result is detected below the RL.

GCMS VOC QC batch 273958 did not include MS recovery data due to insufficient sample volume available for spiking according to the laboratory submittal case narrative.

GCMS SVOC PAH analytical batch 274426 CCV response outliers were not used to qualify client sample results as part of this level 2 verification review. This level 4 data package QC information will be evaluated as part of the pending validation review and data will be qualified if applicable.

GCMS SVOC QC batch 272786 LCS recoveries were outliers biased high for benzaldehyde. Qualification of client sample results was not required based on this high bias QC outlier.

GCMS SVOC sample -001 MS/MSD recoveries were outliers for multiple analytes biased high along with several MS/MSD RPD outliers. Qualification of client sample results was not required based on these high bias QC outliers.

GCMS SVOC SIM QC batch 274147 LCS recoveries were outliers biased low and less than 10% for pentachlorophenol. Client samples were not analyzed as part of this QC batch so qualification of client sample results was not required based on this low bias QC outlier.

GCMS SVOC SIM sample -001 MS/MSD RPD only was an outlier for pentachlorophenol and caprolactam. Qualification of client sample results was not required based on these QC outliers alone.

Metals method blanks had detections below the RL in QC batch 272053 for arsenic and vanadium and in QC batch 272304 for copper and vanadium and in QC batch 272584 for arsenic and vanadium. Client samples -001, -002, -003, -004, -008, -009 total arsenic results and client samples-001, -002, -003, -004, -005 and -006 dissolved arsenic results and client samples -001, -004, -005, -006, -008 total and dissolved vanadium results and client sample -008 dissolved copper result should be considered to be non-detect at the RL and qualified with UB flags. Client samples -007 total arsenic results and client samples -002, -003, -009 total and dissolved vanadium results should be considered to be non-detect at the concentration reported and qualified with B flags.

Metals sample -001 MS recovery and MS/MSD RPD were outliers with the recoveries biased high for zinc and manganese. Client sample -001 total manganese results should be considered to be estimated and qualified with a J flag.

GCMS-SIM VOC QC batch 274966 and Cyanide QC batch 271876 MS recovery outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

Cyanide QC batch 273142 sample -001 MS/MSD recoveries were outliers biased low. Client sample -001 cyanide result should be considered to be estimated and qualified with a UJ flag. QC batch 272365 MS recovery only outlier for sample -00 did not require qualification of client sample results.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

2.0 VOLATILE ORGANIC COMPOUNDS (VOCs) – METHOD SW846 8260C and SIM Analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

2.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) VOCs

2.1.1 TUNING AND MASS CALIBRATION – GC/MS VOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

2.1.2 INITIAL CALIBRATION – GC/MS VOCs

Initial calibration data for VOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS VOCs

Initial calibration verification (ICV) standards for VOC analyses were reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

2.2 CONTINUING CALIBRATION – GC/MS VOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.3 INTERNAL STANDARDS – GC/MS VOCs

Internal standard (IS) data were reviewed and met criteria without exception.

2.4 SURROGATE SPIKE RECOVERIES – GC/MS VOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

2.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS VOCs

A laboratory control sample (LCS) was prepared and analyzed for VOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

2.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS VOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

2.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS VOCs

There were no field duplicate comparisons performed as part of this validation request.

2.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS VOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

2.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS VOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable unless noted otherwise in verification/validation summary.

2.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS VOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

2.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS VOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

3.0 SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) – METHOD SW846 8270D and SIM analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

3.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) SVOCs

3.1.1 TUNING AND MASS CALIBRATION – GC/MS SVOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

3.1.2 INITIAL CALIBRATION – GC/MS SVOCs

Initial calibration data for SVOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

3.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS SVOCs

Initial calibration verification (ICV) standards for SVOC analyses were reviewed and met criteria specified by the laboratory with no exceptions.

3.2 CONTINUING CALIBRATION – GC/MS SVOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary

3.3 INTERNAL STANDARDS – GC/MS SVOCs

Internal standard (IS) data were reviewed and met criteria without exception.

3.4 SURROGATE SPIKE RECOVERIES – GC/MS SVOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

3.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS SVOCs

A laboratory control sample (LCS) was prepared and analyzed for SVOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

3.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS SVOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

3.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS SVOCs

There were no field duplicate comparisons performed as part of this validation request.

3.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS SVOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

3.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS SVOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable without exception.

3.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS SVOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

3.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS SVOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

4.0 POLYCHLORINATED BIPHENYLS (PCBs) – METHOD SW846 8082A

The target analyte list was defined by the client as the standard 7 aroclors.

4.1 CALIBRATION – GAS CHROMATOGRAPH-ECD
4.1.1 TUNING AND MASS CALIBRATION – PCB

Not applicable for this analysis.

4.1.2 INITIAL CALIBRATION – PCB

Initial calibration data for PCBs were reviewed and met the criteria for instrument sensitivity and linearity of response without exception.

4.1.3 INITIAL CALIBRATION VERIFICATION – PCB

Initial calibration verification (ICV) standards for PCB analyses were reviewed and met criteria specified by the laboratory with no exceptions.

4.2 CONTINUING CALIBRATION – PCBs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

4.3 INTERNAL STANDARDS – PCB

Internal standard (IS) data were reviewed and met criteria unless noted otherwise in verification/validation summary. (NOTE: Lab quantitation approach DID use internal standard quantitation for this submittal).

4.4 SURROGATE SPIKE RECOVERIES – PCB

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

4.5 LABORATORY CONTROL SAMPLE ANALYSES - PCB

A laboratory control sample (LCS) was prepared and analyzed for PCBs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary..

4.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - PCB

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

4.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - PCB

There were no field duplicate comparisons performed as part of this validation request.

4.8 EXTRACT CLEANUP - PCB

Extract cleanups were performed in accordance with laboratory SOP's and as noted in level 4 data package prep logs.

4.9 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - PCB

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

4.10 TENTATIVELY IDENTIFIED COMPOUNDS - PCB

Not requested for this analytical procedure.

4.11 BLANKS – METHOD/FIELD/CALIBRATION - PCB

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

5.0 HPLC/IC – METHOD SW846 9056A – CHLORIDE AND SULFATE

5.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

5.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

5.3 CONTINUTING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

5.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

5.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

5.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

5.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

5.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

6.0 METALS – ICPMS by Method 6020 TOTAL AND DISSOLVED and Mercury by Method 7470A

The following samples provided in this SDG underwent a Level IV review for either/and metals or mercury analyses:

- Method 6020A: ALL
- Method 7470A: ALL

6.1 ICP/MS TUNING AND MASS CALIBRATION

Instrument tuning data were reviewed. Tuning elements were analyzed. All tuning criteria were met for the analyses, indicating proper optimization of the instrumentation.

6.2 INITIAL CALIBRATION

Initial calibration data for metals and mercury were reviewed and met the criteria for linearity of response without exception.

6.3 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards for metals and mercury analyses were reviewed and met criteria unless otherwise noted in verification/validation summary section of this document.

An initial calibration blank (ICB) was analyzed for metals and mercury analyses. Metals and mercury were reported as non-detect in each ICB analysis unless noted otherwise in verification/validation summary.

6.4 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for metals and mercury analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

6.5 INTERFERENCE CHECK STANDARD

The interference check standard results were reviewed and found to meet criteria.

6.6 INTERNAL STANDARDS

Internal standard (IS) data were reviewed and found to meet criteria unless noted otherwise in verification/validation summary.

6.7 LABORATORY CONTROL SAMPLE ANALYSIS

A laboratory control sample (LCS) was prepared and analyzed for metals and mercury. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

6.8 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE (MS/MSD) ANALYSES

The MS/MSD recoveries and RPD's were either not performed using a client sample or were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

6.9 CONTRACT REQUIRED DETECTION LIMIT STANDARD ANALYSES

Each contract required detection limit (CRDL) standard was analyzed at the proper frequency and were within laboratory control limits unless noted otherwise in verification/validation summary.

6.10 ICP SERIAL DILUTION

Serial dilutions were analyzed at the proper frequency and were either not performed using the client sample or were within laboratory control limits unless noted otherwise in verification/validation summary.

6.11 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

6.12 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

6.13 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

7.0 GENERAL CHEMISTRY- TOTAL AND AMENABLE CYANIDE AND ALKALINITY – METHODS 9012B and 2320B

7.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

7.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

7.3 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

7.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

7.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD’s were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

7.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

7.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

7.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

8.0 REPRESENTATIVENESS EVALUATION

Representativeness is a qualitative evaluation of whether the data represents actual environmental conditions. Representativeness was evaluated using holding time criteria, which reflect the length of time after sample collection that a sample or extract remains representative of environmental conditions. Depending on the analysis, either one or two holding times were evaluated.

i.) For those analyses that do not include a sample extraction, only one holding time was evaluated: the length of time between sample collection and analysis.

ii.) For analyses that require sample extraction prior to analysis, two holding times were evaluated: the length of time from sampling until extraction and the length of time from extraction to analysis.

Holding times are compared to standard method specific holding times accepted or recommended by the United States Environmental Protection Agency (USEPA). Those holding times outside of USEPA acceptance criteria are qualitatively evaluated to determine their effect on sample representativeness.

Representativeness was also evaluated by analysis of laboratory method blanks and field equipment blanks. Laboratory method blanks and field equipment blanks are used to identify sources of contamination not associated with environmental conditions.

8.1 SAMPLE PRESERVATION AND HOLDING TIMES

Sample holding time and preservation requirements are summarized in Appendix 5.

All sample extractions and/or analyses were performed within the specified holding times unless noted otherwise in verification/validation summary.

All samples were properly preserved and cooled to 0-6°C after collection.

8.2 METHOD BLANK SUMMARY

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

Evaluation of blank contamination includes directions on the interpretation of the affected analytical results.

9.0 USABILITY AND COMPARABIILTY

Usability of data was evaluated by assuring that all the analytical requests were met, samples were received in the proper condition, and all analyses were performed within the appropriate holding times unless noted otherwise in verification/validation summary

No data evaluated within this delivery group was considered unusable (qualified with an R flag) due to sample integrity, sample matrix interference or batch quality control issues unless noted otherwise in verification/validation summary.

10.0 QC SUMMARY

All sample results meet the project specific QAPP standard for usability with exceptions defined by validation and verification qualifiers as applied. Please reference the following tables for a summary of the investigative field sample data and their valid qualifiers based on Level 4 technical review of the analytical data.

APPENDIX 1

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Nashville
Laboratory Submittal: 84672-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	Metals by ICP Mass Spectroscopy(D)	Metals by ICP Mass Spectroscopy	Mercury (Manual Cold Vapor)(D)	Mercury (Manual Cold Vapor)	TOTAL AND AMENABLE COLORIMETRIC, WITH OFF-LINE DISTILLATION)	Anions by IC	Alkalinity Prep
490846721	RW-7-080615	8/6/2015	10:05:00	X	X	X	X	X	X	X	X	X	X	X	X
4908467210	TB-03-080715	8/7/2015	1:00:00	X	X										
490846722	OB-21-080615	8/6/2015	10:35:00	X	X	X	X	X	X	X	X	X	X	X	X
490846723	Dup-01-080615	8/6/2015	12:00:00	X	X	X	X	X	X	X	X	X	X	X	X
490846724	OB-6-080615	8/6/2015	10:05:00	X	X	X	X	X	X	X	X	X	X	X	X
490846725	OB-11R-080615	8/6/2015	12:00:00	X	X	X	X	X	X	X	X	X	X	X	X
490846726	OB-27-080615	8/6/2015	3:20:00	X	X	X	X	X	X	X	X	X	X	X	X
490846727	OB-30C-080615	8/6/2015	3:05:00	X	X	X	X	X	X	X	X	X	X	X	X
490846728	OB-30B-080615	8/6/2015	3:10:00	X	X	X	X	X	X	X	X	X	X	X	X
490846729	RW-3 (77-87)-080615	8/6/2015	2:35:00	X	X	X	X	X	X	X	X	X	X	X	X

APPENDIX 2

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-84672-1
August 2015

Description

- Standard Report Cover page
- Table of Contents
- SDG Case Narrative
- Sample Summary
- Executive Summary detection highlights
- Method Summary
- Method/Analyst Summary
- Analytical Results
- Surrogate Summary
- Quality Control Results
- Data Qualifiers
- QC Summary Association
- Lab Chronicle
- GCMS Volatiles Data - Method 8260C and SIM
  - QC Summary Data
    - Surrogate recoveries (form II)
    - Check Sample recoveries (form III)
    - Matrix spike/Matrix spike duplicate report (form III)
    - Method blank report (form IV)
    - Tuning and mass calibrations (form V)
    - Internal Standard and RT area summary (form VIII)
  - Sample Data
    - GCMS VOA Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Total Ion Profile Chromatogram
    - Ion profiles of detected target analyte peaks
    - Manual integration if applicable
    - Tentatively Identified Compound Reports (if applicable)
  - Standards Data
    - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
    - ICAL Raw integration data from instrument
    - ICAL Total Ion Profile Chromatogram
    - ICV check standard recovery report (Form VII)
    - ICV check standard total ion profile with integration
    - GCMS VOA Continuing Calibration Data (Form VII)
    - CCV raw integration data from instrument
    - CCV Total Ion Profile Chromatogram
    - Manual integration if applicable
  - Raw QC Data
    - Tune information (not included with SIM package)
    - FORM I - QC data
    - Method Blank integration/internal standard and total ion profile raw data
    - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
    - MS and MSD integration/internal standard and total ion profile raw data
  - Miscellaneous Data
    - Run logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-84672-1
August 2015

Description

GCMS Semivolatiles Data - Method 8270D and SIM

- QC Summary Data
  - Surrogate recoveries (form II)
  - Check Sample recoveries (form III)
  - Method blank report (form IV)
  - Tuning and mass calibrations (form V) (not applicable for SIM)
  - Internal Standard and RT area summary (form VIII)
- Sample Data
  - GCMS VOA Organics Analysis Data Sheet (Form I)
  - Raw integration data from instrument
  - Total Ion Profile Chromatogram
  - Ion profiles of detected target analyte peaks
  - Manual integration if applicable
  - Tentatively Identified Compound Reports (if applicable)
- Standards Data
  - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
  - ICAL Raw integration data from instrument
  - ICAL Total Ion Profile Chromatogram
  - ICV check standard recovery report
  - ICV check standard total ion profile with integration
  - GCMS VOA Continuing Calibration Data (Form VII)
  - CCV raw integration data from instrument
  - CCV Total Ion Profile Chromatogram
  - Manual integration if applicable
- Raw QC Data
  - Tune information (not applicable for SIM)
  - Method Blank integration/internal standard and total ion profile raw data
  - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
- Miscellaneous Data
  - Instrument run logs
  - Extraction bench sheets

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-84672-1
August 2015

Description

- Polychlorinated Biphenyls Data (PCB)
  - QC Summary data
    - Surrogate recoveries (form II)
    - Check Sample Recovery data (form III)
    - Method Blank data (form IV)
    - Analytical sequence with RT check (Form VIII)
    - Identification Summary (Form X)
  - Sample Data
    - Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Chromatogram
  - Standards Data (both columns)
    - Initial Calibration Data External Standard RT Summary (Form VI)
    - Initial Calibration Data Summary with average RF
    - Raw integration data from instrument with manual integrations where applicable
    - ICAL chromatograms
    - Continuing Calibration Data (Form VII) with RT Summaries
    - ICV raw integration and chromatograms
    - CCV raw integration data from instrument
    - CCV chromatogram
  - Raw QC Data
    - LCS/LCSD sample data report and integration and chromatograms
    - Method blank integration and chromatograms
  - Miscellaneous Data
    - Sequence table (run log)
    - PCB Batch Worksheet
- HPLC/IC - 9056A ORGFM_28D - Anions, Ion Chromatography - Sulfate and Chloride
  - Raw Data and Data Summaries for:
    - LCS/LCSD (form III)
    - MS/MSD (form III)
    - METHOD BLANKS (Form IV)
    - SAMPLE DATA (Form I)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VI)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VII)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - QC DATA (Form I)
      - Raw instrument data and chromatography
    - Analysis Run Logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-84672-1
August 2015

Description

METALS DATA (ICPMS and mercury)
- Forms Data
  - Cover Page
  - Inorganic Analysis Data Sheet - Metals Dissolved/Total Recoverable (1A-IN)
  - CCV standard report - mercury and ICPMS (2A-IN)
  - CRQL report - mercury and ICPMS (2B-IN)
  - ICB report - mercury and ICPMS (3-IN)
  - Method blank report (3-IN)
  - Interference check standard A - ICPMS (4A-IN)
  - Interference check standard AB - ICPMS (4A-IN)
  - MS/MSD Sample recovery (5A-IN)
  - PDS Summary (5B-IN)
  - LCS Recovery form (7A-IN)
  - LCS Duplicate Recover (7D-IN)
  - ICP-MS Serial Dilutions (8-IN)
  - Detection Limits Form (9-IN)
  - Linear dynamic ranges - ICPMS (11-IN)
  - Prep log - mercury and ICPMS (12-IN)
  - Run log - ICPMS and Mercury (13-IN)
  - ICP-MS TUNE (14-IN)
  - ICPMS Internal Standards Relative Intensity Summary (15-IN)
- Instrument Printouts
  - ICP-MS Raw instrument data
  - Mercury raw instrument data, run logs and calibrations
- Miscellaneous Data
  - Metals Batch Worksheet

GENERAL CHEMISTRY - Total and Amenable Cyanide and Alkalinity
- Cover Page
- Raw Data and Data Summaries for:
  - Sample Data (Form 1B-IN)
  - CCV/CCB (Form 2-IN)
  - METHOD BLANKS (Form 3-IN)
  - MATRIX SPIKES (Form 5-IN)
  - Sample DUPLICATES (Form 6-IN)
  - LCS/LCSD (Form 7-IN)
  - Detection Limits Form (9-IN)
  - Prep log (12-IN)
  - Analysis Run Logs (13-IN)
  - Raw Data - instrument sample sequence and calibration curve
  - Alkalinity Reagents
  - Alkalinity pH meter calibration
  - Alkalinity sequence log and raw data
  - General Chemistry Batch Worksheets

Shipping and Receiving Documents
- COC forms
- Cooler Receipt Form, checklist and narrative

APPENDIX 3

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84672-1

		Sample Name:	RW-7-080615				TB-03-080715				OB-21-080615			
		Lab Sample ID:	490846721				4908467210				490846722			
		Sample Date:	8/6/2015				8/7/2015				8/6/2015			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trimethylbenzene - TIC	526-73-8												
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1H-Indene, 2,3-dihydro-1,2-dimethyl- - TIC	17057-82-8												
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	17059-48-2												
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	6682-71-9												
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Phenylbut-1-ene - TIC	934-10-1												
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Benzene, (1-methyl-1-propenyl)-, (E)- - TIC	768-00-3												
Benzene, (3-methyl-2-butenyl)- - TIC	4489-84-3												
Benzene, 1,2,3,4-tetramethyl- - TIC	488-23-3												
Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2												
Benzene, 1,3-diethyl- - TIC	141-93-5												
Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9												
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7												
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexane - TIC	110-54-3												
Indan, 1-methyl- - TIC	767-58-8												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	0.31	5.0	ug/l	J
Naphthalene - TIC	91-20-3												
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Total Alkanes TIC - TIC	Tic1												
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic2												
Unknown - TIC	Tic3												
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84672-1

		Sample Name:	RW-7-080615				TB-03-080715				OB-21-080615			
		Lab Sample ID:	490846721				4908467210				490846722			
		Sample Date:	8/6/2015				8/7/2015				8/6/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	(-)-10-Camphorsulfonyl chloride - TIC	39262-22-1												
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---					ND	10	ug/l	---
	1,4-Dioxane - TIC	123-91-1												
	1-Methylnaphthalene - TIC	90-12-0												
	1-Phenyl-1-butene - TIC	824-90-8												
	1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	6682-71-9												
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---					ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---					ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---					ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---					ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---					ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---					ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---					ND	25	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---					ND	10	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---					ND	10	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---					ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---					ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	---					ND	10	ug/l	---
	2-Nitroaniline	88-74-4	ND	25	ug/l	---					ND	25	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---					ND	10	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---					ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---					ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	25	ug/l	---					ND	25	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---					ND	25	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---					ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---					ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---					ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---					ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	25	ug/l	---					ND	25	ug/l	---
	4-Nitrophenol	100-02-7	ND	25	ug/l	---					ND	25	ug/l	---
	Acenaphthene	83-32-9	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Acenaphthylene	208-96-8	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---					ND	10	ug/l	---
	Anthracene	120-12-7	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Atrazine	1912-24-9	ND	10	ug/l	---					ND	10	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---					ND	10	ug/l	---
	Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2												
	Benzene, 1,4-bis(1-methylethenyl)- - TIC	1605-18-1												
	Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	80-30-8												
	Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---					ND	10	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---					ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---					ND	10	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---					ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---					ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---					ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---					ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---					ND	10	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---					ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---					ND	10	ug/l	---
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---					ND	10	ug/l	---
	Diphenyl	92-52-4	ND	10	ug/l	---					ND	10	ug/l	---
	Fluoranthene	206-44-0	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Fluorene	86-73-7	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---					ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	10	ug/l	---					ND	10	ug/l	---
	Indane - TIC	496-11-7												
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---					ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---					ND	10	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---					ND	10	ug/l	---
	Naphthalene	91-20-3	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Naphthalene, 1-ethyl- - TIC	1127-76-0												
	Naphthalene, 2,7-dimethyl- - TIC	582-16-1												
	Nitrobenzene	98-95-3	ND	10	ug/l	---					ND	10	ug/l	---
	Phenanthrene	85-01-8	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---					ND	10	ug/l	---
	Phenol, 4,4'-(1-methylethylidene)bis- - TIC	80-05-7												
	Phenol, p-tert-butyl- - TIC	98-54-4												
	Pyrene	129-00-0	ND	2.0	ug/l	---					ND	2.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84672-1

			Sample Name:	RW-7-080615			TB-03-080715				OB-21-080615			
			Lab Sample ID:	490846721			4908467210				490846722			
			Sample Date:	8/6/2015			8/7/2015				8/6/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---					ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---					ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---					ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---					ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---					ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---					ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---					0.10	0.30	ug/l	J
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.66	ug/l	---					ND	0.64	ug/l	---
	PCB-1221	11104-28-2	ND	0.66	ug/l	---					ND	0.64	ug/l	---
	PCB-1232	11141-16-5	ND	0.66	ug/l	---					ND	0.64	ug/l	---
	PCB-1242	53469-21-9	ND	0.66	ug/l	---					ND	0.64	ug/l	---
	PCB-1248	12672-29-6	ND	0.66	ug/l	---					ND	0.64	ug/l	---
	PCB-1254	11097-69-1	ND	0.66	ug/l	---					ND	0.64	ug/l	---
	PCB-1260	11096-82-5	ND	0.66	ug/l	---					ND	0.64	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.66	ug/l	---					ND	0.64	ug/l	---
Metals														
OSW-6020A														
	Aluminum	7429-90-5	0.38	0.020	mg/l	---					2.2	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	0.42	0.020	mg/l	---					0.64	0.020	mg/l	---
	Antimony	7440-36-0	ND	0.0020	mg/l	---					ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	0.0014	0.0020	mg/l	J					0.00070	0.0020	mg/l	J
	Arsenic	7440-38-2	0.00074	0.0020	mg/l	UB					0.0014	0.0020	mg/l	UB
	Arsenic - Dissolved	7440-38-2	0.00072	0.0020	mg/l	UB					0.00056	0.0020	mg/l	UB
	Barium	7440-39-3	0.0021	0.0020	mg/l	---					0.016	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.0014	0.0020	mg/l	J					0.0070	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---					ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---					ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---					ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---					ND	0.0010	mg/l	---
	Calcium	7440-70-2	12.1	1.0	mg/l	---					11.6	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	11.6	1.0	mg/l	---					10.8	1.0	mg/l	---
	Chromium	7440-47-3	ND	0.0020	mg/l	---					0.0030	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---					0.00072	0.0020	mg/l	J
	Cobalt	7440-48-4	ND	0.0020	mg/l	---					0.0021	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---					ND	0.0020	mg/l	---
	Copper	7440-50-8	0.0012	0.0020	mg/l	J					0.016	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---					0.0016	0.0020	mg/l	J
	Iron	7439-89-6	0.26	0.025	mg/l	---					3.5	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	0.14	0.025	mg/l	---					0.50	0.025	mg/l	---
	Lead	7439-92-1	0.00048	0.0020	mg/l	J					0.0018	0.0020	mg/l	J
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---					0.00024	0.0020	mg/l	J
	Magnesium	7439-95-4	4.2	1.0	mg/l	---					5.5	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	4.1	1.0	mg/l	---					4.8	1.0	mg/l	---
	Manganese	7439-96-5	0.0042	0.0020	mg/l	J					0.15	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5	0.0019	0.0020	mg/l	J					0.0099	0.0020	mg/l	---
	Nickel	7440-02-0	0.00051	0.0020	mg/l	J					0.0050	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0	ND	0.0020	mg/l	---					0.0011	0.0020	mg/l	J
	Potassium	7440-09-7	0.90	1.0	mg/l	J					1.5	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	0.86	1.0	mg/l	J					1.1	1.0	mg/l	---
	Selenium	7782-49-2	ND	0.0020	mg/l	---					ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---					ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---					ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---					ND	0.0020	mg/l	---
	Sodium	7440-23-5	4.2	1.0	mg/l	---					3.9	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	3.9	1.0	mg/l	---					3.7	1.0	mg/l	---
	Thallium	7440-28-0	0.00037	0.0020	mg/l	J					0.00055	0.0020	mg/l	J
	Thallium - Dissolved	7440-28-0	0.00064	0.0020	mg/l	J					0.00077	0.0020	mg/l	J
	Vanadium	7440-62-2	0.0019	0.0020	mg/l	UB					0.0050	0.0020	mg/l	B
	Vanadium - Dissolved	7440-62-2	0.0018	0.0020	mg/l	UB					0.0025	0.0020	mg/l	B
	Zinc	7440-66-6	ND	0.025	mg/l	---					0.085	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---					ND	0.025	mg/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.00020	mg/l	---					ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---					ND	0.00020	mg/l	---
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	ND	0.010	mg/l	UJ					ND	0.010	mg/l	---
OSW-9056A														
	Chloride	16887-00-6	1.86	1.00	mg/l	---					20.0	1.00	mg/l	---
	Sulfate	14808-79-8	10.8	1.00	mg/l	---					10.5	1.00	mg/l	---
Prep														
APHA-2320B														
	Bicarbonate Alkalinity as CaCO3	E-14508	40.8	10.0	mg/l	---					46.0	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	40.8	10.0	mg/l	---					46.0	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84672-1

		Sample Name:	Dup-01-080615				OB-6-080615				OB-11R-080615			
		Lab Sample ID:	490846723				490846724				490846725			
		Sample Date:	8/6/2015				8/6/2015				8/6/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.32	1.0	ug/l	J
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trimethylbenzene - TIC	526-73-8												
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1H-Indene, 2,3-dihydro-1,2-dimethyl- - TIC	17057-82-8												
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	17059-48-2												
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	6682-71-9									4.8	---	ug/l	NJ
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Phenylbut-1-ene - TIC	934-10-1									4.7	---	ug/l	NJ
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	2.9	1.0	ug/l	---
Benzene, (1-methyl-1-propenyl)-, (E)- - TIC	768-00-3												
Benzene, (3-methyl-2-butenyl)- - TIC	4489-84-3												
Benzene, 1,2,3,4-tetramethyl- - TIC	488-23-3												
Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2												
Benzene, 1,3-diethyl- - TIC	141-93-5												
Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9												
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	23	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.37	1.0	ug/l	J
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	1.9	5.0	ug/l	J
Cyclopentane, methyl- - TIC	96-37-7									4.0	---	ug/l	NJ
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexane - TIC	110-54-3									0.36	2.0	ug/l	J
Indan, 1-methyl- - TIC	767-58-8									2.7	---	ug/l	NJ
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.36	1.0	ug/l	J
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	0.50	5.0	ug/l	J
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	0.23	5.0	ug/l	J
Naphthalene - TIC	91-20-3												
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Total Alkanes TIC - TIC	Tic1									0.36	---	ug/l	NJ
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic2												
Unknown - TIC	Tic3												
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---	4.3	10	ug/l	J
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84672-1

		Sample Name:	Dup-01-080615				OB-6-080615				OB-11R-080615			
		Lab Sample ID:	490846723				490846724				490846725			
		Sample Date:	8/6/2015				8/6/2015				8/6/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	(-)-10-Camphorsulfonyl chloride - TIC	39262-22-1									7.6	---	ug/l	NJ
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,4-Dioxane - TIC	123-91-1									1.5	10	ug/l	J
	1-Methylnaphthalene - TIC	90-12-0												
	1-Phenyl-1-butene - TIC	824-90-8												
	1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	6682-71-9												
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitroaniline	88-74-4	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Nitrophenol	100-02-7	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	Acenaphthene	83-32-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acenaphthylene	208-96-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Atrazine	1912-24-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2												
	Benzene, 1,4-bis(1-methylethenyl)- - TIC	1605-18-1												
	Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	80-30-8									5.9	---	ug/l	NJ
	Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluoranthene	206-44-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Fluorene	86-73-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Indane - TIC	496-11-7												
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Naphthalene, 1-ethyl- - TIC	1127-76-0												
	Naphthalene, 2,7-dimethyl- - TIC	582-16-1												
	Nitrobenzene	98-95-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenanthrene	85-01-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol, 4,4'-(1-methylethylidene)bis- - TIC	80-05-7												
	Phenol, p-tert-butyl- - TIC	98-54-4									3.4	---	ug/l	NJ
	Pyrene	129-00-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84672-1

			Sample Name:	Dup-01-080615			OB-6-080615				OB-11R-080615			
			Lab Sample ID:	490846723			490846724				490846725			
			Sample Date:	8/6/2015			8/6/2015				8/6/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---	ND	0.30	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.64	ug/l	---	ND	0.66	ug/l	---	ND	0.66	ug/l	---
	PCB-1221	11104-28-2	ND	0.64	ug/l	---	ND	0.66	ug/l	---	ND	0.66	ug/l	---
	PCB-1232	11141-16-5	ND	0.64	ug/l	---	ND	0.66	ug/l	---	ND	0.66	ug/l	---
	PCB-1242	53469-21-9	ND	0.64	ug/l	---	ND	0.66	ug/l	---	ND	0.66	ug/l	---
	PCB-1248	12672-29-6	ND	0.64	ug/l	---	ND	0.66	ug/l	---	ND	0.66	ug/l	---
	PCB-1254	11097-69-1	ND	0.64	ug/l	---	ND	0.66	ug/l	---	ND	0.66	ug/l	---
	PCB-1260	11096-82-5	ND	0.64	ug/l	---	ND	0.66	ug/l	---	ND	0.66	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.64	ug/l	---	ND	0.66	ug/l	---	ND	0.66	ug/l	---
Metals														
OSW-6020A														
	Aluminum	7429-90-5	2.2	0.020	mg/l	---	ND	0.020	mg/l	---	0.072	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	1.1	0.020	mg/l	---	ND	0.020	mg/l	---	ND	0.020	mg/l	---
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	0.00054	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Arsenic	7440-38-2	0.0013	0.0020	mg/l	UB	0.00070	0.0020	mg/l	UB	0.025	0.0020	mg/l	---
	Arsenic - Dissolved	7440-38-2	0.00098	0.0020	mg/l	UB	0.00076	0.0020	mg/l	UB	0.00089	0.0020	mg/l	UB
	Barium	7440-39-3	0.017	0.0020	mg/l	---	0.020	0.0020	mg/l	---	0.098	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.010	0.0020	mg/l	---	0.020	0.0020	mg/l	---	0.044	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	11.8	1.0	mg/l	---	24.3	1.0	mg/l	---	60.2	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	10.9	1.0	mg/l	---	23.8	1.0	mg/l	---	55.8	1.0	mg/l	---
	Chromium	7440-47-3	0.0032	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.00056	0.0020	mg/l	J
	Chromium - Dissolved	7440-47-3	0.0012	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt	7440-48-4	0.0020	0.0020	mg/l	---	0.0073	0.0020	mg/l	---	0.0022	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	0.0076	0.0020	mg/l	---	0.0017	0.0020	mg/l	J
	Copper	7440-50-8	0.015	0.0020	mg/l	---	0.0030	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	0.0029	0.0020	mg/l	---	0.0012	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Iron	7439-89-6	3.3	0.025	mg/l	---	3.8	0.025	mg/l	---	70.4	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	0.88	0.025	mg/l	---	0.32	0.025	mg/l	---	5.4	0.025	mg/l	---
	Lead	7439-92-1	0.0017	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Lead - Dissolved	7439-92-1	0.00034	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Magnesium	7439-95-4	5.6	1.0	mg/l	---	5.9	1.0	mg/l	---	7.4	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	5.0	1.0	mg/l	---	5.9	1.0	mg/l	---	7.4	1.0	mg/l	---
	Manganese	7439-96-5	0.15	0.0020	mg/l	---	0.76	0.0020	mg/l	---	11.9	0.20	mg/l	---
	Manganese - Dissolved	7439-96-5	0.022	0.0020	mg/l	---	0.73	0.0020	mg/l	---	11.9	0.20	mg/l	---
	Nickel	7440-02-0	0.0051	0.0020	mg/l	---	0.0018	0.0020	mg/l	J	0.00086	0.0020	mg/l	J
	Nickel - Dissolved	7440-02-0	0.0012	0.0020	mg/l	J	0.0016	0.0020	mg/l	J	0.90	0.20	mg/l	---
	Potassium	7440-09-7	1.5	1.0	mg/l	---	1.9	1.0	mg/l	---	2.8	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	1.2	1.0	mg/l	---	1.8	1.0	mg/l	---	2.6	1.0	mg/l	---
	Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	15.5	1.0	mg/l	---	15.8	1.0	mg/l	---	3.7	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	3.9	1.0	mg/l	---	15.7	1.0	mg/l	---	3.5	1.0	mg/l	---
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	0.00029	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Vanadium	7440-62-2	0.0050	0.0020	mg/l	B	0.0015	0.0020	mg/l	UB	0.0017	0.0020	mg/l	UB
	Vanadium - Dissolved	7440-62-2	0.0033	0.0020	mg/l	B	0.0012	0.0020	mg/l	UB	0.0012	0.0020	mg/l	UB
	Zinc	7440-66-6	0.011	0.025	mg/l	J	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A														
	Chloride	16887-00-6	10.0	1.00	mg/l	---	14.7	1.00	mg/l	---	5.37	1.00	mg/l	---
	Sulfate	14808-79-8	9.73	1.00	mg/l	---	21.8	1.00	mg/l	---	ND	1.00	mg/l	---
Prep														
APHA-2320B														
	Bicarbonate Alkalinity as CaCO3	E-14508	43.1	10.0	mg/l	---	82.5	10.0	mg/l	---	241	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	43.1	10.0	mg/l	---	82.5	10.0	mg/l	---	241	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84672-1

		Sample Name:	OB-27-080615				OB-30C-080615				OB-30B-080615			
		Lab Sample ID:	490846726				490846727				490846728			
		Sample Date:	8/6/2015				8/6/2015				8/6/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	0.38	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trimethylbenzene - TIC	526-73-8	3.4	1.0	ug/l	---								
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1H-Indene, 2,3-dihydro-1,2-dimethyl- - TIC	17057-82-8	5.4	---	ug/l	NJ								
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	17059-48-2	11	---	ug/l	NJ								
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	6682-71-9	5.2	---	ug/l	NJ								
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Phenylbut-1-ene - TIC	934-10-1												
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
Benzene	71-43-2	3.0	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Benzene, (1-methyl-1-propenyl)-, (E)- - TIC	768-00-3	3.8	---	ug/l	NJ								
Benzene, (3-methyl-2-butenyl)- - TIC	4489-84-3	3.4	---	ug/l	NJ								
Benzene, 1,2,3,4-tetramethyl- - TIC	488-23-3	19	---	ug/l	NJ								
Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2	8.4	---	ug/l	NJ								
Benzene, 1,3-diethyl- - TIC	141-93-5	10	---	ug/l	NJ								
Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9	7.3	---	ug/l	NJ								
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	83	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	0.39	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	1.6	5.0	ug/l	J	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7												
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexane - TIC	110-54-3												
Indan, 1-methyl- - TIC	767-58-8	6.0	---	ug/l	NJ								
Isopropylbenzene	98-82-8	2.3	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	0.28	1.0	ug/l	J	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	0.98	5.0	ug/l	J	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	0.33	5.0	ug/l	J	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Naphthalene - TIC	91-20-3	5.9	5.0	ug/l	---								
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Total Alkanes TIC - TIC	Tic1												
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic2	4.6	---	ug/l	NJ								
Unknown - TIC	Tic3	3.3	---	ug/l	NJ								
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	6.2	10	ug/l	J	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84672-1

		Sample Name:	OB-27-080615				OB-30C-080615				OB-30B-080615			
		Lab Sample ID:	490846726				490846727				490846728			
		Sample Date:	8/6/2015				8/6/2015				8/6/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	(-)-10-Camphorsulfonyl chloride - TIC	39262-22-1												
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,4-Dioxane - TIC	123-91-1	2.2	10	ug/l	J								
	1-Methylnaphthalene - TIC	90-12-0	2.4	2.0	ug/l	---								
	1-Phenyl-1-butene - TIC	824-90-8	5.2	---	ug/l	NJ								
	1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	6682-71-9	9.0	---	ug/l	NJ								
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitroaniline	88-74-4	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Nitrophenol	100-02-7	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	Acenaphthene	83-32-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acenaphthylene	208-96-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Atrazine	1912-24-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2	3.6	---	ug/l	NJ								
	Benzene, 1,4-bis(1-methylethenyl)- - TIC	1605-18-1	3.4	---	ug/l	NJ								
	Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	80-30-8												
	Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluoranthene	206-44-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Fluorene	86-73-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Indane - TIC	496-11-7	4.9	---	ug/l	NJ								
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	2.5	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Naphthalene, 1-ethyl- - TIC	1127-76-0	4.5	---	ug/l	NJ								
	Naphthalene, 2,7-dimethyl- - TIC	582-16-1	4.0	---	ug/l	NJ								
	Nitrobenzene	98-95-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenanthrene	85-01-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol, 4,4'-(1-methylethylidene)bis- - TIC	80-05-7	6.2	---	ug/l	NJ								
	Phenol, p-tert-butyl- - TIC	98-54-4												
	Pyrene	129-00-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84672-1

			Sample Name:	OB-27-080615			OB-30C-080615				OB-30B-080615			
			Lab Sample ID:	490846726			490846727				490846728			
			Sample Date:	8/6/2015			8/6/2015				8/6/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.013	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.013	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.013	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.0052	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.10	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---	ND	0.30	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.65	ug/l	---	ND	0.66	ug/l	---	ND	0.63	ug/l	---
	PCB-1221	11104-28-2	ND	0.65	ug/l	---	ND	0.66	ug/l	---	ND	0.63	ug/l	---
	PCB-1232	11141-16-5	ND	0.65	ug/l	---	ND	0.66	ug/l	---	ND	0.63	ug/l	---
	PCB-1242	53469-21-9	ND	0.65	ug/l	---	ND	0.66	ug/l	---	ND	0.63	ug/l	---
	PCB-1248	12672-29-6	ND	0.65	ug/l	---	ND	0.66	ug/l	---	ND	0.63	ug/l	---
	PCB-1254	11097-69-1	ND	0.65	ug/l	---	ND	0.66	ug/l	---	ND	0.63	ug/l	---
	PCB-1260	11096-82-5	ND	0.65	ug/l	---	ND	0.66	ug/l	---	ND	0.63	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.65	ug/l	---	ND	0.66	ug/l	---	ND	0.63	ug/l	---
Metals														
OSW-6020A														
	Aluminum	7429-90-5	0.064	0.020	mg/l	---	1.8	0.020	mg/l	---	0.082	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	0.11	0.020	mg/l	---	0.011	0.020	mg/l	J
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	0.00050	0.0020	mg/l	J	0.00061	0.0020	mg/l	J
	Arsenic	7440-38-2	0.026	0.0020	mg/l	---	0.0023	0.0020	mg/l	B	0.00089	0.0020	mg/l	UB
	Arsenic - Dissolved	7440-38-2	0.00092	0.0020	mg/l	UB	0.0012	0.0020	mg/l	J	0.00058	0.0020	mg/l	J
	Barium	7440-39-3	0.070	0.0020	mg/l	---	0.025	0.0020	mg/l	---	0.029	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.043	0.0020	mg/l	---	0.015	0.0020	mg/l	---	0.028	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	38.1	1.0	mg/l	---	38.2	1.0	mg/l	---	24.5	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	36.3	1.0	mg/l	---	37.3	1.0	mg/l	---	24.9	1.0	mg/l	---
	Chromium	7440-47-3	ND	0.0020	mg/l	---	0.0029	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt	7440-48-4	0.0041	0.0020	mg/l	---	0.0014	0.0020	mg/l	J	0.0022	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	0.0037	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.0022	0.0020	mg/l	---
	Copper	7440-50-8	ND	0.0020	mg/l	---	0.0037	0.0020	mg/l	---	0.0012	0.0020	mg/l	J
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.0015	0.0020	mg/l	UB
	Iron	7439-89-6	52.0	0.025	mg/l	---	3.0	0.025	mg/l	---	0.13	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	5.1	0.025	mg/l	---	0.099	0.025	mg/l	---	0.019	0.025	mg/l	J
	Lead	7439-92-1	ND	0.0020	mg/l	---	0.0013	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.00033	0.0020	mg/l	J
	Magnesium	7439-95-4	5.0	1.0	mg/l	---	16.7	1.0	mg/l	---	5.5	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	5.0	1.0	mg/l	---	16.5	1.0	mg/l	---	5.7	1.0	mg/l	---
	Manganese	7439-96-5	8.0	0.020	mg/l	---	0.16	0.0020	mg/l	---	1.6	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5	8.2	0.010	mg/l	---	0.066	0.0020	mg/l	---	1.6	0.0020	mg/l	---
	Nickel	7440-02-0	0.0024	0.0020	mg/l	---	0.0038	0.0020	mg/l	---	0.0023	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0	0.0027	0.010	mg/l	J	0.0014	0.0020	mg/l	J	0.0031	0.0020	mg/l	---
	Potassium	7440-09-7	1.6	1.0	mg/l	---	5.2	1.0	mg/l	---	2.5	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	1.5	1.0	mg/l	---	5.0	1.0	mg/l	---	2.5	1.0	mg/l	---
	Selenium	7782-49-2	0.00077	0.0020	mg/l	J	0.0024	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	0.0020	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	3.1	1.0	mg/l	---	8.7	1.0	mg/l	---	23.8	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	3.0	1.0	mg/l	---	8.6	1.0	mg/l	---	24.0	1.0	mg/l	---
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Vanadium	7440-62-2	0.0016	0.0020	mg/l	UB	0.0084	0.0020	mg/l	---	0.0015	0.0020	mg/l	UB
	Vanadium - Dissolved	7440-62-2	0.0012	0.0020	mg/l	UB	0.0059	0.0020	mg/l	---	0.0017	0.0020	mg/l	UB
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A														
	Chloride	16887-00-6	2.98	1.00	mg/l	---	34.0	1.00	mg/l	---	33.5	1.00	mg/l	---
	Sulfate	14808-79-8	ND	1.00	mg/l	---	24.5	1.00	mg/l	---	18.6	1.00	mg/l	---
Prep														
APHA-2320B														
	Bicarbonate Alkalinity as CaCO3	E-14508	174	10.0	mg/l	---	111	10.0	mg/l	---	67.3	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	174	10.0	mg/l	---	111	10.0	mg/l	---	67.3	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84672-1

Sample Name: RW-3 (77-87)-080615
Lab Sample ID: 490846729
Sample Date: 8/6/2015

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC					
OSW-8260C					
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	0.26	1.0	ug/l	J
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---
1,2,3-Trimethylbenzene - TIC	526-73-8				
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---
1H-Indene, 2,3-dihydro-1,2-dimethyl- - TIC	17057-82-8				
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	17059-48-2				
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	6682-71-9				
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---
3-Phenylbut-1-ene - TIC	934-10-1				
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---
Benzene, (1-methyl-1-propenyl)-, (E)- - TIC	768-00-3				
Benzene, (3-methyl-2-butenyl)- - TIC	4489-84-3				
Benzene, 1,2,3,4-tetramethyl- - TIC	488-23-3				
Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2				
Benzene, 1,3-diethyl- - TIC	141-93-5				
Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9				
Bromoform	75-25-2	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7				
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---
Hexane - TIC	110-54-3				
Indan, 1-methyl- - TIC	767-58-8				
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---
Naphthalene - TIC	91-20-3				
Styrene	100-42-5	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---
Total Alkanes TIC - TIC	Tic1				
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---
Unknown - TIC	Tic2				
Unknown - TIC	Tic3				
Vinyl chloride	75-01-4	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---
OSW-8260CSim					
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	22	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84672-1

Sample Name: RW-3 (77-87)-080615
Lab Sample ID: 490846729
Sample Date: 8/6/2015

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC					
OSW-8270D					
(-)-10-Camphorsulfonyl chloride - TIC	39262-22-1				
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---
1,4-Dioxane - TIC	123-91-1	9.0	10	ug/l	J
1-Methylnaphthalene - TIC	90-12-0				
1-Phenyl-1-butene - TIC	824-90-8				
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	6682-71-9				
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---
2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---
2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---
2-Chlorophenol	95-57-8	ND	10	ug/l	---
2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---
2-Methylphenol	95-48-7	ND	10	ug/l	---
2-Nitroaniline	88-74-4	ND	25	ug/l	---
2-Nitrophenol	88-75-5	ND	10	ug/l	---
3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---
3-Nitroaniline	99-09-2	ND	25	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---
4-Chloroaniline	106-47-8	ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---
4-Nitroaniline	100-01-6	ND	25	ug/l	---
4-Nitrophenol	100-02-7	ND	25	ug/l	---
Acenaphthene	83-32-9	ND	2.0	ug/l	---
Acenaphthylene	208-96-8	ND	2.0	ug/l	---
Acetophenone	98-86-2	ND	10	ug/l	---
Anthracene	120-12-7	ND	2.0	ug/l	---
Atrazine	1912-24-9	ND	10	ug/l	---
Benzaldehyde	100-52-7	ND	10	ug/l	---
Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2				
Benzene, 1,4-bis(1-methylethenyl)- - TIC	1605-18-1				
Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	80-30-8				
Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---
Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---
Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---
Caprolactam	105-60-2	ND	10	ug/l	---
Carbazole	86-74-8	ND	10	ug/l	---
Chrysene	218-01-9	ND	2.0	ug/l	---
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---
Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---
Dibenzofuran	132-64-9	ND	10	ug/l	---
Diethyl phthalate	84-66-2	ND	10	ug/l	---
Dimethyl phthalate	131-11-3	ND	10	ug/l	---
Diphenyl	92-52-4	ND	10	ug/l	---
Fluoranthene	206-44-0	ND	2.0	ug/l	---
Fluorene	86-73-7	ND	2.0	ug/l	---
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---
Hexachloroethane	67-72-1	ND	10	ug/l	---
Indane - TIC	496-11-7				
Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---
Isophorone	78-59-1	ND	10	ug/l	---
N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---
Naphthalene	91-20-3	ND	2.0	ug/l	---
Naphthalene, 1-ethyl- - TIC	1127-76-0				
Naphthalene, 2,7-dimethyl- - TIC	582-16-1				
Nitrobenzene	98-95-3	ND	10	ug/l	---
Phenanthrene	85-01-8	ND	2.0	ug/l	---
Phenol	108-95-2	ND	10	ug/l	---
Phenol, 4,4'-(1-methylethylidene)bis- - TIC	80-05-7				
Phenol, p-tert-butyl- - TIC	98-54-4				
Pyrene	129-00-0	ND	2.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84672-1

Sample Name: RW-3 (77-87)-080615
Lab Sample ID: 490846729
Sample Date: 8/6/2015

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim					
Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---
Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---
Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---
Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---
Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---
N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---
Pentachlorophenol	87-86-5	ND	0.30	ug/l	---
GC Other					
OSW-8082A					
PCB-1016	12674-11-2	ND	0.66	ug/l	---
PCB-1221	11104-28-2	ND	0.66	ug/l	---
PCB-1232	11141-16-5	ND	0.66	ug/l	---
PCB-1242	53469-21-9	ND	0.66	ug/l	---
PCB-1248	12672-29-6	ND	0.66	ug/l	---
PCB-1254	11097-69-1	ND	0.66	ug/l	---
PCB-1260	11096-82-5	ND	0.66	ug/l	---
Polychlorinated biphenyls, Total	1336-36-3	ND	0.66	ug/l	---
Metals					
OSW-6020A					
Aluminum	7429-90-5	0.013	0.020	mg/l	J
Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---
Antimony	7440-36-0	ND	0.0020	mg/l	---
Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---
Arsenic	7440-38-2	0.00088	0.0020	mg/l	UB
Arsenic - Dissolved	7440-38-2	ND	0.0020	mg/l	---
Barium	7440-39-3	0.050	0.0020	mg/l	---
Barium - Dissolved	7440-39-3	0.045	0.0020	mg/l	---
Beryllium	7440-41-7	ND	0.0020	mg/l	---
Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---
Cadmium	7440-43-9	ND	0.0010	mg/l	---
Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---
Calcium	7440-70-2	58.8	1.0	mg/l	---
Calcium - Dissolved	7440-70-2	57.4	1.0	mg/l	---
Chromium	7440-47-3	ND	0.0020	mg/l	---
Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---
Cobalt	7440-48-4	ND	0.0020	mg/l	---
Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---
Copper	7440-50-8	0.00090	0.0020	mg/l	J
Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---
Iron	7439-89-6	0.082	0.025	mg/l	---
Iron - Dissolved	7439-89-6	0.012	0.025	mg/l	J
Lead	7439-92-1	0.00026	0.0020	mg/l	J
Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---
Magnesium	7439-95-4	15.6	1.0	mg/l	---
Magnesium - Dissolved	7439-95-4	15.7	1.0	mg/l	---
Manganese	7439-96-5	0.096	0.0020	mg/l	---
Manganese - Dissolved	7439-96-5	0.093	0.0020	mg/l	---
Nickel	7440-02-0	0.0094	0.0020	mg/l	---
Nickel - Dissolved	7440-02-0	0.0069	0.0020	mg/l	---
Potassium	7440-09-7	2.3	1.0	mg/l	---
Potassium - Dissolved	7440-09-7	2.2	1.0	mg/l	---
Selenium	7782-49-2	ND	0.0020	mg/l	---
Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---
Silver	7440-22-4	ND	0.0020	mg/l	---
Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---
Sodium	7440-23-5	7.7	1.0	mg/l	---
Sodium - Dissolved	7440-23-5	7.5	1.0	mg/l	---
Thallium	7440-28-0	ND	0.0020	mg/l	---
Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---
Vanadium	7440-62-2	0.0020	0.0020	mg/l	B
Vanadium - Dissolved	7440-62-2	0.0020	0.0020	mg/l	B
Zinc	7440-66-6	0.016	0.025	mg/l	J
Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---
OSW-7470A					
Mercury	7439-97-6	ND	0.00020	mg/l	---
Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---
General Chemistry					
OSW-9012B					
Cyanide, Total	57-12-5	ND	0.010	mg/l	---
OSW-9056A					
Chloride	16887-00-6	2190	5.00	mg/l	---
Sulfate	14808-79-8	139	1.00	mg/l	---
Prep					
APHA-2320B					
Bicarbonate Alkalinity as CaCO3	E-14508	202	10.0	mg/l	---
Total Alkalinity as CaCO3	E-14506	202	10.0	mg/l	---

APPENDIX 4

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84672-1

		Sample Name:	RW-7-080615				OB-21-080615				Dup-01-080615				OB-6-080615				OB-11R-080615				OB-27-080615			
		Lab Sample ID:	490846721				490846722				490846723				490846724				490846725				490846726			
		Sample Date:	8/6/2015				8/6/2015				8/6/2015				8/6/2015				8/6/2015				8/6/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																									
OSW-8260C																									
1H-Indene, 2,3-dihydro-1,2-dimethyl- - TIC	17057-82-8																					5.4	---	ug/l	NJ
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	17059-48-2																					11	---	ug/l	NJ
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	6682-71-9																	4.8	---	ug/l	NJ	5.2	---	ug/l	NJ
3-Phenylbut-1-ene - TIC	934-10-1																	4.7	---	ug/l	NJ				
Benzene, (1-methyl-1-propenyl)-, (E)- - TIC	768-00-3																					3.8	---	ug/l	NJ
Benzene, (3-methyl-2-butenyl)- - TIC	4489-84-3																					3.4	---	ug/l	NJ
Benzene, 1,2,3,4-tetramethyl- - TIC	488-23-3																					19	---	ug/l	NJ
Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2																					8.4	---	ug/l	NJ
Benzene, 1,3-diethyl- - TIC	141-93-5																					10	---	ug/l	NJ
Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9																					7.3	---	ug/l	NJ
Cyclopentane, methyl- - TIC	96-37-7																	4.0	---	ug/l	NJ				
Hexane - TIC	110-54-3																	0.36	2.0	ug/l	J				
Indan, 1-methyl- - TIC	767-58-8																	2.7	---	ug/l	NJ	6.0	---	ug/l	NJ
Total Alkanes TIC - TIC	Tic1																	0.36	---	ug/l	NJ				
Unknown - TIC	Tic2																					4.6	---	ug/l	NJ
Unknown - TIC	Tic3																					3.3	---	ug/l	NJ
GC/MS SVOC																									
OSW-8270D																									
(-)-10-Camphorsulfonyl chloride - TIC	39262-22-1																	7.6	---	ug/l	NJ				
1,4-Dioxane - TIC	123-91-1																	1.5	10	ug/l	J	2.2	10	ug/l	J
1-Phenyl-1-butene - TIC	824-90-8																					5.2	---	ug/l	NJ
1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	6682-71-9																					9.0	---	ug/l	NJ
Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2																					3.6	---	ug/l	NJ
Benzene, 1,4-bis(1-methylethenyl)- - TIC	1605-18-1																					3.4	---	ug/l	NJ
Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	80-30-8																	5.9	---	ug/l	NJ				
Indane - TIC	496-11-7																					4.9	---	ug/l	NJ
Naphthalene, 1-ethyl- - TIC	1127-76-0																					4.5	---	ug/l	NJ
Naphthalene, 2,7-dimethyl- - TIC	582-16-1																					4.0	---	ug/l	NJ
Phenol, 4,4'-(1-methylethylidene)bis- - TIC	80-05-7																					6.2	---	ug/l	NJ
Phenol, p-tert-butyl- - TIC	98-54-4																	3.4	---	ug/l	NJ				
Metals																									
OSW-6020A																									
Arsenic	7440-38-2	0.00074	0.0020	mg/l	UB	0.0014	0.0020	mg/l	UB	0.0013	0.0020	mg/l	UB	0.00070	0.0020	mg/l	UB								
Arsenic - Dissolved	7440-38-2	0.00072	0.0020	mg/l	UB	0.00056	0.0020	mg/l	UB	0.00098	0.0020	mg/l	UB	0.00076	0.0020	mg/l	UB	0.00089	0.0020	mg/l	UB	0.00092	0.0020	mg/l	UB
Copper - Dissolved	7440-50-8																								
Manganese	7439-96-5	0.0042	0.0020	mg/l	J																				
Vanadium	7440-62-2	0.0019	0.0020	mg/l	UB	0.0050	0.0020	mg/l	B	0.0050	0.0020	mg/l	B	0.0015	0.0020	mg/l	UB	0.0017	0.0020	mg/l	UB	0.0016	0.0020	mg/l	UB
Vanadium - Dissolved	7440-62-2	0.0018	0.0020	mg/l	UB	0.0025	0.0020	mg/l	B	0.0033	0.0020	mg/l	B	0.0012	0.0020	mg/l	UB	0.0012	0.0020	mg/l	UB	0.0012	0.0020	mg/l	UB
General Chemistry																									
OSW-9012B																									
Cyanide, Total	57-12-5	ND	0.010	mg/l	UJ																				

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84672-1

			Sample Name:	OB-30C-080615				OB-30B-080615				RW-3 (77-87)-080615			
			Lab Sample ID:	490846727				490846728				490846729			
			Sample Date:	8/6/2015				8/6/2015				8/6/2015			
				Report			Valid		Report		Valid		Report		Valid
Analyte		Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
GC/MS VOC														
OSW-8260C														
	1H-Indene, 2,3-dihydro-1,2-dimethyl- - TIC	17057-82-8												
	1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	17059-48-2												
	1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	6682-71-9												
	3-Phenylbut-1-ene - TIC	934-10-1												
	Benzene, (1-methyl-1-propenyl)-, (E)- - TIC	768-00-3												
	Benzene, (3-methyl-2-butenyl)- - TIC	4489-84-3												
	Benzene, 1,2,3,4-tetramethyl- - TIC	488-23-3												
	Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2												
	Benzene, 1,3-diethyl- - TIC	141-93-5												
	Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9												
	Cyclopentane, methyl- - TIC	96-37-7												
	Hexane - TIC	110-54-3												
	Indan, 1-methyl- - TIC	767-58-8												
	Total Alkanes TIC - TIC	Tic1												
	Unknown - TIC	Tic2												
	Unknown - TIC	Tic3												
GC/MS SVOC														
OSW-8270D														
	(-)-10-Camphorsulfonyl chloride - TIC	39262-22-1												
	1,4-Dioxane - TIC	123-91-1									9.0	10	ug/l	J
	1-Phenyl-1-butene - TIC	824-90-8												
	1H-Indene, 2,3-dihydro-4,7-dimethyl- - TIC	6682-71-9												
	Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2												
	Benzene, 1,4-bis(1-methylethenyl)- - TIC	1605-18-1												
	Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	80-30-8												
	Indane - TIC	496-11-7												
	Naphthalene, 1-ethyl- - TIC	1127-76-0												
	Naphthalene, 2,7-dimethyl- - TIC	582-16-1												
	Phenol, 4,4'-(1-methylethylidene)bis- - TIC	80-05-7												
	Phenol, p-tert-butyl- - TIC	98-54-4												
Metals														
OSW-6020A														
	Arsenic	7440-38-2	0.0023	0.0020	mg/l	B	0.00089	0.0020	mg/l	UB	0.00088	0.0020	mg/l	UB
	Arsenic - Dissolved	7440-38-2												
	Copper - Dissolved	7440-50-8					0.0015	0.0020	mg/l	UB				
	Manganese	7439-96-5												
	Vanadium	7440-62-2					0.0015	0.0020	mg/l	UB	0.0020	0.0020	mg/l	B
	Vanadium - Dissolved	7440-62-2					0.0017	0.0020	mg/l	UB	0.0020	0.0020	mg/l	B
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5												

APPENDIX 5

EPA Sample Holding Time and Preservation Requirements

Parameter	*Reference Method*	*Matrix*	*Preservation & Storage*	*Holding Times*
Volatile Organics by GCMS	OSW-8260C/SIM	Water	Acidify ph<2 Refrigeration 0-6oC	14 days
Semivolatile Organics by GCMS	OSW-8270D/SIM	Water	Refrigeration 0-6oC	7 days Extraction 40 days Analysis
Polychlorinated Biphenyls by GC/ECD	OSW-8082A	Water	Refrigeration 0-6oC	365 days - Extraction - Analysis
Metals by ICP/ICPMS Spectroscopy	OSW-6010B OSW-6020A	Water	Acidify pH<2 Refrigeration 0-6oC	180 days
Mercury in Aqueous Waste	OSW-7470A	Water	Acidify pH<2 Refrigeration 0-6oC	28 days
Alkalinity	EPA 2320B	Water	Refrigeration 0-6oC	14 days
Chloride and Sulfate	OSW-9056A	Water	Refrigeration 0-6oC	28 days
Total and Amenable Cyanide	OSW-9012B	Water	Test for presence of Sulfide – if unknown collect two samples and treat one with Lead Carbonate. Then adjust sample to pH of greater than or equal to 12with NaOH. Refrigeration at 0-4C –(also may require treatment for aldehydes and chlorine/hypochlorite/sulfite)	14 days if preserved. 24 hours or sooner if unpreserved

ATTACHMENT A

CHAIN OF CUSTODY DOCUMENT(S)

Loc: 490
84672
#1
O

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Robert Lavelle	Lab PM: Brown, Shali	Carrier:	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	8082A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filtert)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:															
RW-7-080615 MS/MSD	8/6/15	10:05	G	Water	N	Y	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
OB-21-080615	8/6/15	10:35	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Dup-01-080615	8/6/15	12:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
OB-6-080615	8/6/15	10:05	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
OB-11R-080615	8/6/15	12:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
OB-27-080615	8/6/15	15:20	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
OB-30C-080615	8/6/15	15:05	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
OB-30B-080615	8/6/15	15:10	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
~~RW-3-080615~~				Water														
RW-3 (77-87)-080615	8/6/15	14:35	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
TB-03-080715	8/7/15	—	—	Water	N	N	✓	✓										

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/7/15 730	CS	James Thro	8/7/15 1730	TA
2		8/7/15 1320	TA			
3		8/10/15 1800		1.6/0.9/1.1/0.9/0.1	8/11/15 933	TAN

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

09/15/2015

E-Mail Date: 2015-10-27
E-Mail To: tim.roeper@cornerstoneeg.com
cc:

U.S. Mail: Tim Roeper
Cornerstone Environmental Group
100 Crystal Run Road, Suite 101
Middletown, NY 10941

ANALYTICAL DATA VALIDATION REPORT
Ringwood Mines/Landfill
Ford Motor Company
CLIENT PROJECT NUMBER - not available
CADENA PROJECT E203361
SAMPLES COLLECTED August 2015
SUBMITTAL #: 490-85153-1

PREPARED BY:
CADENA, INC.
1099 Highland Drive
Ann Arbor, MI 48108
Telephone: 517-819-0356
Fax: 734-975-6709
Contact: Jim Tomalia (jtomalia@cadenaco.com)
Date: 2015-10-27
www.CADENACO.com

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ATTACHMENT A CHAIN OF CUSTODY DOCUMENT(S)

1.0 INTRODUCTION

The following document details an assessment of the analytical data reported by TestAmerica-Nashville Laboratory the data in the submittals listed below which were collected from the Ringwood Mines/Landfill site as noted. A sampling and analysis summary that lists all sample ID's and testing as related to the laboratory submittal numbers is presented in Appendix 1. A summary of all of the analytical data is presented in Appendix 3. Copies of sample Chain of Custody (COC) documents and cooler receipt forms for samples discussed in this report are included in Attachment A.
Note: One field sample from this submittal was collected in triplicate to facilitate use of this sample as the QC batch MS/MSD for each analysis where appropriate (MS not required for alkalinity).

Table 1.1

Laboratory Submittal	***Sample Date***	***Laboratory Receipt Date***
490-85153-1	8/12-13/2015	8/14-15/2015

The samples noted below were validated against the associated method/parameter in order to achieve the validation requirements for this SDG:

Table 1.2

Parameter	***Reference Method***	***Analyte Listing***
Volatile Organics	OSW-8260C	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8260CSIM	1,2-Dibromo-3-Chloropropane,1,4-Dioxane,EthyleneDibromide,1,2,3-Trichloropropane
Semi-Volatile Organics	OSW-8270D	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8270DSIM	Extended list includes the following: Benzo(a)anthracene,Benzo(a)pyrene, Benzo(b)fluoranthene,Hexachlorobenzene, Hexachlorobutadiene,N-Nitrosodimethylamine,Pentachlorophenol
PCB	OSW-8082A	7 Standard Aroclors
Metals	OSW-6020A/7470A	Total and dissolved TAL Metals
Ion Chromatography	OSW-9056A	Chloride and Sulfate
Total Cyanide	OSW-9021B	Total and Amenable Cyanide
General Chemistry	APHA-2320B	Total and Bicarbonate Alkalinity

All "SW" analytical methods were referenced from "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition, November 1986 (with all subsequent revisions). The "SM" analytical method was referenced from the "Standard Methods for the Examination of Water and Waste water", latest promulgated revision. "EPA" methods were referenced from the revisions noted.

Laboratory Standard Operating Procedures (SOPs) associated with the methods utilized for this laboratory submittal were not available to CADENA for the purpose of validating this SDG.

Level IV data review provides a comprehensive or extensive review of the analytical data allowing for the complete reconstruction of the chemical analysis. A Level IV (Tier 3) data review was performed on the samples listed in Table 1.2 above by (CADENA).

All of the data that was recalculated was consistent with the reported results to within at least 2 significant figures. Final results may not recalculate exactly beyond this level of precision, in some cases, due to differences in available significant figures between the hardcopy raw data provided and the data utilized for calculations by the laboratory that came directly from the instrument. A table of the laboratory documents reviewed in preparing this report is included in Appendix 2.

The data was reviewed in accordance with the analytical methods and the documents listed below: (NOTE: laboratory criteria – control limits – were utilized to evaluate the data where available. Comparison to NFG criteria are noted when lab criteria was not available or for informational purposes when lab data exceeds NFG criteria).

i.) "Standard Operating Procedure HW-6 Rev12 March 2001: CLP Organics Data Review and Preliminary Review" USEPA Region 2 as identified in project QAPP.
ii.) "Standard Operating Procedure HW-2, Rev11, Jan 1992: Evaluation of Metals Data for the CLP Program" as identified in the project QAPP.

The Level VI review findings are presented in the following subsections.

An overview of the review findings is presented in table format. Several data qualifier flags were utilized in the review process. The definitions of these qualifier flags are as follows:

- J Indicates an estimated value.
- U Indicates the compound or analyte was analyzed for, but not detected at or above the stated limit.
- UJ The analyte/compound was not detected above the reported sample quantitation limit. However, the quantitation limit is considered to be approximate due to associated quality assurance results.
- UB The analyte was detected in the sample at a level between the MDL and RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the reporting limit.
- B The analyte was detected in the sample at a level above the RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the concentration reported.
- R The analyte/compound results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte/compound cannot be verified.

All flags have been incorporated into the data tables in this report.

1.1 VALIDATION QUALIFIER EXECUTIVE SUMMARY

VALIDATION SUMMARY

GCMS VOC and SIM
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
GCMS SVOC and SIM
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
PCB
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
METALS
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
INORGANICS
No additional qualifications were made beyond those determined from level 2 verification review as noted below.

The following observations **DID NOT** result in qualification but were noted during the validation review:
GCMS VOC
CCV/ICV – CCV for analytical batch 275550 analyzed on 8/23 has %D outliers (20% max) biased low for target analytes acetone and biased high for target analytes cyclohexane and cyclohexanone (%D was less than 30% for all). Qualification of client sample results was not made based on these CCV percent difference outliers as only analyte detection associated with these outliers was already J flagged due to being detected below the RL.
GCMS VOC-SIM
No additional non-conforming observations to report.
GCMS SVOC
Sample was received at a pH of 10 (recommended pH 7) for sample -007 GCMS SVOC analysis. Sample pH was adjusted to pH 2 prior to initial extraction so sample preservation non-conformance did not require qualification.
METALS
PDS and SERIAL DILUTION analytical sequence outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.
CRQL's outside of lab criteria biased high did not affect qualification of client sample results.
NOTE: QC batch 27599 thallium raw data results for samples -001 and -002 did not match the reported results. Lab inquiry in progress – database and report will be corrected if applicable pending lab response.
PCB – internal standard technique was used for both columns. Some initial and continuing calibration outliers were observed for specific aroclor 1016/1260 peaks on the secondary columns but these outliers did not affect sample quantitation. There was no ending CCV reported for the sequences evaluated.

Laboratory "P" flag outliers noted for quantification differences determined from the two analytical columns were associated with surrogate recoveries only for samples that were non-detect on both columns so qualification was not required based on these "P" flags.

LABORATORY FOLLOW-UP

Total thallium results for client samples -001 and -002 were re-visited with the lab as the reported results were marginally different from raw data values. Revised level 4 laboratory data package was received 2015-10-27 and original data was confirmed using updated data package.

VERIFICATION SUMMARY

The following qualifications and associated data flags were applied based on the initial level 2 review of this data package.

The following minor QC exceptions or missing information were noted:

GCMS VOC trip blank had a detection below the RL for methylene chloride. Client samples -003, -004, -005, -006 and -007 methylene chloride results should be considered to be non-detect at the RL and qualified with UB flags.

GCMS VOC QC batch 275550 LCS recovery was an outlier biased high for cis-1,2-dichloroethylene. Qualification of client sample results was not required based on this high bias QC outlier.

GCMS VOC and GCMS SVOC TIC results should be considered to be estimated and qualified with NJ flags unless the TIC analyte detected is an instrument calibrated compound that is just not part of the TAL for this submittal in which case no qualification is required other than the TIC qualification code or J flag if the result is detected below the RL.

GCMS SVOC QC batch 274686 and PCB QC batch 277885 and PAH QC batch 274580 did not include MS recovery data due to insufficient sample volume available for spiking according to the laboratory submittal case narrative.

GCMS SVOC QC batch 274686 LCS recoveries were outliers biased high for benzaldehyde. Qualification of client sample results was not required based on this high bias QC outlier. LCS/LCSduplicate RPD only was an outlier for pentachlorophenol so qualification was not required based on this QC outlier alone.

GCMS SVOC QC batch 274686 method blank had detections above the RL for benzo(ghi)perylene, dibenzo(ah)anthracene and indeno(123cd)pyrene. Client sample -004 benzo(ghi)perylene results should be considered to be non-detect at the RL and qualified with a UB flag.

PCB results qualified by the laboratory with P flags indicating that the relative percent difference between confirmatory results was greater than 40% were not qualified as part of this level 2 verification review but will be evaluated in the level 4 validation package review.

Metals method blanks had detections below the RL in QC batch 272053 for total arsenic, manganese, antimony and vanadium and in QC batch 275991 for aluminum and above the RL in QC batch 274351 for vanadium. Client samples -001, -003, -006 total arsenic results and client samples -001, -002, -004 total antimony results and client samples -001, -003, -004 total vanadium results and client samples -001, -003, -004 dissolved vanadium results should be considered to be non-detect at the RL and qualified with UB flags. Client samples -004 total arsenic results and client samples -005, -006 total vanadium results and client sample -007 total manganese results and client samples -002, -005, -006 and -007 dissolved vanadium results and client samples -001 and -003 total aluminum results should be considered to be non-detect at the concentration reported and qualified with B flags.

Metals QC batch 276031, 273945 and 275991 and Cyanide QC batch 273559 and 274313 MS recovery

outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

2.0 VOLATILE ORGANIC COMPOUNDS (VOCs) – METHOD SW846 8260C and SIM Analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

2.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) VOCs

2.1.1 TUNING AND MASS CALIBRATION – GC/MS VOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

2.1.2 INITIAL CALIBRATION – GC/MS VOCs

Initial calibration data for VOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS VOCs

Initial calibration verification (ICV) standards for VOC analyses were reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

2.2 CONTINUING CALIBRATION – GC/MS VOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.3 INTERNAL STANDARDS – GC/MS VOCs

Internal standard (IS) data were reviewed and met criteria without exception.

2.4 SURROGATE SPIKE RECOVERIES – GC/MS VOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

2.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS VOCs

A laboratory control sample (LCS) was prepared and analyzed for VOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

2.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS VOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

2.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS VOCs

There were no field duplicate comparisons performed as part of this validation request.

2.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS VOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

2.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS VOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable unless noted otherwise in verification/validation summary.

2.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS VOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

2.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS VOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

3.0 SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) – METHOD SW846 8270D and SIM analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

3.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) SVOCs

3.1.1 TUNING AND MASS CALIBRATION – GC/MS SVOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

3.1.2 INITIAL CALIBRATION – GC/MS SVOCs

Initial calibration data for SVOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

3.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS SVOCs

Initial calibration verification (ICV) standards for SVOC analyses were reviewed and met criteria specified by the laboratory with no exceptions.

3.2 CONTINUING CALIBRATION – GC/MS SVOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary

3.3 INTERNAL STANDARDS – GC/MS SVOCs

Internal standard (IS) data were reviewed and met criteria without exception.

3.4 SURROGATE SPIKE RECOVERIES – GC/MS SVOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

3.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS SVOCs

A laboratory control sample (LCS) was prepared and analyzed for SVOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

3.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS SVOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

3.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS SVOCs

There were no field duplicate comparisons performed as part of this validation request.

3.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS SVOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

3.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS SVOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable without exception.

3.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS SVOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

3.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS SVOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

4.0 POLYCHLORINATED BIPHENYLS (PCBs) – METHOD SW846 8082A

The target analyte list was defined by the client as the standard 7 aroclors.

4.1 CALIBRATION – GAS CHROMATOGRAPH-ECD
4.1.1 TUNING AND MASS CALIBRATION – PCB

Not applicable for this analysis.

4.1.2 INITIAL CALIBRATION – PCB

Initial calibration data for PCBs were reviewed and met the criteria for instrument sensitivity and linearity of response without exception.

4.1.3 INITIAL CALIBRATION VERIFICATION – PCB

Initial calibration verification (ICV) standards for PCB analyses were reviewed and met criteria specified by the laboratory with no exceptions.

4.2 CONTINUING CALIBRATION – PCBs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

4.3 INTERNAL STANDARDS – PCB

Internal standard (IS) data were reviewed and met criteria unless noted otherwise in verification/validation summary. (NOTE: Lab quantitation approach DID use internal standard quantitation for this submittal).

4.4 SURROGATE SPIKE RECOVERIES – PCB

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

4.5 LABORATORY CONTROL SAMPLE ANALYSES - PCB

A laboratory control sample (LCS) was prepared and analyzed for PCBs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary..

4.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - PCB

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

4.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - PCB

There were no field duplicate comparisons performed as part of this validation request.

4.8 EXTRACT CLEANUP - PCB

Extract cleanups were performed in accordance with laboratory SOP's and as noted in level 4 data package prep logs.

4.9 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - PCB

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

4.10 TENTATIVELY IDENTIFIED COMPOUNDS - PCB

Not requested for this analytical procedure.

4.11 BLANKS – METHOD/FIELD/CALIBRATION - PCB

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

5.0 HPLC/IC – METHOD SW846 9056A – CHLORIDE AND SULFATE

5.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

5.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

5.3 CONTINUTING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

5.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

5.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

5.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

5.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

5.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

6.0 METALS – ICPMS by Method 6020 TOTAL AND DISSOLVED and Mercury by Method 7470A

The following samples provided in this SDG underwent a Level IV review for either/and metals or mercury analyses:

- Method 6020A: ALL
- Method 7470A: ALL

6.1 ICP/MS TUNING AND MASS CALIBRATION

Instrument tuning data were reviewed. Tuning elements were analyzed. All tuning criteria were met for the analyses, indicating proper optimization of the instrumentation.

6.2 INITIAL CALIBRATION

Initial calibration data for metals and mercury were reviewed and met the criteria for linearity of response without exception.

6.3 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards for metals and mercury analyses were reviewed and met criteria unless otherwise noted in verification/validation summary section of this document.

An initial calibration blank (ICB) was analyzed for metals and mercury analyses. Metals and mercury were reported as non-detect in each ICB analysis unless noted otherwise in verification/validation summary.

6.4 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for metals and mercury analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

6.5 INTERFERENCE CHECK STANDARD

The interference check standard results were reviewed and found to meet criteria.

6.6 INTERNAL STANDARDS

Internal standard (IS) data were reviewed and found to meet criteria unless noted otherwise in verification/validation summary.

6.7 LABORATORY CONTROL SAMPLE ANALYSIS

A laboratory control sample (LCS) was prepared and analyzed for metals and mercury. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

6.8 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE (MS/MSD) ANALYSES

The MS/MSD recoveries and RPD's were either not performed using a client sample or were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

6.9 CONTRACT REQUIRED DETECTION LIMIT STANDARD ANALYSES

Each contract required detection limit (CRDL) standard was analyzed at the proper frequency and were within laboratory control limits unless noted otherwise in verification/validation summary.

6.10 ICP SERIAL DILUTION

Serial dilutions were analyzed at the proper frequency and were either not performed using the client sample or were within laboratory control limits unless noted otherwise in verification/validation summary.

6.11 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

6.12 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

6.13 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

7.0 GENERAL CHEMISTRY- TOTAL AND AMENABLE CYANIDE AND ALKALINITY – METHODS 9012B and 2320B

7.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

7.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

7.3 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

7.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

7.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD’s were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

7.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

7.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

7.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

8.0 REPRESENTATIVENESS EVALUATION

Representativeness is a qualitative evaluation of whether the data represents actual environmental conditions. Representativeness was evaluated using holding time criteria, which reflect the length of time after sample collection that a sample or extract remains representative of environmental conditions. Depending on the analysis, either one or two holding times were evaluated.

i.) For those analyses that do not include a sample extraction, only one holding time was evaluated: the length of time between sample collection and analysis.

ii.) For analyses that require sample extraction prior to analysis, two holding times were evaluated: the length of time from sampling until extraction and the length of time from extraction to analysis.

Holding times are compared to standard method specific holding times accepted or recommended by the United States Environmental Protection Agency (USEPA). Those holding times outside of USEPA acceptance criteria are qualitatively evaluated to determine their effect on sample representativeness.

Representativeness was also evaluated by analysis of laboratory method blanks and field equipment blanks. Laboratory method blanks and field equipment blanks are used to identify sources of contamination not associated with environmental conditions.

8.1 SAMPLE PRESERVATION AND HOLDING TIMES

Sample holding time and preservation requirements are summarized in Appendix 5.

All sample extractions and/or analyses were performed within the specified holding times unless noted otherwise in verification/validation summary.

All samples were properly preserved and cooled to 0-6°C after collection.

8.2 METHOD BLANK SUMMARY

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

Evaluation of blank contamination includes directions on the interpretation of the affected analytical results.

9.0 USABILITY AND COMPARABIILTY

Usability of data was evaluated by assuring that all the analytical requests were met, samples were received in the proper condition, and all analyses were performed within the appropriate holding times unless noted otherwise in verification/validation summary

No data evaluated within this delivery group was considered unusable (qualified with an R flag) due to sample integrity, sample matrix interference or batch quality control issues unless noted otherwise in verification/validation summary.

10.0 QC SUMMARY

All sample results meet the project specific QAPP standard for usability with exceptions defined by validation and verification qualifiers as applied. Please reference the following tables for a summary of the investigative field sample data and their valid qualifiers based on Level 4 technical review of the analytical data.

APPENDIX 1

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Nashville
Laboratory Submittal: 85153-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	Metals by ICP Spectroscopy(D)	Metals by ICP Mass Spectroscopy	(Manual Cold Vapor)(D)	(Manual Cold Vapor)	TOTAL AND AMENABLE COLORIMETRIC, WITH OFF-LINE DISTILLATION)	Inorganic Anions by IC	Alkalinity Prep
490851531	PM AirShaft-50-081215	8/12/2015	10:05:00	X	X	X	X	X	X	X	X	X	X	X	X
490851532	OB-25-081215	8/12/2015	9:50:00	X	X	X	X	X	X	X	X	X	X	X	X
490851533	OB-2-081215	8/12/2015	12:55:00	X	X	X	X	X	X	X	X	X	X	X	X
490851534	SC-2-081215	8/12/2015	2:25:00	X	X	X	X	X	X	X	X	X	X	X	X
490851535	RW-13(150-170)-081215	8/12/2015	11:10:00	X	X	X	X	X	X	X	X	X	X	X	X
490851536	OB-29-081215	8/12/2015	3:30:00	X	X	X	X	X	X	X	X	X	X	X	X
490851537	RW-12(130-140)-081215	8/12/2015	2:50:00	X	X	X	X	X	X	X	X	X	X	X	X
490851538	TB-06-081315	8/13/2015	1:00:00	X	X										

APPENDIX 2

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85153-1
August 2015

Description

- Standard Report Cover page
- Table of Contents
- SDG Case Narrative
- Sample Summary
- Executive Summary detection highlights
- Method Summary
- Method/Analyst Summary
- Analytical Results
- Surrogate Summary
- Quality Control Results
- Data Qualifiers
- QC Summary Association
- Lab Chronicle
- GCMS Volatiles Data - Method 8260C and SIM
  - QC Summary Data
    - Surrogate recoveries (form II)
    - Check Sample recoveries (form III)
    - Matrix spike/Matrix spike duplicate report (form III)
    - Method blank report (form IV)
    - Tuning and mass calibrations (form V)
    - Internal Standard and RT area summary (form VIII)
  - Sample Data
    - GCMS VOA Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Total Ion Profile Chromatogram
    - Ion profiles of detected target analyte peaks
    - Manual integration if applicable
    - Tentatively Identified Compound Reports (if applicable)
  - Standards Data
    - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
    - ICAL Raw integration data from instrument
    - ICAL Total Ion Profile Chromatogram
    - ICV check standard recovery report (Form VII)
    - ICV check standard total ion profile with integration
    - GCMS VOA Continuing Calibration Data (Form VII)
    - CCV raw integration data from instrument
    - CCV Total Ion Profile Chromatogram
    - Manual integration if applicable
  - Raw QC Data
    - Tune information (not included with SIM package)
    - FORM I - QC data
    - Method Blank integration/internal standard and total ion profile raw data
    - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
    - MS and MSD integration/internal standard and total ion profile raw data
  - Miscellaneous Data
    - Run logs

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NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
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Description

GCMS Semivolatiles Data - Method 8270D and SIM

- QC Summary Data
  - Surrogate recoveries (form II)
  - Check Sample recoveries (form III)
  - Method blank report (form IV)
  - Tuning and mass calibrations (form V) (not applicable for SIM)
  - Internal Standard and RT area summary (form VIII)
- Sample Data
  - GCMS VOA Organics Analysis Data Sheet (Form I)
  - Raw integration data from instrument
  - Total Ion Profile Chromatogram
  - Ion profiles of detected target analyte peaks
  - Manual integration if applicable
  - Tentatively Identified Compound Reports (if applicable)
- Standards Data
  - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
  - ICAL Raw integration data from instrument
  - ICAL Total Ion Profile Chromatogram
  - ICV check standard recovery report
  - ICV check standard total ion profile with integration
  - GCMS VOA Continuing Calibration Data (Form VII)
  - CCV raw integration data from instrument
  - CCV Total Ion Profile Chromatogram
  - Manual integration if applicable
- Raw QC Data
  - Tune information (not applicable for SIM)
  - Method Blank integration/internal standard and total ion profile raw data
  - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
- Miscellaneous Data
  - Instrument run logs
  - Extraction bench sheets

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FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
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Description

- Polychlorinated Biphenyls Data (PCB)
  - QC Summary data
    - Surrogate recoveries (form II)
    - Check Sample Recovery data (form III)
    - Method Blank data (form IV)
    - Analytical sequence with RT check (Form VIII)
    - Identification Summary (Form X)
  - Sample Data
    - Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Chromatogram
  - Standards Data (both columns)
    - Initial Calibration Data External Standard RT Summary (Form VI)
    - Initial Calibration Data Summary with average RF
    - Raw integration data from instrument with manual integrations where applicable
    - ICAL chromatograms
    - Continuing Calibration Data (Form VII) with RT Summaries
    - ICV raw integration and chromatograms
    - CCV raw integration data from instrument
    - CCV chromatogram
  - Raw QC Data
    - LCS/LCSD sample data report and integration and chromatograms
    - Method blank integration and chromatograms
  - Miscellaneous Data
    - Sequence table (run log)
    - PCB Batch Worksheet
- HPLC/IC - 9056A ORGFM_28D - Anions, Ion Chromatography - Sulfate and Chloride
  - Raw Data and Data Summaries for:
    - LCS/LCSD (form III)
    - MS/MSD (form III)
    - METHOD BLANKS (Form IV)
    - SAMPLE DATA (Form I)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VI)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VII)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - QC DATA (Form I)
      - Raw instrument data and chromatography
    - Analysis Run Logs

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LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85153-1
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Description

METALS DATA (ICPMS and mercury)
- Forms Data
  - Cover Page
  - Inorganic Analysis Data Sheet - Metals Dissolved/Total Recoverable (1A-IN)
  - CCV standard report - mercury and ICPMS (2A-IN)
  - CRQL report - mercury and ICPMS (2B-IN)
  - ICB report - mercury and ICPMS (3-IN)
  - Method blank report (3-IN)
  - Interference check standard A - ICPMS (4A-IN)
  - Interference check standard AB - ICPMS (4A-IN)
  - MS/MSD Sample recovery (5A-IN)
  - PDS Summary (5B-IN)
  - LCS Recovery form (7A-IN)
  - LCS Duplicate Recover (7D-IN)
  - ICP-MS Serial Dilutions (8-IN)
  - Detection Limits Form (9-IN)
  - Linear dynamic ranges - ICPMS (11-IN)
  - Prep log - mercury and ICPMS (12-IN)
  - Run log - ICPMS and Mercury (13-IN)
  - ICP-MS TUNE (14-IN)
  - ICPMS Internal Standards Relative Intensity Summary (15-IN)
- Instrument Printouts
  - ICP-MS Raw instrument data
  - Mercury raw instrument data, run logs and calibrations
- Miscellaneous Data
  - Metals Batch Worksheet

GENERAL CHEMISTRY - Total and Amenable Cyanide and Alkalinity
- Cover Page
- Raw Data and Data Summaries for:
  - Sample Data (Form 1B-IN)
  - CCV/CCB (Form 2-IN)
  - METHOD BLANKS (Form 3-IN)
  - MATRIX SPIKES (Form 5-IN)
  - Sample DUPLICATES (Form 6-IN)
  - LCS/LCSD (Form 7-IN)
  - Detection Limits Form (9-IN)
  - Prep log (12-IN)
  - Analysis Run Logs (13-IN)
  - Raw Data - instrument sample sequence and calibration curve
  - Alkalinity Reagents
  - Alkalinity pH meter calibration
  - Alkalinity sequence log and raw data
  - General Chemistry Batch Worksheets

Shipping and Receiving Documents
- COC forms
- Cooler Receipt Form, checklist and narrative

APPENDIX 3

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85153-1

		Sample Name:	PM AirShaft-50-081215				OB-25-081215				OB-2-081215			
		Lab Sample ID:	490851531				490851532				490851533			
		Sample Date:	8/12/2015				8/12/2015				8/12/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Hexanol, 2-ethyl- - TIC	104-76-7												
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Hydroxymandelic acid, ethyl ester, di- - TIC	1000071-88-9												
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	0.22	5.0	ug/l	UB
Silanol, dimethyl(1,1,2-trimethylpropyl) - TIC	55644-10-5					3.2	---	ug/l	NJ				
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic2												
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85153-1

		Sample Name:	PM AirShaft-50-081215				OB-25-081215				OB-2-081215			
		Lab Sample ID:	490851531				490851532				490851533			
		Sample Date:	8/12/2015				8/12/2015				8/12/2015			
	Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	1740-19-8												
	15-Crown-5 - TIC	33100-27-5												
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitroaniline	88-74-4	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methoxybenzhydrazide - TIC	3290-99-1												
	4-Nitroaniline	100-01-6	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Nitrophenol	100-02-7	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	Acenaphthene	83-32-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acenaphthylene	208-96-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Atrazine	1912-24-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzocycloheptatriene - TIC	264-09-5												
	Benzo[b]triphenylene - TIC	215-58-7												
	Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethylene glycol monododecyl ether - TIC	3055-93-4												
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5												
	Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]- - TIC	143-22-6												
	Fluoranthene	206-44-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Fluorene	86-73-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexadecane - TIC	544-76-3	4.0	---	ug/l	NJ								
	Hexagol - TIC	2615-15-8									16	---	ug/l	NJ
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	n-Hexadecanoic acid - TIC	57-10-3									6.8	---	ug/l	NJ
	N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Nitrobenzene	98-95-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Octadec-9-enoic acid - TIC	1000190-13-7												
	Octadecanoic acid - TIC	57-11-4									5.5	---	ug/l	NJ
	Phenanthrene	85-01-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol, 4-(1,1,3,3-tetramethylbutyl)- - TIC	140-66-9												
	Pyrene	129-00-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Tetradecane - TIC	629-59-4					4.8	---	ug/l	NJ				
	Tetradecanoic acid - TIC	544-63-8	3.7	---	ug/l	NJ								
	Tridecanoic acid - TIC	638-53-9					3.6	---	ug/l	NJ				
	[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	366-29-0												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85153-1

			Sample Name:	PM AirShaft-50-081215			OB-25-081215				OB-2-081215			
			Lab Sample ID:	490851531			490851532				490851533			
			Sample Date:	8/12/2015			8/12/2015				8/12/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
	OSW-8270DSim													
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---	ND	0.30	ug/l	---
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Metals														
	OSW-6020A													
	Aluminum	7429-90-5	0.050	0.020	mg/l	B	12.8	0.020	mg/l	---	0.046	0.020	mg/l	B
	Aluminum - Dissolved	7429-90-5	0.016	0.020	mg/l	J	1.8	0.020	mg/l	---	ND	0.020	mg/l	---
	Antimony	7440-36-0	0.00061	0.0020	mg/l	UB	0.00083	0.0020	mg/l	UB	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	0.00053	0.0020	mg/l	J	0.0013	0.0020	mg/l	J	0.00064	0.0020	mg/l	J
	Arsenic	7440-38-2	0.0013	0.0020	mg/l	UB	0.0041	0.0020	mg/l	---	0.0012	0.0020	mg/l	UB
	Arsenic - Dissolved	7440-38-2	ND	0.0020	mg/l	---	0.0010	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Barium	7440-39-3	0.0093	0.0020	mg/l	---	0.076	0.0020	mg/l	---	0.0052	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.0094	0.0020	mg/l	---	0.036	0.0020	mg/l	---	0.0054	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	0.0018	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	0.00064	0.0010	mg/l	J	ND	0.0010	mg/l	---
	Calcium	7440-70-2	6.4	1.0	mg/l	---	43.4	1.0	mg/l	---	12.1	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	6.1	1.0	mg/l	---	39.5	1.0	mg/l	---	12.8	1.0	mg/l	---
	Chromium	7440-47-3	0.00076	0.0020	mg/l	J	0.0063	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	0.0020	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt	7440-48-4	ND	0.0020	mg/l	---	0.0053	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	0.00082	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Copper	7440-50-8	0.0024	0.0020	mg/l	---	0.031	0.0020	mg/l	---	0.0020	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	0.0017	0.0020	mg/l	J	0.0082	0.0020	mg/l	---	0.0013	0.0020	mg/l	J
	Iron	7439-89-6	0.47	0.025	mg/l	---	8.1	0.025	mg/l	---	0.12	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	0.14	0.025	mg/l	---	1.6	0.025	mg/l	---	ND	0.025	mg/l	---
	Lead	7439-92-1	0.0045	0.0020	mg/l	---	0.011	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Lead - Dissolved	7439-92-1	0.00082	0.0020	mg/l	J	0.0010	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Magnesium	7439-95-4	1.8	1.0	mg/l	---	9.8	1.0	mg/l	---	4.5	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	1.8	1.0	mg/l	---	7.8	1.0	mg/l	---	4.6	1.0	mg/l	---
	Manganese	7439-96-5	0.017	0.0020	mg/l	---	0.34	0.0020	mg/l	---	0.0054	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5	0.0094	0.0020	mg/l	---	0.051	0.0020	mg/l	---	0.00081	0.0020	mg/l	J
	Nickel	7440-02-0	0.0088	0.0020	mg/l	---	0.010	0.0020	mg/l	---	0.00070	0.0020	mg/l	J
	Nickel - Dissolved	7440-02-0	0.0078	0.0020	mg/l	---	0.0024	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Potassium	7440-09-7	0.51	1.0	mg/l	J	7.7	1.0	mg/l	---	1.2	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	0.47	1.0	mg/l	J	7.3	1.0	mg/l	---	1.3	1.0	mg/l	---
	Selenium	7782-49-2	ND	0.0020	mg/l	---	0.0017	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	2.8	1.0	mg/l	---	69.9	1.0	mg/l	---	3.6	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	2.7	1.0	mg/l	---	67.7	1.0	mg/l	---	3.9	1.0	mg/l	---
	Thallium	7440-28-0	0.00067	0.0020	mg/l	J	0.00021	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Vanadium	7440-62-2	0.0016	0.0020	mg/l	UB	0.011	0.0020	mg/l	---	0.0015	0.0020	mg/l	UB
	Vanadium - Dissolved	7440-62-2	0.0017	0.0020	mg/l	UB	0.0050	0.0020	mg/l	B	0.0018	0.0020	mg/l	UB
	Zinc	7440-66-6	1.6	0.13	mg/l	---	0.052	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	1.6	0.025	mg/l	---	0.013	0.025	mg/l	J	ND	0.025	mg/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	1.13	1.00	mg/l	---	91.7	1.00	mg/l	---	2.18	1.00	mg/l	---
	Sulfate	14808-79-8	4.35	1.00	mg/l	---	9.24	1.00	mg/l	---	10.1	1.00	mg/l	---
Prep														
	APHA-2320B													
	Bicarbonate Alkalinity as CaCO3	E-14508	24.0	10.0	mg/l	---	124	10.0	mg/l	---	37.6	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	24.0	10.0	mg/l	---	124	10.0	mg/l	---	37.6	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85153-1

		Sample Name:	SC-2-081215				RW-13(150-170)-081215				OB-29-081215			
		Lab Sample ID:	490851534				490851535				490851536			
		Sample Date:	8/12/2015				8/12/2015				8/12/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Hexanol, 2-ethyl- - TIC	104-76-7												
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Hydroxymandelic acid, ethyl ester, di- - TIC	1000071-88-9												
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	0.23	5.0	ug/l	UB	0.34	5.0	ug/l	UB	0.28	5.0	ug/l	UB
Silanol, dimethyl(1,1,2-trimethylpropyl) - TIC	55644-10-5												
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic2												
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85153-1

		Sample Name:	SC-2-081215				RW-13(150-170)-081215				OB-29-081215			
		Lab Sample ID:	490851534				490851535				490851536			
		Sample Date:	8/12/2015				8/12/2015				8/12/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	1740-19-8												
	15-Crown-5 - TIC	33100-27-5	62	---	ug/l	NJ								
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitroaniline	88-74-4	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methoxybenzhydrazide - TIC	3290-99-1	5.6	---	ug/l	NJ								
	4-Nitroaniline	100-01-6	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Nitrophenol	100-02-7	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	Acenaphthene	83-32-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acenaphthylene	208-96-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Atrazine	1912-24-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzocycloheptatriene - TIC	264-09-5	3.6	---	ug/l	NJ								
	Benzo[b]triphenylene - TIC	215-58-7	25	---	ug/l	NJ								
	Benzo[g,h,i]perylene	191-24-2	0.81	2.0	ug/l	UB	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethylene glycol monododecyl ether - TIC	3055-93-4												
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5												
	Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]- - TIC	143-22-6												
	Fluoranthene	206-44-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Fluorene	86-73-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexadecane - TIC	544-76-3												
	Hexagol - TIC	2615-15-8												
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	n-Hexadecanoic acid - TIC	57-10-3	4.8	---	ug/l	NJ								
	N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Nitrobenzene	98-95-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Octadec-9-enoic acid - TIC	1000190-13-7	4.6	---	ug/l	NJ								
	Octadecanoic acid - TIC	57-11-4	4.3	---	ug/l	NJ								
	Phenanthrene	85-01-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Phenol	108-95-2	3.1	10	ug/l	J	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol, 4-(1,1,3,3-tetramethylbutyl)- - TIC	140-66-9												
	Pyrene	129-00-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Tetradecane - TIC	629-59-4												
	Tetradecanoic acid - TIC	544-63-8												
	Tridecanoic acid - TIC	638-53-9												
	[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	366-29-0	8.5	---	ug/l	NJ								

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85153-1

			Sample Name:	SC-2-081215				RW-13(150-170)-081215				OB-29-081215			
			Lab Sample ID:	490851534				490851535				490851536			
			Sample Date:	8/12/2015				8/12/2015				8/12/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---	ND	0.30	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Metals														
OSW-6020A														
	Aluminum	7429-90-5	0.088	0.020	mg/l	---	0.53	0.020	mg/l	---	1.7	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	ND	0.020	mg/l	---	0.84	0.020	mg/l	---
	Antimony	7440-36-0	0.00077	0.0020	mg/l	UB	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.00073	0.0020	mg/l	J
	Arsenic	7440-38-2	0.0021	0.0020	mg/l	B	0.0046	0.0020	mg/l	---	0.0015	0.0020	mg/l	UB
	Arsenic - Dissolved	7440-38-2	0.0046	0.0020	mg/l	---	0.0020	0.0020	mg/l	---	0.012	0.0020	mg/l	---
	Barium	7440-39-3	0.032	0.0020	mg/l	---	0.031	0.0020	mg/l	---	0.013	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.040	0.0020	mg/l	---	0.36	0.0020	mg/l	---	0.015	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	65.7	1.0	mg/l	---	31.9	1.0	mg/l	---	13.9	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	452	50.0	mg/l	---	92.9	100	mg/l	J	47.4	1.0	mg/l	---
	Chromium	7440-47-3	0.00052	0.0020	mg/l	J	0.00090	0.0020	mg/l	J	0.0018	0.0020	mg/l	J
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt	7440-48-4	0.0019	0.0020	mg/l	J	ND	0.0020	mg/l	---	0.00075	0.0020	mg/l	J
	Cobalt - Dissolved	7440-48-4	0.00083	0.0020	mg/l	J	ND	0.20	mg/l	---	ND	0.0020	mg/l	---
	Copper	7440-50-8	0.0030	0.0020	mg/l	---	0.00074	0.0020	mg/l	J	0.0031	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	0.00084	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Iron	7439-89-6	0.30	0.025	mg/l	---	0.65	0.025	mg/l	---	1.2	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	13.3	0.025	mg/l	---	2.7	0.025	mg/l	---	0.018	0.025	mg/l	J
	Lead	7439-92-1	0.00058	0.0020	mg/l	J	0.00033	0.0020	mg/l	J	0.00054	0.0020	mg/l	J
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	0.00031	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Magnesium	7439-95-4	15.2	1.0	mg/l	---	6.8	1.0	mg/l	---	4.1	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	123	50.0	mg/l	---	24.5	100	mg/l	J	ND	1.0	mg/l	---
	Manganese	7439-96-5	0.21	0.0020	mg/l	---	0.092	0.0020	mg/l	---	0.036	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5	1.1	0.10	mg/l	---	0.22	0.20	mg/l	---	ND	0.0020	mg/l	---
	Nickel	7440-02-0	0.0030	0.0020	mg/l	---	0.0084	0.0020	mg/l	---	0.0022	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0	0.00067	0.0020	mg/l	J	0.00093	0.0020	mg/l	J	0.00097	0.0020	mg/l	J
	Potassium	7440-09-7	2.7	1.0	mg/l	---	1.8	1.0	mg/l	---	1.3	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	6.9	1.0	mg/l	---	9.3	1.0	mg/l	---	10.8	1.0	mg/l	---
	Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.0038	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	7.3	1.0	mg/l	---	9.9	1.0	mg/l	---	3.2	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	64.1	1.0	mg/l	---	153	100	mg/l	---	131	20.0	mg/l	---
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Vanadium	7440-62-2	0.0015	0.0020	mg/l	UB	0.0020	0.0020	mg/l	B	0.0028	0.0020	mg/l	B
	Vanadium - Dissolved	7440-62-2	0.0016	0.0020	mg/l	UB	0.0020	0.0020	mg/l	B	0.015	0.0020	mg/l	B
	Zinc	7440-66-6	0.030	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A														
	Chloride	16887-00-6	1.93	1.00	mg/l	---	3.66	1.00	mg/l	---	3.22	1.00	mg/l	---
	Sulfate	14808-79-8	27.4	1.00	mg/l	---	16.5	1.00	mg/l	---	5.38	1.00	mg/l	---
Prep														
APHA-2320B														
	Bicarbonate Alkalinity as CaCO3	E-14508	208	10.0	mg/l	---	96.4	10.0	mg/l	---	44.6	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	208	10.0	mg/l	---	96.4	10.0	mg/l	---	44.6	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85153-1

		Sample Name:	RW-12(130-140)-081215				TB-06-081315			
		Lab Sample ID:	490851537				490851538			
		Sample Date:	8/12/2015				8/13/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC										
OSW-8260C										
	1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---
	1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1-Hexanol, 2-ethyl- - TIC	104-76-7	3.1	---	ug/l	NJ				
	2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---
	2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---
	3-Hydroxymandelic acid, ethyl ester, di- - TIC	1000071-88-9	5.4	---	ug/l	NJ				
	4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---
	Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---
	Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon disulfide	75-15-0	0.27	1.0	ug/l	J	ND	1.0	ug/l	---
	Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Cyclohexane	110-82-7	0.66	5.0	ug/l	J	ND	5.0	ug/l	---
	Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---
	Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Methylene Chloride	75-09-2	0.22	5.0	ug/l	UB	0.22	5.0	ug/l	J
	Silanol, dimethyl(1,1,2-trimethylpropyl) - TIC	55644-10-5								
	Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---
	Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Unknown - TIC	Tic2	5.2	---	ug/l	NJ				
	Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim										
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85153-1

		Sample Name:	RW-12(130-140)-081215				TB-06-081315			
		Lab Sample ID:	490851537				490851538			
		Sample Date:	8/12/2015				8/13/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC										
OSW-8270D										
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---				
	1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	1740-19-8	14	---	ug/l	NJ				
	15-Crown-5 - TIC	33100-27-5								
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---				
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---				
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---				
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---				
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---				
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---				
	2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---				
	2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---				
	2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---				
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---				
	2-Chlorophenol	95-57-8	ND	10	ug/l	---				
	2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---				
	2-Methylphenol	95-48-7	ND	10	ug/l	---				
	2-Nitroaniline	88-74-4	ND	25	ug/l	---				
	2-Nitrophenol	88-75-5	ND	10	ug/l	---				
	3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---				
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---				
	3-Nitroaniline	99-09-2	ND	25	ug/l	---				
	4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---				
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---				
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---				
	4-Chloroaniline	106-47-8	ND	10	ug/l	---				
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---				
	4-Methoxybenzhydrazide - TIC	3290-99-1								
	4-Nitroaniline	100-01-6	ND	25	ug/l	---				
	4-Nitrophenol	100-02-7	ND	25	ug/l	---				
	Acenaphthene	83-32-9	ND	2.0	ug/l	---				
	Acenaphthylene	208-96-8	ND	2.0	ug/l	---				
	Acetophenone	98-86-2	ND	10	ug/l	---				
	Anthracene	120-12-7	ND	2.0	ug/l	---				
	Atrazine	1912-24-9	ND	10	ug/l	---				
	Benzaldehyde	100-52-7	ND	10	ug/l	---				
	Benzocycloheptatriene - TIC	264-09-5								
	Benzo[b]triphenylene - TIC	215-58-7								
	Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---				
	Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---				
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---				
	Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---				
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---				
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---				
	Caprolactam	105-60-2	ND	10	ug/l	---				
	Carbazole	86-74-8	ND	10	ug/l	---				
	Chrysene	218-01-9	ND	2.0	ug/l	---				
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---				
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---				
	Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---				
	Dibenzofuran	132-64-9	ND	10	ug/l	---				
	Diethyl phthalate	84-66-2	ND	10	ug/l	---				
	Diethylene glycol monododecyl ether - TIC	3055-93-4	16	---	ug/l	NJ				
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---				
	Diphenyl	92-52-4	ND	10	ug/l	---				
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5	20	---	ug/l	NJ				
	Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]- - TIC	143-22-6	8.2	---	ug/l	NJ				
	Fluoranthene	206-44-0	ND	2.0	ug/l	---				
	Fluorene	86-73-7	ND	2.0	ug/l	---				
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---				
	Hexachloroethane	67-72-1	ND	10	ug/l	---				
	Hexadecane - TIC	544-76-3								
	Hexagol - TIC	2615-15-8								
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---				
	Isophorone	78-59-1	ND	10	ug/l	---				
	n-Hexadecanoic acid - TIC	57-10-3	19	---	ug/l	NJ				
	N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---				
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---				
	Naphthalene	91-20-3	ND	2.0	ug/l	---				
	Nitrobenzene	98-95-3	ND	10	ug/l	---				
	Octadec-9-enoic acid - TIC	1000190-13-7								
	Octadecanoic acid - TIC	57-11-4	9.8	---	ug/l	NJ				
	Phenanthrene	85-01-8	ND	2.0	ug/l	---				
	Phenol	108-95-2	ND	10	ug/l	---				
	Phenol, 4-(1,1,3,3-tetramethylbutyl)- - TIC	140-66-9	18	---	ug/l	NJ				
	Pyrene	129-00-0	ND	2.0	ug/l	---				
	Tetradecane - TIC	629-59-4								
	Tetradecanoic acid - TIC	544-63-8								
	Tridecanoic acid - TIC	638-53-9								
	[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	366-29-0								

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85153-1

			Sample Name:	RW-12(130-140)-081215			TB-06-081315			
			Lab Sample ID:	490851537			490851538			
			Sample Date:	8/12/2015			8/13/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim										
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---				
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---				
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---				
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---				
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---				
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---				
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---				
GC Other										
OSW-8082A										
	PCB-1016	12674-11-2	ND	0.50	ug/l	---				
	PCB-1221	11104-28-2	ND	0.50	ug/l	---				
	PCB-1232	11141-16-5	ND	0.50	ug/l	---				
	PCB-1242	53469-21-9	ND	0.50	ug/l	---				
	PCB-1248	12672-29-6	ND	0.50	ug/l	---				
	PCB-1254	11097-69-1	ND	0.50	ug/l	---				
	PCB-1260	11096-82-5	ND	0.50	ug/l	---				
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---				
Metals										
OSW-6020A										
	Aluminum	7429-90-5	0.90	0.020	mg/l	---				
	Aluminum - Dissolved	7429-90-5	0.30	0.020	mg/l	---				
	Antimony	7440-36-0	ND	0.0020	mg/l	---				
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---				
	Arsenic	7440-38-2	0.013	0.0020	mg/l	---				
	Arsenic - Dissolved	7440-38-2	ND	0.0020	mg/l	---				
	Barium	7440-39-3	0.015	0.0020	mg/l	---				
	Barium - Dissolved	7440-39-3	0.0089	0.0020	mg/l	---				
	Beryllium	7440-41-7	ND	0.0020	mg/l	---				
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---				
	Cadmium	7440-43-9	ND	0.0010	mg/l	---				
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---				
	Calcium	7440-70-2	44.7	1.0	mg/l	---				
	Calcium - Dissolved	7440-70-2	14.2	1.0	mg/l	---				
	Chromium	7440-47-3	ND	0.0020	mg/l	---				
	Chromium - Dissolved	7440-47-3	0.00054	0.0020	mg/l	J				
	Cobalt	7440-48-4	ND	0.0020	mg/l	---				
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---				
	Copper	7440-50-8	ND	0.0020	mg/l	---				
	Copper - Dissolved	7440-50-8	0.00074	0.0020	mg/l	J				
	Iron	7439-89-6	0.11	0.025	mg/l	---				
	Iron - Dissolved	7439-89-6	0.32	0.025	mg/l	---				
	Lead	7439-92-1	ND	0.0020	mg/l	---				
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---				
	Magnesium	7439-95-4	0.14	1.0	mg/l	J				
	Magnesium - Dissolved	7439-95-4	4.0	1.0	mg/l	---				
	Manganese	7439-96-5	0.0027	0.0020	mg/l	B				
	Manganese - Dissolved	7439-96-5	0.0067	0.0020	mg/l	---				
	Nickel	7440-02-0	0.0024	0.0020	mg/l	---				
	Nickel - Dissolved	7440-02-0	ND	0.0020	mg/l	---				
	Potassium	7440-09-7	10.4	1.0	mg/l	---				
	Potassium - Dissolved	7440-09-7	1.3	1.0	mg/l	---				
	Selenium	7782-49-2	0.0038	0.0020	mg/l	---				
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---				
	Silver	7440-22-4	ND	0.0020	mg/l	---				
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---				
	Sodium	7440-23-5	98.8	10.0	mg/l	---				
	Sodium - Dissolved	7440-23-5	3.9	1.0	mg/l	---				
	Thallium	7440-28-0	ND	0.0020	mg/l	---				
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---				
	Vanadium	7440-62-2	0.015	0.0020	mg/l	---				
	Vanadium - Dissolved	7440-62-2	0.0022	0.0020	mg/l	B				
	Zinc	7440-66-6	ND	0.025	mg/l	---				
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---				
OSW-7470A										
	Mercury	7439-97-6	ND	0.00020	mg/l	---				
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---				
General Chemistry										
OSW-9012B										
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---				
OSW-9056A										
	Chloride	16887-00-6	21.5	1.00	mg/l	---				
	Sulfate	14808-79-8	145	1.00	mg/l	---				
Prep										
APHA-2320B										
	Bicarbonate Alkalinity as CaCO3	E-14508	ND	10.0	mg/l	---				
	Total Alkalinity as CaCO3	E-14506	159	10.0	mg/l	---				

APPENDIX 4

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85153-1

			Sample Name:	PM AirShaft-50-081215				OB-25-081215				OB-2-081215				SC-2-081215				RW-13(150-170)-081215				OB-29-081215				RW-12(130-140)-081215			
			Lab Sample ID:	490851531				490851532				490851533				490851534				490851535				490851536				490851537			
			Sample Date:	8/12/2015				8/12/2015				8/12/2015				8/12/2015				8/12/2015				8/12/2015				8/12/2015			
	Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																															
OSW-8260C																															
	1-Hexanol, 2-ethyl- - TIC	104-76-7																										3.1	---	ug/l	NJ
	3-Hydroxymandelic acid, ethyl ester, di- - TIC	1000071-88-9																										5.4	---	ug/l	NJ
	Methylene Chloride	75-09-2										0.22	5.0	ug/l	UB	0.23	5.0	ug/l	UB	0.34	5.0	ug/l	UB	0.28	5.0	ug/l	UB	0.22	5.0	ug/l	UB
	Silanol, dimethyl(1,1,2-trimethylpropyl) - TIC	55644-10-5						3.2	---	ug/l	NJ																				
	Unknown - TIC	Tic2																										5.2	---	ug/l	NJ
GC/MS SVOC																															
OSW-8270D																															
	1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	1740-19-8																										14	---	ug/l	NJ
	15-Crown-5 - TIC	33100-27-5														62	---	ug/l	NJ												
	4-Methoxybenzhydrazide - TIC	3290-99-1														5.6	---	ug/l	NJ												
	Benzocycloheptatriene - TIC	264-09-5														3.6	---	ug/l	NJ												
	Benzo[b]triphenylene - TIC	215-58-7														25	---	ug/l	NJ												
	Benzo[g,h,i]perylene	191-24-2														0.81	2.0	ug/l	UB												
	Diethylene glycol monododecyl ether - TIC	3055-93-4																										16	---	ug/l	NJ
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5																										20	---	ug/l	NJ
	Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]- - TIC	143-22-6																										8.2	---	ug/l	NJ
	Hexadecane - TIC	544-76-3		4.0	---	ug/l	NJ																								
	Hexagol - TIC	2615-15-8										16	---	ug/l	NJ																
	n-Hexadecanoic acid - TIC	57-10-3										6.8	---	ug/l	NJ	4.8	---	ug/l	NJ									19	---	ug/l	NJ
	Octadec-9-enoic acid - TIC	1000190-13-7														4.6	---	ug/l	NJ												
	Octadecanoic acid - TIC	57-11-4										5.5	---	ug/l	NJ	4.3	---	ug/l	NJ									9.8	---	ug/l	NJ
	Phenol, 4-(1,1,3,3-tetramethylbutyl)- - TIC	140-66-9																										18	---	ug/l	NJ
	Tetradecane - TIC	629-59-4						4.8	---	ug/l	NJ																				
	Tetradecanoic acid - TIC	544-63-8		3.7	---	ug/l	NJ																								
	Tridecanoic acid - TIC	638-53-9						3.6	---	ug/l	NJ																				
	[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	366-29-0														8.5	---	ug/l	NJ												
Metals																															
OSW-6020A																															
	Aluminum	7429-90-5		0.050	0.020	mg/l	B					0.046	0.020	mg/l	B																
	Antimony	7440-36-0		0.00061	0.0020	mg/l	UB	0.00083	0.0020	mg/l	UB					0.00077	0.0020	mg/l	UB												
	Arsenic	7440-38-2		0.0013	0.0020	mg/l	UB					0.0012	0.0020	mg/l	UB	0.0021	0.0020	mg/l	B					0.0015	0.0020	mg/l	UB				
	Manganese	7439-96-5																										0.0027	0.0020	mg/l	B
	Vanadium	7440-62-2		0.0016	0.0020	mg/l	UB					0.0015	0.0020	mg/l	UB	0.0015	0.0020	mg/l	UB	0.0020	0.0020	mg/l	B	0.0028	0.0020	mg/l	B				
	Vanadium - Dissolved	7440-62-2		0.0017	0.0020	mg/l	UB	0.0050	0.0020	mg/l	B	0.0018	0.0020	mg/l	UB	0.0016	0.0020	mg/l	UB	0.0020	0.0020	mg/l	B	0.015	0.0020	mg/l	B	0.0022	0.0020	mg/l	B

APPENDIX 5

EPA Sample Holding Time and Preservation Requirements

Parameter	*Reference Method*	*Matrix*	*Preservation & Storage*	*Holding Times*
Volatile Organics by GCMS	OSW-8260C/SIM	Water	Acidify ph<2 Refrigeration 0-6oC	14 days
Semivolatile Organics by GCMS	OSW-8270D/SIM	Water	Refrigeration 0-6oC	7 days Extraction 40 days Analysis
Polychlorinated Biphenyls by GC/ECD	OSW-8082A	Water	Refrigeration 0-6oC	365 days - Extraction - Analysis
Metals by ICP/ICPMS Spectroscopy	OSW-6010B OSW-6020A	Water	Acidify pH<2 Refrigeration 0-6oC	180 days
Mercury in Aqueous Waste	OSW-7470A	Water	Acidify pH<2 Refrigeration 0-6oC	28 days
Alkalinity	EPA 2320B	Water	Refrigeration 0-6oC	14 days
Chloride and Sulfate	OSW-9056A	Water	Refrigeration 0-6oC	28 days
Total and Amenable Cyanide	OSW-9012B	Water	Test for presence of Sulfide – if unknown collect two samples and treat one with Lead Carbonate. Then adjust sample to pH of greater than or equal to 12with NaOH. Refrigeration at 0-4C –(also may require treatment for aldehydes and chlorine/hypochlorite/sulfite)	14 days if preserved. 24 hours or sooner if unpreserved

ATTACHMENT A

CHAIN OF CUSTODY DOCUMENT(S)

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL

Loc: 490
85153
09/17/2015

Client Information	Sampler: Robert Lawfenberg	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	8082A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
PM Air Shaft-50-081215	8/12/15	10:05	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					-1
OB-25-081215	8/12/15	09:50	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					2
OB-2-081215	8/12/15	12:55	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					3
SC-2-081215	8/12/15	14:25	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					4
RW-13 (150-170)-081215	8/12/15	11:10	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					5
OB-29-081215	8/12/15	15:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					6
RW-12 (130-140)-081215	8/12/15	14:50	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					7
TB-06-081315	8/13/15	—	—	Water	N	N	✓	✓													8
				Water																	
				Water																	
				Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 8/13/15 830	Company: TA	Received by:	Date/Time: 8/12/15 830	Company: TA
Relinquished by:	Date/Time: 8/13/15 1225	Company: TA	Received by:	Date/Time: 8/14/15 @ 0955	Company: TAN
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: △ Yes △ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.1/2.0/0.4/4.1

E-Mail Date: 2015-10-14
E-Mail To: tim.roeper@cornerstoneeg.com
cc:

U.S. Mail: Tim Roeper
Cornerstone Environmental Group
100 Crystal Run Road, Suite 101
Middletown, NY 10941

ANALYTICAL DATA VALIDATION REPORT
Ringwood Mines/Landfill
Ford Motor Company
CLIENT PROJECT NUMBER - not available
CADENA PROJECT E203361
SAMPLES COLLECTED August 2015
SUBMITTAL #: 490-85229-1

PREPARED BY:
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1.0 INTRODUCTION

The following document details an assessment of the analytical data reported by TestAmerica-Nashville Laboratory the data in the submittals listed below which were collected from the Ringwood Mines/Landfill site as noted. A sampling and analysis summary that lists all sample ID's and testing as related to the laboratory submittal numbers is presented in Appendix 1. A summary of all of the analytical data is presented in Appendix 3. Copies of sample Chain of Custody (COC) documents and cooler receipt forms for samples discussed in this report are included in Attachment A.
Note: One field sample from this submittal was collected in triplicate to facilitate use of this sample as the QC batch MS/MSD for each analysis where appropriate (MS not required for alkalinity).

Table 1.1

Laboratory Submittal	***Sample Date***	***Laboratory Receipt Date***
490-85229-1	8/13-14/2015	8/15/2015

The samples noted below were validated against the associated method/parameter in order to achieve the validation requirements for this SDG:

Table 1.2

Parameter	***Reference Method***	***Analyte Listing***
Volatile Organics	OSW-8260C	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8260CSIM	1,2-Dibromo-3-Chloropropane,1,4-Dioxane,EthyleneDibromide,1,2,3-Trichloropropane
Semi-Volatile Organics	OSW-8270D	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8270DSIM	Extended list includes the following: Benzo(a)anthracene,Benzo(a)pyrene, Benzo(b)fluoranthene,Hexachlorobenzene, Hexachlorobutadiene,N-Nitrosodimethylamine,Pentachlorophenol
PCB	OSW-8082A	7 Standard Aroclors
Metals	OSW-6020A/7470A	Total and dissolved TAL Metals
Ion Chromatography	OSW-9056A	Chloride and Sulfate
Total Cyanide	OSW-9021B	Total and Amenable Cyanide
General Chemistry	APHA-2320B	Total and Bicarbonate Alkalinity

All "SW" analytical methods were referenced from "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition, November 1986 (with all subsequent revisions). The "SM" analytical method was referenced from the "Standard Methods for the Examination of Water and Waste water", latest promulgated revision. "EPA" methods were referenced from the revisions noted.

Laboratory Standard Operating Procedures (SOPs) associated with the methods utilized for this laboratory submittal were not available to CADENA for the purpose of validating this SDG.

Level IV data review provides a comprehensive or extensive review of the analytical data allowing for the complete reconstruction of the chemical analysis. A Level IV (Tier 3) data review was performed on the samples listed in Table 1.2 above by (CADENA).

All of the data that was recalculated was consistent with the reported results to within at least 2 significant figures. Final results may not recalculate exactly beyond this level of precision, in some cases, due to differences in available significant figures between the hardcopy raw data provided and the data utilized for calculations by the laboratory that came directly from the instrument. A table of the laboratory documents reviewed in preparing this report is included in Appendix 2.

The data was reviewed in accordance with the analytical methods and the documents listed below: (NOTE: laboratory criteria – control limits – were utilized to evaluate the data where available. Comparison to NFG criteria are noted when lab criteria was not available or for informational purposes when lab data exceeds NFG criteria).

i.) "Standard Operating Procedure HW-6 Rev12 March 2001: CLP Organics Data Review and Preliminary Review" USEPA Region 2 as identified in project QAPP.
ii.) "Standard Operating Procedure HW-2, Rev11, Jan 1992: Evaluation of Metals Data for the CLP Program" as identified in the project QAPP.

The Level VI review findings are presented in the following subsections.

An overview of the review findings is presented in table format. Several data qualifier flags were utilized in the review process. The definitions of these qualifier flags are as follows:

- J Indicates an estimated value.
- U Indicates the compound or analyte was analyzed for, but not detected at or above the stated limit.
- UJ The analyte/compound was not detected above the reported sample quantitation limit. However, the quantitation limit is considered to be approximate due to associated quality assurance results.
- UB The analyte was detected in the sample at a level between the MDL and RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the reporting limit.
- B The analyte was detected in the sample at a level above the RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the concentration reported.
- R The analyte/compound results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte/compound cannot be verified.

All flags have been incorporated into the data tables in this report.

1.1 VALIDATION QUALIFIER EXECUTIVE SUMMARY

VALIDATION SUMMARY

GCMS VOC and SIM
GCMS VOC CCVIS 490-276265/2 responses were outliers biased low for target analytes bromomethane. Client samples (all) bromomethane results should be considered to be estimated and qualified with UJ flags. Remaining CCV outliers were either for non-target analytes or were high bias outliers associated with non-detect sample results.
GCMS SVOC and SIM
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
PCB
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
METALS
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
INORGANICS
No additional qualifications were made beyond those determined from level 2 verification review as noted below.

The following observations **DID NOT** result in qualification but were noted during the validation review:
GCMS VOC
CCV outliers were not associated with target analytes for this submittal.
GCMS VOC-SIM
No additional non-conforming observations to report.
GCMS SVOC
Sample-001 was received at a pH of 12 (recommended preservation pH is 7). Sample was adjusted to pH 2 prior to initial prep so qualification based on initial sample pH was not required.
GCMS SVOC-SIM
Sample-001 was received at a pH of 11 (recommended preservation pH is 7). Sample was adjusted to pH 2 prior to initial prep so qualification based on initial sample pH was not required.
METALS
Total metals PDS performed on sample -012 had outliers biased low for barium, calcium, magnesium, potassium, sodium and zinc with zinc, sodium and calcium results subject to 4X rule so were not used for qualification. Qualification of client sample results were assigned based on MS/MSD recovery data for sample -012 so no further qualification was required based on these PDS recovery outliers. Dissolved PDS sample -012 outliers were subject to 4X rule so were not used for qualification.
CRQL's were consistently within lab control limits with the exception of potassium which was consistently biased high.
PCB – internal standard technique was used for both columns. Some initial and continuing calibration outliers were observed for specific aroclor 1016/1260 peaks on the secondary columns but these outliers did not affect sample quantitation.

RAW DATA NOT INCLUDED IN ORIGINAL LAB LEVEL 4 DATA PACKAGE:
Metals – raw instrument data from 9/2 for samples 85229-1, -2, -3, -4, -5 and -7 was not included for total potassium, sodium, calcium, copper, manganese and nickel. (Received 2015-10-27).

VERIFICATION SUMMARY

The following qualifications and associated data flags were applied based on the initial level 2 review of this data package.

The following minor QC exceptions or missing information were noted:

GCMS VOC trip blank was non-detect for all target analytes.

GCMS VOC QC batch 276265 method blank had a detection below the RL for toluene. Client sample -001 toluene results should be considered to be non-detect at the RL and qualified with a UB flag.

GCMS-SIM SVOC surrogate recoveries were outliers biased high for 2 out of 3 surrogates in client sample -012. Qualification of client sample results was not required based on these high bias QC outliers.

GCMS VOC and GCMS SVOC TIC results should be considered to be estimated and qualified with NJ flags unless the TIC analyte detected is an instrument calibrated compound that is just not part of the TAL for this submittal in which case no qualification is required other than the TIC qualification code or J flag if the result is detected below the RL.

PCB QC batch 277885 did not include MS recovery data due to insufficient sample volume available for spiking according to the laboratory submittal case narrative.

(See Validation Summary above for observations associated with this verification comment) Laboratory case narrative indicated that sample preservation for client sample -001 was outside of method criteria biased high (pH was 11). The lab submittal did not indicate which method was referenced for this potential sample preservation outlier so qualification was not applied based on the case narrative comment alone. This potential preservation outlier will be evaluated further as part of the pending level 4 data package validation review.

GCMS SVOC QC batch 274736 LCS recoveries were outliers biased high for bis-2-chloroethylether. Qualification of client sample results was not required based on this high bias QC outlier.

GCMS SVOC surrogate recoveries were outliers biased high for 1 out of 3 acid fraction surrogates in client samples -001 and -007. Qualification of client sample results was not required based on these high bias QC outliers alone.

GCMS SVOC MS/MSD recovery data for client sample -012 was not reported in laboratory submittal QC summary other than the associated surrogate recovery results. These recoveries will be evaluated further as part of the level 4 data package review. (note: validation review showed no recovery outliers for the sample -012 MS/MSD QC sample)

Metals method blanks had detections below the RL in QC batch 274876 for manganese and vanadium and in QC batch 275634 for arsenic and vanadium. Client samples -010 and -011 total arsenic results and client samples -001 total manganese results and client samples -001, -011, -012 total vanadium results and client samples -003, -004, -005, -006, -007, -010, -011, -012, -008 dissolved vanadium results should be considered to be non-detect at the RL and qualified with UB flags. Client samples -008 and -012 total arsenic results and client samples -002, -003, -004, -005, -006, -007, -008 total vanadium results and client samples -002 dissolved vanadium results should be considered to be non-detect at the concentration reported and qualified

with B flags.

Metals QC batch 274876 and Cyanide QC batch 275318 and Chloride QC batch 276233 MS recovery outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

Metals sample -012 MS/MSD recoveries were not considered to be statistically reliable due to elevated levels of target analyte in the original sample matrix relative to the amount spiked (4X rule) so were not used to qualify results for total and dissolved calcium, iron, manganese, sodium and zinc. MSD recovery only was an outlier for dissolved selenium so qualification was not required based on this QC outlier alone.

Cyanide client sample -012 and -001 MS/MSD recoveries were outliers biased low. Client samples -001 and -012 cyanide results should be considered to be estimated and qualified with UJ flags if non-detect and J flags if detected.

Chloride client sample -012 MS/MSD recoveries were outliers biased low. Client sample -012 chloride results should be considered to be estimated and qualified with a J flag.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

2.0 VOLATILE ORGANIC COMPOUNDS (VOCs) – METHOD SW846 8260C and SIM Analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

2.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) VOCs

2.1.1 TUNING AND MASS CALIBRATION – GC/MS VOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

2.1.2 INITIAL CALIBRATION – GC/MS VOCs

Initial calibration data for VOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS VOCs

Initial calibration verification (ICV) standards for VOC analyses were reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

2.2 CONTINUING CALIBRATION – GC/MS VOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.3 INTERNAL STANDARDS – GC/MS VOCs

Internal standard (IS) data were reviewed and met criteria without exception.

2.4 SURROGATE SPIKE RECOVERIES – GC/MS VOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

2.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS VOCs

A laboratory control sample (LCS) was prepared and analyzed for VOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

2.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS VOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

2.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS VOCs

There were no field duplicate comparisons performed as part of this validation request.

2.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS VOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

2.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS VOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable unless noted otherwise in verification/validation summary.

2.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS VOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

2.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS VOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

3.0 SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) – METHOD SW846 8270D and SIM analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

3.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) SVOCs

3.1.1 TUNING AND MASS CALIBRATION – GC/MS SVOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

3.1.2 INITIAL CALIBRATION – GC/MS SVOCs

Initial calibration data for SVOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

3.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS SVOCs

Initial calibration verification (ICV) standards for SVOC analyses were reviewed and met criteria specified by the laboratory with no exceptions.

3.2 CONTINUING CALIBRATION – GC/MS SVOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary

3.3 INTERNAL STANDARDS – GC/MS SVOCs

Internal standard (IS) data were reviewed and met criteria without exception.

3.4 SURROGATE SPIKE RECOVERIES – GC/MS SVOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

3.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS SVOCs

A laboratory control sample (LCS) was prepared and analyzed for SVOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

3.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS SVOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

3.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS SVOCs

There were no field duplicate comparisons performed as part of this validation request.

3.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS SVOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

3.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS SVOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable without exception.

3.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS SVOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

3.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS SVOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

4.0 POLYCHLORINATED BIPHENYLS (PCBs) – METHOD SW846 8082A

The target analyte list was defined by the client as the standard 7 aroclors.

4.1 CALIBRATION – GAS CHROMATOGRAPH-ECD
4.1.1 TUNING AND MASS CALIBRATION – PCB

Not applicable for this analysis.

4.1.2 INITIAL CALIBRATION – PCB

Initial calibration data for PCBs were reviewed and met the criteria for instrument sensitivity and linearity of response without exception.

4.1.3 INITIAL CALIBRATION VERIFICATION – PCB

Initial calibration verification (ICV) standards for PCB analyses were reviewed and met criteria specified by the laboratory with no exceptions.

4.2 CONTINUING CALIBRATION – PCBs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

4.3 INTERNAL STANDARDS – PCB

Internal standard (IS) data were reviewed and met criteria unless noted otherwise in verification/validation summary. (NOTE: Lab quantitation approach DID use internal standard quantitation for this submittal).

4.4 SURROGATE SPIKE RECOVERIES – PCB

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

4.5 LABORATORY CONTROL SAMPLE ANALYSES - PCB

A laboratory control sample (LCS) was prepared and analyzed for PCBs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary..

4.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - PCB

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

4.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - PCB

There were no field duplicate comparisons performed as part of this validation request.

4.8 EXTRACT CLEANUP - PCB

Extract cleanups were performed in accordance with laboratory SOP's and as noted in level 4 data package prep logs.

4.9 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - PCB

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

4.10 TENTATIVELY IDENTIFIED COMPOUNDS - PCB

Not requested for this analytical procedure.

4.11 BLANKS – METHOD/FIELD/CALIBRATION - PCB

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

5.0 HPLC/IC – METHOD SW846 9056A – CHLORIDE AND SULFATE

5.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

5.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

5.3 CONTINUTING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

5.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

5.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

5.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

5.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

5.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

6.0 METALS – ICPMS by Method 6020 TOTAL AND DISSOLVED and Mercury by Method 7470A

The following samples provided in this SDG underwent a Level IV review for either/and metals or mercury analyses:

- Method 6020A: ALL
- Method 7470A: ALL

6.1 ICP/MS TUNING AND MASS CALIBRATION

Instrument tuning data were reviewed. Tuning elements were analyzed. All tuning criteria were met for the analyses, indicating proper optimization of the instrumentation.

6.2 INITIAL CALIBRATION

Initial calibration data for metals and mercury were reviewed and met the criteria for linearity of response without exception.

6.3 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards for metals and mercury analyses were reviewed and met criteria unless otherwise noted in verification/validation summary section of this document.

An initial calibration blank (ICB) was analyzed for metals and mercury analyses. Metals and mercury were reported as non-detect in each ICB analysis unless noted otherwise in verification/validation summary.

6.4 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for metals and mercury analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

6.5 INTERFERENCE CHECK STANDARD

The interference check standard results were reviewed and found to meet criteria.

6.6 INTERNAL STANDARDS

Internal standard (IS) data were reviewed and found to meet criteria unless noted otherwise in verification/validation summary.

6.7 LABORATORY CONTROL SAMPLE ANALYSIS

A laboratory control sample (LCS) was prepared and analyzed for metals and mercury. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

6.8 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE (MS/MSD) ANALYSES

The MS/MSD recoveries and RPD's were either not performed using a client sample or were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

6.9 CONTRACT REQUIRED DETECTION LIMIT STANDARD ANALYSES

Each contract required detection limit (CRDL) standard was analyzed at the proper frequency and were within laboratory control limits unless noted otherwise in verification/validation summary.

6.10 ICP SERIAL DILUTION

Serial dilutions were analyzed at the proper frequency and were either not performed using the client sample or were within laboratory control limits unless noted otherwise in verification/validation summary.

6.11 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

6.12 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

6.13 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

7.0 GENERAL CHEMISTRY- TOTAL AND AMENABLE CYANIDE AND ALKALINITY – METHODS 9012B and 2320B

7.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

7.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

7.3 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

7.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

7.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD’s were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

7.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

7.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

7.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

8.0 REPRESENTATIVENESS EVALUATION

Representativeness is a qualitative evaluation of whether the data represents actual environmental conditions. Representativeness was evaluated using holding time criteria, which reflect the length of time after sample collection that a sample or extract remains representative of environmental conditions. Depending on the analysis, either one or two holding times were evaluated.

i.) For those analyses that do not include a sample extraction, only one holding time was evaluated: the length of time between sample collection and analysis.

ii.) For analyses that require sample extraction prior to analysis, two holding times were evaluated: the length of time from sampling until extraction and the length of time from extraction to analysis.

Holding times are compared to standard method specific holding times accepted or recommended by the United States Environmental Protection Agency (USEPA). Those holding times outside of USEPA acceptance criteria are qualitatively evaluated to determine their effect on sample representativeness.

Representativeness was also evaluated by analysis of laboratory method blanks and field equipment blanks. Laboratory method blanks and field equipment blanks are used to identify sources of contamination not associated with environmental conditions.

8.1 SAMPLE PRESERVATION AND HOLDING TIMES

Sample holding time and preservation requirements are summarized in Appendix 5.

All sample extractions and/or analyses were performed within the specified holding times unless noted otherwise in verification/validation summary.

All samples were properly preserved and cooled to 0-6°C after collection.

8.2 METHOD BLANK SUMMARY

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

Evaluation of blank contamination includes directions on the interpretation of the affected analytical results.

9.0 USABILITY AND COMPARABIILTY

Usability of data was evaluated by assuring that all the analytical requests were met, samples were received in the proper condition, and all analyses were performed within the appropriate holding times unless noted otherwise in verification/validation summary

No data evaluated within this delivery group was considered unusable (qualified with an R flag) due to sample integrity, sample matrix interference or batch quality control issues unless noted otherwise in verification/validation summary.

10.0 QC SUMMARY

All sample results meet the project specific QAPP standard for usability with exceptions defined by validation and verification qualifiers as applied. Please reference the following tables for a summary of the investigative field sample data and their valid qualifiers based on Level 4 technical review of the analytical data.

APPENDIX 1

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Nashville
Laboratory Submittal: 85229-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	Metals by ICP Mass Spectroscopy(D)	Metals by ICP Mass Spectroscopy	Mercury (Manual Cold Vapor)(D)	Mercury (Manual Cold Vapor)	TOTAL AND AMENABLE CYANIDE (AUTOMATED COLORIMETRIC, WITH OFF-LINE DISTILLATION)	Inorganic Anions by IC	Alkalinity Prep
490852291	RW-13 (100-120)- 081315	8/13/2015	9:15:00	X	X	X	X	X	X	X	X	X	X	X	X
4908522910	OB-10-081415	8/14/2015	10:20:00	X	X	X	X	X	X	X	X	X	X	X	X
4908522911	DUP-03-081415	8/14/2015	12:00:00	X	X	X	X	X	X	X	X	X	X	X	X
4908522912	CM-50-081415	8/14/2015	10:25:00	X	X	X	X	X	X	X	X	X	X	X	X
490852292	OB-24-081315	8/13/2015	9:50:00	X	X	X	X	X	X	X	X	X	X	X	X
490852293	OB-14A-081315	8/13/2015	10:55:00	X	X	X	X	X	X	X	X	X	X	X	X
490852294	OB-14B-081315	8/13/2015	10:20:00	X	X	X	X	X	X	X	X	X	X	X	X
490852295	OB-16-081315	8/13/2015	3:45:00	X	X	X	X	X	X	X	X	X	X	X	X
490852296	OB-18-081315	8/13/2015	2:25:00	X	X	X	X	X	X	X	X	X	X	X	X
490852297	OB-28-081315	8/13/2015	3:15:00	X	X	X	X	X	X	X	X	X	X	X	X
490852298	OB-17-081315	8/13/2015	2:05:00	X	X	X	X	X	X	X	X	X	X	X	X
490852299	TB-07-081415	8/14/2015	1:00:00	X	X										

APPENDIX 2

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85229-1
August 2015

Description

- Standard Report Cover page
- Table of Contents
- SDG Case Narrative
- Sample Summary
- Executive Summary detection highlights
- Method Summary
- Method/Analyst Summary
- Analytical Results
- Surrogate Summary
- Quality Control Results
- Data Qualifiers
- QC Summary Association
- Lab Chronicle
- GCMS Volatiles Data - Method 8260C and SIM
  - QC Summary Data
    - Surrogate recoveries (form II)
    - Check Sample recoveries (form III)
    - Matrix spike/Matrix spike duplicate report (form III)
    - Method blank report (form IV)
    - Tuning and mass calibrations (form V)
    - Internal Standard and RT area summary (form VIII)
  - Sample Data
    - GCMS VOA Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Total Ion Profile Chromatogram
    - Ion profiles of detected target analyte peaks
    - Manual integration if applicable
    - Tentatively Identified Compound Reports (if applicable)
  - Standards Data
    - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
    - ICAL Raw integration data from instrument
    - ICAL Total Ion Profile Chromatogram
    - ICV check standard recovery report (Form VII)
    - ICV check standard total ion profile with integration
    - GCMS VOA Continuing Calibration Data (Form VII)
    - CCV raw integration data from instrument
    - CCV Total Ion Profile Chromatogram
    - Manual integration if applicable
  - Raw QC Data
    - Tune information (not included with SIM package)
    - FORM I - QC data
    - Method Blank integration/internal standard and total ion profile raw data
    - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
    - MS and MSD integration/internal standard and total ion profile raw data
  - Miscellaneous Data
    - Run logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85229-1
August 2015

Description

GCMS Semivolatiles Data - Method 8270D and SIM

- QC Summary Data
  - Surrogate recoveries (form II)
  - Check Sample recoveries (form III)
  - Method blank report (form IV)
  - Tuning and mass calibrations (form V) (not applicable for SIM)
  - Internal Standard and RT area summary (form VIII)
- Sample Data
  - GCMS VOA Organics Analysis Data Sheet (Form I)
  - Raw integration data from instrument
  - Total Ion Profile Chromatogram
  - Ion profiles of detected target analyte peaks
  - Manual integration if applicable
  - Tentatively Identified Compound Reports (if applicable)
- Standards Data
  - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
  - ICAL Raw integration data from instrument
  - ICAL Total Ion Profile Chromatogram
  - ICV check standard recovery report
  - ICV check standard total ion profile with integration
  - GCMS VOA Continuing Calibration Data (Form VII)
  - CCV raw integration data from instrument
  - CCV Total Ion Profile Chromatogram
  - Manual integration if applicable
- Raw QC Data
  - Tune information (not applicable for SIM)
  - Method Blank integration/internal standard and total ion profile raw data
  - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
- Miscellaneous Data
  - Instrument run logs
  - Extraction bench sheets

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85229-1
August 2015

Description

- Polychlorinated Biphenyls Data (PCB)
  - QC Summary data
    - Surrogate recoveries (form II)
    - Check Sample Recovery data (form III)
    - Method Blank data (form IV)
    - Analytical sequence with RT check (Form VIII)
    - Identification Summary (Form X)
  - Sample Data
    - Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Chromatogram
  - Standards Data (both columns)
    - Initial Calibration Data External Standard RT Summary (Form VI)
    - Initial Calibration Data Summary with average RF
    - Raw integration data from instrument with manual integrations where applicable
    - ICAL chromatograms
    - Continuing Calibration Data (Form VII) with RT Summaries
    - ICV raw integration and chromatograms
    - CCV raw integration data from instrument
    - CCV chromatogram
  - Raw QC Data
    - LCS/LCSD sample data report and integration and chromatograms
    - Method blank integration and chromatograms
  - Miscellaneous Data
    - Sequence table (run log)
    - PCB Batch Worksheet
- HPLC/IC - 9056A ORGFM_28D - Anions, Ion Chromatography - Sulfate and Chloride
  - Raw Data and Data Summaries for:
    - LCS/LCSD (form III)
    - MS/MSD (form III)
    - METHOD BLANKS (Form IV)
    - SAMPLE DATA (Form I)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VI)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VII)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - QC DATA (Form I)
      - Raw instrument data and chromatography
    - Analysis Run Logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85229-1
August 2015

Description

METALS DATA (ICPMS and mercury)
- Forms Data
  - Cover Page
  - Inorganic Analysis Data Sheet - Metals Dissolved/Total Recoverable (1A-IN)
  - CCV standard report - mercury and ICPMS (2A-IN)
  - CRQL report - mercury and ICPMS (2B-IN)
  - ICB report - mercury and ICPMS (3-IN)
  - Method blank report (3-IN)
  - Interference check standard A - ICPMS (4A-IN)
  - Interference check standard AB - ICPMS (4A-IN)
  - MS/MSD Sample recovery (5A-IN)
  - PDS Summary (5B-IN)
  - LCS Recovery form (7A-IN)
  - LCS Duplicate Recover (7D-IN)
  - ICP-MS Serial Dilutions (8-IN)
  - Detection Limits Form (9-IN)
  - Linear dynamic ranges - ICPMS (11-IN)
  - Prep log - mercury and ICPMS (12-IN)
  - Run log - ICPMS and Mercury (13-IN)
  - ICP-MS TUNE (14-IN)
  - ICPMS Internal Standards Relative Intensity Summary (15-IN)
- Instrument Printouts
  - ICP-MS Raw instrument data
  - Mercury raw instrument data, run logs and calibrations
- Miscellaneous Data
  - Metals Batch Worksheet

GENERAL CHEMISTRY - Total and Amenable Cyanide and Alkalinity
- Cover Page
- Raw Data and Data Summaries for:
  - Sample Data (Form 1B-IN)
  - CCV/CCB (Form 2-IN)
  - METHOD BLANKS (Form 3-IN)
  - MATRIX SPIKES (Form 5-IN)
  - Sample DUPLICATES (Form 6-IN)
  - LCS/LCSD (Form 7-IN)
  - Detection Limits Form (9-IN)
  - Prep log (12-IN)
  - Analysis Run Logs (13-IN)
  - Raw Data - instrument sample sequence and calibration curve
  - Alkalinity Reagents
  - Alkalinity pH meter calibration
  - Alkalinity sequence log and raw data
  - General Chemistry Batch Worksheets

Shipping and Receiving Documents
- COC forms
- Cooler Receipt Form, checklist and narrative

APPENDIX 3

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85229-1

		Sample Name:	RW-13 (100-120)- 081315				OB-10-081415				DUP-03-081415			
		Lab Sample ID:	490852291				4908522910				4908522911			
		Sample Date:	8/13/2015				8/14/2015				8/14/2015			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Hexanol, 2-ethyl- - TIC	104-76-7	6.7	---	ug/l	NJ								
2-Butanone (MEK)	78-93-3	3.2	50	ug/l	J	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	41	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	0.14	5.0	ug/l	J	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	0.65	1.0	ug/l	UB	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85229-1

		Sample Name:	RW-13 (100-120)- 081315				OB-10-081415				DUP-03-081415			
		Lab Sample ID:	490852291				4908522910				4908522911			
		Sample Date:	8/13/2015				8/14/2015				8/14/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	1740-19-8	26	---	ug/l	NJ								
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-HYDRAZINO-2-IMIDAZOLINE - TIC	1000239-54-7	43	---	ug/l	NJ								
	2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitroaniline	88-74-4	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Nitrophenol	100-02-7	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3	21	---	ug/l	NJ								
	Acenaphthene	83-32-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acenaphthylene	208-96-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Allyldimethylphenylsilane - TIC	18001-18-8	10	---	ug/l	NJ								
	Anthracene	120-12-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Atrazine	1912-24-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzyl Alcohol - TIC	100-51-6	14	---	ug/l	NJ								
	Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	2437-95-8					29	---	ug/l	NJ				
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7												
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dodecanoic acid - TIC	143-07-7	10	---	ug/l	NJ								
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5	96	---	ug/l	NJ								
	Fluoranthene	206-44-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Fluorene	86-73-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Furan, tetrahydro-2,5-dipropyl- - TIC	4457-62-9	9.5	---	ug/l	NJ								
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	n-Hexadecanoic acid - TIC	57-10-3	85	---	ug/l	NJ								
	N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Nitrobenzene	98-95-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Octadecanoic acid - TIC	57-11-4	100	---	ug/l	NJ								
	Phenanthrene	85-01-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Phenol	108-95-2	6.6	10	ug/l	J	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol, 4-(1,1-dimethylpropyl)- - TIC	80-46-6	12	---	ug/l	NJ								
	Pyrene	129-00-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Pyridine, 3-butyl-, 1-oxide - TIC	31396-33-5												
	Triethylene glycol monododecyl ether - TIC	3055-94-5	8.3	---	ug/l	NJ								

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85229-1

			Sample Name:	RW-13 (100-120)- 081315				OB-10-081415				DUP-03-081415			
			Lab Sample ID:	490852291				4908522910				4908522911			
			Sample Date:	8/13/2015				8/14/2015				8/14/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---	ND	0.30	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Metals														
OSW-6020A														
	Aluminum	7429-90-5	5.6	0.020	mg/l	---	ND	0.020	mg/l	---	ND	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	4.8	0.020	mg/l	---	ND	0.020	mg/l	---	ND	0.020	mg/l	---
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	0.00063	0.0020	mg/l	J	0.00051	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Arsenic	7440-38-2	0.0032	0.0020	mg/l	---	0.0013	0.0020	mg/l	UB	0.0013	0.0020	mg/l	UB
	Arsenic - Dissolved	7440-38-2	0.0021	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Barium	7440-39-3	0.024	0.0020	mg/l	---	0.0068	0.0020	mg/l	---	0.0069	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.021	0.0020	mg/l	---	0.0065	0.0020	mg/l	---	0.0062	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	24.9	1.0	mg/l	---	13.4	1.0	mg/l	---	13.9	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	26.2	1.0	mg/l	---	14.0	1.0	mg/l	---	13.7	1.0	mg/l	---
	Chromium	7440-47-3	0.055	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3	0.050	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper	7440-50-8	0.019	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	0.013	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Iron	7439-89-6	0.38	0.025	mg/l	---	0.25	0.025	mg/l	---	0.29	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	0.31	0.025	mg/l	---	0.013	0.025	mg/l	J	ND	0.025	mg/l	---
	Lead	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Magnesium	7439-95-4	ND	1.0	mg/l	---	3.8	1.0	mg/l	---	4.0	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	ND	1.0	mg/l	---	4.1	1.0	mg/l	---	4.1	1.0	mg/l	---
	Manganese	7439-96-5	0.00060	0.0020	mg/l	UB	0.029	0.0020	mg/l	---	0.033	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5	ND	0.0020	mg/l	---	0.00078	0.0020	mg/l	J	0.00064	0.0020	mg/l	J
	Nickel	7440-02-0	0.0028	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.0013	0.0020	mg/l	J
	Nickel - Dissolved	7440-02-0	0.0016	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Potassium	7440-09-7	232	10.0	mg/l	---	1.2	1.0	mg/l	---	1.3	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	209	20.0	mg/l	---	1.2	1.0	mg/l	---	1.2	1.0	mg/l	---
	Selenium	7782-49-2	0.012	0.0020	mg/l	---	0.00080	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	0.011	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	246	10.0	mg/l	---	3.1	1.0	mg/l	---	3.3	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	210	20.0	mg/l	---	3.4	1.0	mg/l	---	3.3	1.0	mg/l	---
	Thallium	7440-28-0	0.00090	0.0020	mg/l	J	0.00024	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	0.00089	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Vanadium	7440-62-2	0.039	0.0020	mg/l	---	0.0010	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB
	Vanadium - Dissolved	7440-62-2	0.035	0.0020	mg/l	---	0.0016	0.0020	mg/l	UB	0.0016	0.0020	mg/l	UB
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	ND	0.010	mg/l	UJ	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A														
	Chloride	16887-00-6	25.9	5.00	mg/l	---	3.43	1.00	mg/l	---	3.39	1.00	mg/l	---
	Sulfate	14808-79-8	50.7	5.00	mg/l	---	5.88	1.00	mg/l	---	5.85	1.00	mg/l	---
Prep														
APHA-2320B														
	Bicarbonate Alkalinity as CaCO3	E-14508	ND	10.0	mg/l	---	43.9	10.0	mg/l	---	43.6	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	547	10.0	mg/l	---	43.9	10.0	mg/l	---	43.6	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85229-1

		Sample Name:	CM-50-081415				OB-24-081315				OB-14A-081315			
		Lab Sample ID:	4908522912				490852292				490852293			
		Sample Date:	8/14/2015				8/13/2015				8/13/2015			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Hexanol, 2-ethyl- - TIC	104-76-7												
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	0.41	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85229-1

		Sample Name:	CM-50-081415				OB-24-081315				OB-14A-081315			
		Lab Sample ID:	4908522912				490852292				490852293			
		Sample Date:	8/14/2015				8/13/2015				8/13/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	1740-19-8												
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-HYDRAZINO-2-IMIDAZOLINE - TIC	1000239-54-7												
	2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitroaniline	88-74-4	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Nitrophenol	100-02-7	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3												
	Acenaphthene	83-32-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acenaphthylene	208-96-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Allyldimethylphenylsilane - TIC	18001-18-8												
	Anthracene	120-12-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Atrazine	1912-24-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzyl Alcohol - TIC	100-51-6												
	Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	2437-95-8												
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7									16	---	ug/l	NJ
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dodecanoic acid - TIC	143-07-7												
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5												
	Fluoranthene	206-44-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Fluorene	86-73-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Furan, tetrahydro-2,5-dipropyl- - TIC	4457-62-9												
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	n-Hexadecanoic acid - TIC	57-10-3												
	N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Nitrobenzene	98-95-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Octadecanoic acid - TIC	57-11-4												
	Phenanthrene	85-01-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol, 4-(1,1-dimethylpropyl)- - TIC	80-46-6												
	Pyrene	129-00-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Pyridine, 3-butyl-, 1-oxide - TIC	31396-33-5												
	Triethylene glycol monododecyl ether - TIC	3055-94-5												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85229-1

			Sample Name:	CM-50-081415			OB-24-081315				OB-14A-081315			
			Lab Sample ID:	4908522912			490852292				490852293			
			Sample Date:	8/14/2015			8/13/2015				8/13/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
	OSW-8270DSim													
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---	ND	0.30	ug/l	---
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Metals														
	OSW-6020A													
	Aluminum	7429-90-5	ND	0.020	mg/l	---	0.060	0.020	mg/l	---	0.025	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	0.010	0.020	mg/l	J	ND	0.020	mg/l	---
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.00061	0.0020	mg/l	J
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.00074	0.0020	mg/l	J
	Arsenic	7440-38-2	0.0023	0.0020	mg/l	B	0.0018	0.0020	mg/l	J	0.0092	0.0020	mg/l	---
	Arsenic - Dissolved	7440-38-2	ND	0.0020	mg/l	---	0.00064	0.0020	mg/l	J	0.0012	0.0020	mg/l	J
	Barium	7440-39-3	0.12	0.0020	mg/l	---	0.048	0.0020	mg/l	---	0.46	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.083	0.0020	mg/l	---	0.032	0.0020	mg/l	---	0.31	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	81.3	1.0	mg/l	---	99.2	1.0	mg/l	---	146	10.0	mg/l	---
	Calcium - Dissolved	7440-70-2	83.7	1.0	mg/l	---	99.2	1.0	mg/l	---	115	20.0	mg/l	---
	Chromium	7440-47-3	0.0021	0.0020	mg/l	---	0.00092	0.0020	mg/l	J	0.00077	0.0020	mg/l	J
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.0012	0.0020	mg/l	J
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.00088	0.0020	mg/l	J
	Copper	7440-50-8	0.0015	0.0020	mg/l	J	0.0011	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Iron	7439-89-6	20.0	0.025	mg/l	---	0.17	0.025	mg/l	---	59.3	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	5.1	0.025	mg/l	---	0.014	0.025	mg/l	J	27.3	0.025	mg/l	---
	Lead	7439-92-1	0.00039	0.0020	mg/l	J	0.00024	0.0020	mg/l	J	0.00086	0.0020	mg/l	J
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Magnesium	7439-95-4	22.7	1.0	mg/l	---	23.8	1.0	mg/l	---	10.9	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	24.0	1.0	mg/l	---	24.6	1.0	mg/l	---	10.2	1.0	mg/l	---
	Manganese	7439-96-5	1.2	0.0020	mg/l	---	1.3	0.0020	mg/l	---	1.5	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5	1.4	0.040	mg/l	---	0.022	0.0020	mg/l	---	1.8	0.040	mg/l	---
	Nickel	7440-02-0	0.0052	0.0020	mg/l	---	0.0015	0.0020	mg/l	J	0.0026	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0	0.0013	0.0020	mg/l	J	ND	0.0020	mg/l	---	0.0013	0.0020	mg/l	J
	Potassium	7440-09-7	4.5	1.0	mg/l	---	2.4	1.0	mg/l	---	5.8	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	4.6	1.0	mg/l	---	2.1	1.0	mg/l	---	5.1	1.0	mg/l	---
	Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	85.7	1.0	mg/l	---	16.2	1.0	mg/l	---	18.4	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	90.4	1.0	mg/l	---	18.0	1.0	mg/l	---	17.5	1.0	mg/l	---
	Thallium	7440-28-0	0.00051	0.0020	mg/l	J	0.00044	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	0.00060	0.0020	mg/l	J	0.00031	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Vanadium	7440-62-2	0.0010	0.0020	mg/l	UB	0.0035	0.0020	mg/l	B	0.0040	0.0020	mg/l	B
	Vanadium - Dissolved	7440-62-2	0.0017	0.0020	mg/l	UB	0.0022	0.0020	mg/l	B	0.0017	0.0020	mg/l	UB
	Zinc	7440-66-6	0.96	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	0.48	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	UJ	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	191	1.00	mg/l	J	86.8	1.00	mg/l	---	20.6	1.00	mg/l	---
	Sulfate	14808-79-8	3.36	1.00	mg/l	---	27.3	1.00	mg/l	---	ND	1.00	mg/l	---
Prep														
	APHA-2320B													
	Bicarbonate Alkalinity as CaCO3	E-14508	229	10.0	mg/l	---	218	10.0	mg/l	---	377	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	229	10.0	mg/l	---	218	10.0	mg/l	---	377	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85229-1

		Sample Name:	OB-14B-081315				OB-16-081315				OB-18-081315			
		Lab Sample ID:	490852294				490852295				490852296			
		Sample Date:	8/13/2015				8/13/2015				8/13/2015			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Hexanol, 2-ethyl- - TIC	104-76-7												
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85229-1

		Sample Name:	OB-14B-081315				OB-16-081315				OB-18-081315			
		Lab Sample ID:	490852294				490852295				490852296			
		Sample Date:	8/13/2015				8/13/2015				8/13/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	1740-19-8												
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-HYDRAZINO-2-IMIDAZOLINE - TIC	1000239-54-7												
	2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitroaniline	88-74-4	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Nitrophenol	100-02-7	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3												
	Acenaphthene	83-32-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acenaphthylene	208-96-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Allyldimethylphenylsilane - TIC	18001-18-8												
	Anthracene	120-12-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Atrazine	1912-24-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzyl Alcohol - TIC	100-51-6												
	Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	2437-95-8												
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7												
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dodecanoic acid - TIC	143-07-7												
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5												
	Fluoranthene	206-44-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Fluorene	86-73-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Furan, tetrahydro-2,5-dipropyl- - TIC	4457-62-9												
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	n-Hexadecanoic acid - TIC	57-10-3												
	N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Nitrobenzene	98-95-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Octadecanoic acid - TIC	57-11-4												
	Phenanthrene	85-01-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol, 4-(1,1-dimethylpropyl)- - TIC	80-46-6												
	Pyrene	129-00-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Pyridine, 3-butyl-, 1-oxide - TIC	31396-33-5					13	---	ug/l	NJ				
	Triethylene glycol monododecyl ether - TIC	3055-94-5												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85229-1

		Sample Name:	OB-14B-081315				OB-16-081315				OB-18-081315			
		Lab Sample ID:	490852294				490852295				490852296			
		Sample Date:	8/13/2015				8/13/2015				8/13/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---	ND	0.30	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Metals														
OSW-6020A														
	Aluminum	7429-90-5	ND	0.020	mg/l	---	ND	0.020	mg/l	---	0.27	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	ND	0.020	mg/l	---	0.017	0.020	mg/l	J
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Arsenic	7440-38-2	0.0025	0.0020	mg/l	---	0.012	0.0020	mg/l	---	0.0014	0.0020	mg/l	J
	Arsenic - Dissolved	7440-38-2	0.0011	0.0020	mg/l	J	0.0023	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Barium	7440-39-3	0.041	0.0020	mg/l	---	0.10	0.0020	mg/l	---	0.010	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.041	0.0020	mg/l	---	0.069	0.0020	mg/l	---	0.0089	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	125	10.0	mg/l	---	170	10.0	mg/l	---	54.7	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	100	1.0	mg/l	---	142	20.0	mg/l	---	53.6	1.0	mg/l	---
	Chromium	7440-47-3	0.00055	0.0020	mg/l	J	ND	0.0020	mg/l	---	0.0012	0.0020	mg/l	J
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.00067	0.0020	mg/l	J
	Cobalt	7440-48-4	ND	0.0020	mg/l	---	0.0019	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	0.0018	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Copper	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Iron	7439-89-6	0.93	0.025	mg/l	---	20.1	0.025	mg/l	---	0.36	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	0.050	0.025	mg/l	---	2.9	0.025	mg/l	---	0.018	0.025	mg/l	J
	Lead	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Magnesium	7439-95-4	28.8	1.0	mg/l	---	18.2	1.0	mg/l	---	10.8	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	29.9	1.0	mg/l	---	18.0	1.0	mg/l	---	11.0	1.0	mg/l	---
	Manganese	7439-96-5	1.6	0.0020	mg/l	---	4.9	0.020	mg/l	---	0.013	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5	3.3	0.040	mg/l	---	4.0	0.040	mg/l	---	0.00075	0.0020	mg/l	J
	Nickel	7440-02-0	0.0019	0.0020	mg/l	J	0.0015	0.0020	mg/l	J	0.0014	0.0020	mg/l	J
	Nickel - Dissolved	7440-02-0	0.0012	0.0020	mg/l	J	0.00070	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Potassium	7440-09-7	3.1	1.0	mg/l	---	10.6	1.0	mg/l	---	0.53	1.0	mg/l	J
	Potassium - Dissolved	7440-09-7	2.9	1.0	mg/l	---	10.5	1.0	mg/l	---	0.39	1.0	mg/l	J
	Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	18.4	1.0	mg/l	---	34.2	1.0	mg/l	---	6.2	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	19.4	1.0	mg/l	---	34.4	1.0	mg/l	---	6.4	1.0	mg/l	---
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Vanadium	7440-62-2	0.0024	0.0020	mg/l	B	0.0025	0.0020	mg/l	B	0.0026	0.0020	mg/l	B
	Vanadium - Dissolved	7440-62-2	0.0016	0.0020	mg/l	UB	0.0016	0.0020	mg/l	UB	0.0015	0.0020	mg/l	UB
	Zinc	7440-66-6	ND	0.025	mg/l	---	0.011	0.025	mg/l	J	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A														
	Chloride	16887-00-6	45.1	1.00	mg/l	---	56.6	1.00	mg/l	---	1.22	1.00	mg/l	---
	Sulfate	14808-79-8	13.4	1.00	mg/l	---	3.37	1.00	mg/l	---	11.6	1.00	mg/l	---
Prep														
APHA-2320B														
	Bicarbonate Alkalinity as CaCO3	E-14508	311	10.0	mg/l	---	401	10.0	mg/l	---	163	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	311	10.0	mg/l	---	401	10.0	mg/l	---	163	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85229-1

		Sample Name:	OB-28-081315				OB-17-081315				TB-07-081415			
		Lab Sample ID:	490852297				490852298				490852299			
		Sample Date:	8/13/2015				8/13/2015				8/14/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	0.78	1.0	ug/l	J	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Hexanol, 2-ethyl- - TIC	104-76-7												
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---	17	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85229-1

		Sample Name:	OB-28-081315				OB-17-081315				TB-07-081415			
		Lab Sample ID:	490852297				490852298				490852299			
		Sample Date:	8/13/2015				8/13/2015				8/14/2015			
	Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---				
	1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	1740-19-8												
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---				
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---				
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---				
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---				
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---				
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---				
	2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---	ND	25	ug/l	---				
	2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---	ND	10	ug/l	---				
	2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---	ND	10	ug/l	---				
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---				
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---				
	2-HYDRAZINO-2-IMIDAZOLINE - TIC	1000239-54-7												
	2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---				
	2-Nitroaniline	88-74-4	ND	25	ug/l	---	ND	25	ug/l	---				
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---				
	3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---	ND	10	ug/l	---				
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---				
	3-Nitroaniline	99-09-2	ND	25	ug/l	---	ND	25	ug/l	---				
	4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---	ND	25	ug/l	---				
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---				
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---				
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---				
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---				
	4-Nitroaniline	100-01-6	ND	25	ug/l	---	ND	25	ug/l	---				
	4-Nitrophenol	100-02-7	ND	25	ug/l	---	ND	25	ug/l	---				
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3												
	Acenaphthene	83-32-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Acenaphthylene	208-96-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---				
	Allyldimethylphenylsilane - TIC	18001-18-8												
	Anthracene	120-12-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Atrazine	1912-24-9	ND	10	ug/l	---	ND	10	ug/l	---				
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---				
	Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Benzyl Alcohol - TIC	100-51-6												
	Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	2437-95-8												
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---				
	Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---	ND	10	ug/l	---				
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---	ND	10	ug/l	---				
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---				
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---				
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---				
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7												
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---				
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---				
	Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---				
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---				
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---				
	Diphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---				
	Dodecanoic acid - TIC	143-07-7												
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5												
	Fluoranthene	206-44-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Fluorene	86-73-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Furan, tetrahydro-2,5-dipropyl- - TIC	4457-62-9												
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---				
	Hexachloroethane	67-72-1	ND	10	ug/l	---	ND	10	ug/l	---				
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---				
	n-Hexadecanoic acid - TIC	57-10-3												
	N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---	ND	10	ug/l	---				
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---				
	Naphthalene	91-20-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Nitrobenzene	98-95-3	ND	10	ug/l	---	ND	10	ug/l	---				
	Octadecanoic acid - TIC	57-11-4												
	Phenanthrene	85-01-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---				
	Phenol, 4-(1,1-dimethylpropyl)- - TIC	80-46-6												
	Pyrene	129-00-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Pyridine, 3-butyl-, 1-oxide - TIC	31396-33-5												
	Triethylene glycol monododecyl ether - TIC	3055-94-5												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85229-1

		Sample Name:	OB-28-081315				OB-17-081315				TB-07-081415			
		Lab Sample ID:	490852297				490852298				490852299			
		Sample Date:	8/13/2015				8/13/2015				8/14/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---				
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---				
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---				
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
Metals														
OSW-6020A														
	Aluminum	7429-90-5	1.4	0.020	mg/l	---	0.051	0.020	mg/l	---				
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	ND	0.020	mg/l	---				
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Arsenic	7440-38-2	0.0015	0.0020	mg/l	J	0.0050	0.0020	mg/l	B				
	Arsenic - Dissolved	7440-38-2	0.00082	0.0020	mg/l	J	0.00058	0.0020	mg/l	J				
	Barium	7440-39-3	0.084	0.0020	mg/l	---	0.016	0.0020	mg/l	---				
	Barium - Dissolved	7440-39-3	0.073	0.0020	mg/l	---	0.013	0.0020	mg/l	---				
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---				
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---				
	Calcium	7440-70-2	141	10.0	mg/l	---	110	10.0	mg/l	---				
	Calcium - Dissolved	7440-70-2	103	20.0	mg/l	---	99.3	1.0	mg/l	---				
	Chromium	7440-47-3	0.0024	0.0020	mg/l	---	0.00073	0.0020	mg/l	J				
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Cobalt	7440-48-4	0.0028	0.0020	mg/l	---	0.0010	0.0020	mg/l	J				
	Cobalt - Dissolved	7440-48-4	0.0015	0.0020	mg/l	J	0.00088	0.0020	mg/l	J				
	Copper	7440-50-8	0.0060	0.0020	mg/l	---	0.0011	0.0020	mg/l	J				
	Copper - Dissolved	7440-50-8	0.0016	0.0020	mg/l	J	ND	0.0020	mg/l	---				
	Iron	7439-89-6	2.7	0.025	mg/l	---	6.1	0.025	mg/l	---				
	Iron - Dissolved	7439-89-6	ND	0.025	mg/l	---	0.11	0.025	mg/l	---				
	Lead	7439-92-1	0.0010	0.0020	mg/l	J	0.00036	0.0020	mg/l	J				
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Magnesium	7439-95-4	31.6	1.0	mg/l	---	31.0	1.0	mg/l	---				
	Magnesium - Dissolved	7439-95-4	29.5	1.0	mg/l	---	31.6	1.0	mg/l	---				
	Manganese	7439-96-5	4.4	0.020	mg/l	---	0.53	0.0020	mg/l	---				
	Manganese - Dissolved	7439-96-5	0.54	0.040	mg/l	---	0.55	0.0020	mg/l	---				
	Nickel	7440-02-0	0.0027	0.0020	mg/l	---	0.0014	0.0020	mg/l	J				
	Nickel - Dissolved	7440-02-0	0.0016	0.0020	mg/l	J	0.00063	0.0020	mg/l	J				
	Potassium	7440-09-7	4.6	1.0	mg/l	---	0.91	1.0	mg/l	J				
	Potassium - Dissolved	7440-09-7	4.0	1.0	mg/l	---	0.81	1.0	mg/l	J				
	Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Sodium	7440-23-5	24.4	1.0	mg/l	---	14.8	1.0	mg/l	---				
	Sodium - Dissolved	7440-23-5	24.2	1.0	mg/l	---	14.9	1.0	mg/l	---				
	Thallium	7440-28-0	ND	0.0020	mg/l	---	0.00066	0.0020	mg/l	J				
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Vanadium	7440-62-2	0.0055	0.0020	mg/l	B	0.0028	0.0020	mg/l	B				
	Vanadium - Dissolved	7440-62-2	0.0017	0.0020	mg/l	UB	0.0017	0.0020	mg/l	UB				
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---				
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---				
OSW-7470A														
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---				
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---				
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---				
OSW-9056A														
	Chloride	16887-00-6	89.4	1.00	mg/l	---	8.57	1.00	mg/l	---				
	Sulfate	14808-79-8	18.1	1.00	mg/l	---	38.5	1.00	mg/l	---				
Prep														
APHA-2320B														
	Bicarbonate Alkalinity as CaCO3	E-14508	362	10.0	mg/l	---	328	10.0	mg/l	---				
	Total Alkalinity as CaCO3	E-14506	362	10.0	mg/l	---	328	10.0	mg/l	---				

APPENDIX 4

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85229-1

		Sample Name:	RW-13 (100-120)- 081315				OB-10-081415				DUP-03-081415				CM-50-081415				OB-24-081315			
		Lab Sample ID:	490852291				4908522910				4908522911				4908522912				490852292			
		Sample Date:	8/13/2015				8/14/2015				8/14/2015				8/14/2015				8/13/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																						
	OSW-8260C																					
	1-Hexanol, 2-ethyl- - TIC	104-76-7	6.7	---	ug/l	NJ																
	Bromomethane	74-83-9	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
	Toluene	108-88-3	0.65	1.0	ug/l	UB																
GC/MS SVOC																						
	OSW-8270D																					
	1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	1740-19-8	26	---	ug/l	NJ																
	2-HYDRAZINO-2-IMIDAZOLINE - TIC	1000239-54-7	43	---	ug/l	NJ																
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3	21	---	ug/l	NJ																
	Allyldimethylphenylsilane - TIC	18001-18-8	10	---	ug/l	NJ																
	Benzyl Alcohol - TIC	100-51-6	14	---	ug/l	NJ																
	Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	2437-95-8					29	---	ug/l	NJ												
	Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7																				
	Dodecanoic acid - TIC	143-07-7	10	---	ug/l	NJ																
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5	96	---	ug/l	NJ																
	Furan, tetrahydro-2,5-dipropyl- - TIC	4457-62-9	9.5	---	ug/l	NJ																
	n-Hexadecanoic acid - TIC	57-10-3	85	---	ug/l	NJ																
	Octadecanoic acid - TIC	57-11-4	100	---	ug/l	NJ																
	Phenol, 4-(1,1-dimethylpropyl)- - TIC	80-46-6	12	---	ug/l	NJ																
	Pyridine, 3-butyl-, 1-oxide - TIC	31396-33-5																				
	Triethylene glycol monododecyl ether - TIC	3055-94-5	8.3	---	ug/l	NJ																
Metals																						
	OSW-6020A																					
	Arsenic	7440-38-2					0.0013	0.0020	mg/l	UB	0.0013	0.0020	mg/l	UB	0.0023	0.0020	mg/l	B				
	Manganese	7439-96-5	0.00060	0.0020	mg/l	UB																
	Vanadium	7440-62-2					0.0010	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB	0.0010	0.0020	mg/l	UB	0.0035	0.0020	mg/l	B
	Vanadium - Dissolved	7440-62-2					0.0016	0.0020	mg/l	UB	0.0016	0.0020	mg/l	UB	0.0017	0.0020	mg/l	UB	0.0022	0.0020	mg/l	B
General Chemistry																						
	OSW-9012B																					
	Cyanide, Total	57-12-5	ND	0.010	mg/l	UJ									ND	0.010	mg/l	UJ				
	OSW-9056A																					
	Chloride	16887-00-6													191	1.00	mg/l	J				

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85229-1

		Sample Name:	OB-14A-081315				OB-14B-081315				OB-16-081315				OB-18-081315				OB-28-081315			
		Lab Sample ID:	490852293				490852294				490852295				490852296				490852297			
		Sample Date:	8/13/2015				8/13/2015				8/13/2015				8/13/2015				8/13/2015			
Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																						
OSW-8260C																						
1-Hexanol, 2-ethyl- - TIC	104-76-7																					
Bromomethane	74-83-9		ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Toluene	108-88-3																					
GC/MS SVOC																						
OSW-8270D																						
1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	1740-19-8																					
2-HYDRAZINO-2-IMIDAZOLINE - TIC	1000239-54-7																					
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3																					
Allyldimethylphenylsilane - TIC	18001-18-8																					
Benzyl Alcohol - TIC	100-51-6																					
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	2437-95-8																					
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7		16	---	ug/l	NJ																
Dodecanoic acid - TIC	143-07-7																					
Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5																					
Furan, tetrahydro-2,5-dipropyl- - TIC	4457-62-9																					
n-Hexadecanoic acid - TIC	57-10-3																					
Octadecanoic acid - TIC	57-11-4																					
Phenol, 4-(1,1-dimethylpropyl)- - TIC	80-46-6																					
Pyridine, 3-butyl-, 1-oxide - TIC	31396-33-5										13	---	ug/l	NJ								
Triethylene glycol monododecyl ether - TIC	3055-94-5																					
Metals																						
OSW-6020A																						
Arsenic	7440-38-2																					
Manganese	7439-96-5																					
Vanadium	7440-62-2		0.0040	0.0020	mg/l	B	0.0024	0.0020	mg/l	B	0.0025	0.0020	mg/l	B	0.0026	0.0020	mg/l	B	0.0055	0.0020	mg/l	B
Vanadium - Dissolved	7440-62-2		0.0017	0.0020	mg/l	UB	0.0016	0.0020	mg/l	UB	0.0016	0.0020	mg/l	UB	0.0015	0.0020	mg/l	UB	0.0017	0.0020	mg/l	UB
General Chemistry																						
OSW-9012B																						
Cyanide, Total	57-12-5																					
OSW-9056A																						
Chloride	16887-00-6																					

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85229-1

		Sample Name:	OB-17-081315				TB-07-081415			
		Lab Sample ID:	490852298				490852299			
		Sample Date:	8/13/2015				8/14/2015			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC									
OSW-8260C									
1-Hexanol, 2-ethyl- - TIC	104-76-7								
Bromomethane	74-83-9	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Toluene	108-88-3								
GC/MS SVOC									
OSW-8270D									
1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	1740-19-8								
2-HYDRAZINO-2-IMIDAZOLINE - TIC	1000239-54-7								
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3								
Allyldimethylphenylsilane - TIC	18001-18-8								
Benzyl Alcohol - TIC	100-51-6								
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy - TIC	2437-95-8								
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7								
Dodecanoic acid - TIC	143-07-7								
Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5								
Furan, tetrahydro-2,5-dipropyl- - TIC	4457-62-9								
n-Hexadecanoic acid - TIC	57-10-3								
Octadecanoic acid - TIC	57-11-4								
Phenol, 4-(1,1-dimethylpropyl)- - TIC	80-46-6								
Pyridine, 3-butyl-, 1-oxide - TIC	31396-33-5								
Triethylene glycol monododecyl ether - TIC	3055-94-5								
Metals									
OSW-6020A									
Arsenic	7440-38-2	0.0050	0.0020	mg/l	B				
Manganese	7439-96-5								
Vanadium	7440-62-2	0.0028	0.0020	mg/l	B				
Vanadium - Dissolved	7440-62-2	0.0017	0.0020	mg/l	UB				
General Chemistry									
OSW-9012B									
Cyanide, Total	57-12-5								
OSW-9056A									
Chloride	16887-00-6								

APPENDIX 5

EPA Sample Holding Time and Preservation Requirements

Parameter	*Reference Method*	*Matrix*	*Preservation & Storage*	*Holding Times*
Volatile Organics by GCMS	OSW-8260C/SIM	Water	Acidify ph<2 Refrigeration 0-6oC	14 days
Semivolatile Organics by GCMS	OSW-8270D/SIM	Water	Refrigeration 0-6oC	7 days Extraction 40 days Analysis
Polychlorinated Biphenyls by GC/ECD	OSW-8082A	Water	Refrigeration 0-6oC	365 days - Extraction - Analysis
Metals by ICP/ICPMS Spectroscopy	OSW-6010B OSW-6020A	Water	Acidify pH<2 Refrigeration 0-6oC	180 days
Mercury in Aqueous Waste	OSW-7470A	Water	Acidify pH<2 Refrigeration 0-6oC	28 days
Alkalinity	EPA 2320B	Water	Refrigeration 0-6oC	14 days
Chloride and Sulfate	OSW-9056A	Water	Refrigeration 0-6oC	28 days
Total and Amenable Cyanide	OSW-9012B	Water	Test for presence of Sulfide – if unknown collect two samples and treat one with Lead Carbonate. Then adjust sample to pH of greater than or equal to 12with NaOH. Refrigeration at 0-4C –(also may require treatment for aldehydes and chlorine/hypochlorite/sulfite)	14 days if preserved. 24 hours or sooner if unpreserved

ATTACHMENT A

CHAIN OF CUSTODY DOCUMENT(S)

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
85229
#2
N

TestAmerica

09/21/2015

Client Information	Sampler: Robert Lautenberg	Lab PM: Brown, Shali	Carrier:	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 8456950200	E-Mail: shali.brown@testamericainc.com		Page: 1 of 2
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	8082A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
				Preservation Code:																		
1	RW-13 (100-120)-081315	8/13/15	09:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
2	OB-24-081315	8/13/15	09:50	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
3	OB-14A-081315	8/13/15	10:55	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
4	OB-14B-081315	8/13/15	10:20	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
5	OB-16-081315	8/13/15	15:45	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
6	OB-18-081315	8/13/15	14:25	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
7	OB-28-081315	8/13/15	15:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
8	OB-17-081315	8/13/15	14:05	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
9	TB-07-081415	8/14/15	—	—	Water	N	N	✓	✓													
10	OB-10-081415	8/14/15	10:20	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
11	DUP-03-081415	8/14/15	12:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1					8/14 1440	TT
2		8/14 1715	TT	3.9/2.8/2.9/4.2 3.7/5.8/5.8/2.6/3.5	8/15/15 0930	TAN
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
85229
#3
K

TestAmerica

09/21/2015

Client Information	Sampler: Robert Lautenberg	Lab PM: Brown, Shali	Carrier T	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page: 2 of 2
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
12 CM-50-081415 MS/MSD	8/14/15	10:25	G	Water	N	Y	✓	✓	✓	✓	—	✓	✓	✓	✓	✓					
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 8/14 1440	Company TA
Relinquished by:	Date/Time: 8/14 1715	Company TA	Received by: 3.9/2.8/2.9/4.2 3.7/5.8/5.8/2.6/3.5	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

E-Mail Date: 2015-10-11
E-Mail To: tim.roeper@cornerstoneeg.com
cc:

U.S. Mail: Tim Roeper
Cornerstone Environmental Group
100 Crystal Run Road, Suite 101
Middletown, NY 10941

ANALYTICAL DATA VALIDATION REPORT
Ringwood Mines/Landfill
Ford Motor Company
CLIENT PROJECT NUMBER - not available
CADENA PROJECT E203361
SAMPLES COLLECTED August 2015
SUBMITTAL #: 490-85658-1

PREPARED BY:
CADENA, INC.
1099 Highland Drive
Ann Arbor, MI 48108
Telephone: 517-819-0356
Fax: 734-975-6709
Contact: Jim Tomalia (jtomalia@cadenaco.com)
Date: 2015-10-11
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1.0 INTRODUCTION

The following document details an assessment of the analytical data reported by TestAmerica-Nashville Laboratory the data in the submittals listed below which were collected from the Ringwood Mines/Landfill site as noted. A sampling and analysis summary that lists all sample ID's and testing as related to the laboratory submittal numbers is presented in Appendix 1. A summary of all of the analytical data is presented in Appendix 3. Copies of sample Chain of Custody (COC) documents and cooler receipt forms for samples discussed in this report are included in Attachment A.
Note: One field sample from this submittal was collected in triplicate to facilitate use of this sample as the QC batch MS/MSD for each analysis where appropriate (MS not required for alkalinity).

Table 1.1

Laboratory Submittal	***Sample Date***	***Laboratory Receipt Date***
490-85658-1	8/19-20/2015	8/21/2015

The samples noted below were validated against the associated method/parameter in order to achieve the validation requirements for this SDG:

Table 1.2

Parameter	***Reference Method***	***Analyte Listing***
Volatile Organics	OSW-8260C	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8260CSIM	1,2-Dibromo-3-Chloropropane,1,4-Dioxane,EthyleneDibromide,1,2,3-Trichloropropane
Semi-Volatile Organics	OSW-8270D	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8270DSIM	Extended list includes the following: Benzo(a)anthracene,Benzo(a)pyrene, Benzo(b)fluoranthene,Hexachlorobenzene, Hexachlorobutadiene,N-Nitrosodimethylamine,Pentachlorophenol
PCB	OSW-8082A	7 Standard Aroclors
Metals	OSW-6020A/7470A	Total and dissolved TAL Metals
Ion Chromatography	OSW-9056A	Chloride and Sulfate
Total Cyanide	OSW-9021B	Total and Amenable Cyanide
General Chemistry	APHA-2320B	Total and Bicarbonate Alkalinity

All "SW" analytical methods were referenced from "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition, November 1986 (with all subsequent revisions). The "SM" analytical method was referenced from the "Standard Methods for the Examination of Water and Waste water", latest promulgated revision. "EPA" methods were referenced from the revisions noted.

Laboratory Standard Operating Procedures (SOPs) associated with the methods utilized for this laboratory submittal were not available to CADENA for the purpose of validating this SDG.

Level IV data review provides a comprehensive or extensive review of the analytical data allowing for the complete reconstruction of the chemical analysis. A Level IV (Tier 3) data review was performed on the samples listed in Table 1.2 above by (CADENA).

All of the data that was recalculated was consistent with the reported results to within at least 2 significant figures. Final results may not recalculate exactly beyond this level of precision, in some cases, due to differences in available significant figures between the hardcopy raw data provided and the data utilized for calculations by the laboratory that came directly from the instrument. A table of the laboratory documents reviewed in preparing this report is included in Appendix 2.

The data was reviewed in accordance with the analytical methods and the documents listed below: (NOTE: laboratory criteria – control limits – were utilized to evaluate the data where available. Comparison to NFG criteria are noted when lab criteria was not available or for informational purposes when lab data exceeds NFG criteria).

i.) "Standard Operating Procedure HW-6 Rev12 March 2001: CLP Organics Data Review and Preliminary Review" USEPA Region 2 as identified in project QAPP.
ii.) "Standard Operating Procedure HW-2, Rev11, Jan 1992: Evaluation of Metals Data for the CLP Program" as identified in the project QAPP.

The Level VI review findings are presented in the following subsections.

An overview of the review findings is presented in table format. Several data qualifier flags were utilized in the review process. The definitions of these qualifier flags are as follows:

- J Indicates an estimated value.
- U Indicates the compound or analyte was analyzed for, but not detected at or above the stated limit.
- UJ The analyte/compound was not detected above the reported sample quantitation limit. However, the quantitation limit is considered to be approximate due to associated quality assurance results.
- UB The analyte was detected in the sample at a level between the MDL and RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the reporting limit.
- B The analyte was detected in the sample at a level above the RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the concentration reported.
- R The analyte/compound results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte/compound cannot be verified.

All flags have been incorporated into the data tables in this report.

1.1 VALIDATION QUALIFIER EXECUTIVE SUMMARY

VALIDATION SUMMARY

GCMS VOC and SIM

GCMS VOC Continuing Calibration Verification standard 278001/3 analyzed on 9/1 had multiple responses outside of laboratory control limits. High bias outliers did not have an effect on client sample data or were not associated with target analytes for this submittal (cis-1,2-dichlroethylene was already qualified as estimated due to being detected below the RL so no further qualification was required based on the CCV outlier). Low bias recoveries were observed for target analyte methyl acetate and TIC analyte isopropylalcohol. The TIC analyte was already qualified as estimated due to being detected below the RL. All client sample methyl acetate results were non-detect so the associated reporting limits should be considered to be estimated and qualified with UJ flags based on the low bias CCV response.

GCMS SVOC and SIM

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

PCB

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

METALS

Metals Continuing Calibration Blank (CCB) CCB-490-275984/109 at 21:16 of 9/24 analytical sequence had a detection for selenium above the MDL but below the RL. Based on this CCB detection client sample 490-85658-3 total selenium result should be considered to be non-detect at the RL and qualified with a UB flag.

INORGANICS

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

The following observations **DID NOT** result in qualification but were noted during the validation review:

GCMS VOC

CCV outliers were not associated with target analytes for this submittal.

GCMS VOC-SIM

CCV for sequence 276673 on 8/27 had outliers that were not associated with reported sample results. ICV for sequence 277064 on 8/28 were reported on form VII as outliers based on known spike values reported. Verification with laboratory indicated that the known spike values should have been 10 and 0.5 (instead of 2000/100) as was historically reported for other sequences to these ICV recoveries were considered to be acceptable when compared to these historical values.

GCMS SVOC

CCV for sequence 276363 on 8/26 had outliers that were not associated with reported sample results.

GCMS SVOC-SIM

No additional observations to report based on review of level 4 data package.

METALS

QC batch PDS and SERIAL DILUTION outliers were not determined using samples from this submittal so qualification was not required based on these sample-specific QC outliers.
CRQL's were consistently within lab control limits with the exception of potassium which was consistently biased high.
PCB – internal standard technique was used for both columns. Some initial and continuing calibration outliers were observed for specific aroclor 1016/1260 peaks on the secondary columns but these outliers did not result in qualification of final client sample results.
RAW DATA NOT INCLUDED IN ORIGINAL LAB LEVEL 4 DATA PACKAGE:
No additional requests for data associated with this submittal were required of the laboratory.

VERIFICATION SUMMARY

The following qualifications and associated data flags were applied based on the initial level 2 review of this data package.

The following minor QC exceptions or missing information were noted:

GCMS VOC trip blank had a detection below the RL for acetone. Qualification of client sample results was not required based on this trip blank detection.

GCMS-SIM VOC surrogate recoveries were outliers biased high for 1 out of 4 surrogates in client sample -002re-analysis and -007re-analysis. GCMS-SIM VOC detected results in these samples should be considered to be estimated and qualified with J flags. Non-detect results do not require qualification.

GCMS-SIM VOC QC batch 276673 LCS recovery was an outlier for ethylene dibromide. QC batch 276673 LCS/LCSduplicate recovery outliers were not associated with reportable results so qualification was not required based on these QC outliers.

GCMS-SIM VOC QC batch 277393 and 277754 and GCMS SVOC QC batch 276223 and PCB QC batch 278338 and PAH QC batch 276166 and cyanide batch 276486 did not include MS recovery data due to insufficient sample volume available for spiking according to the laboratory submittal case narrative.

GCMS VOC and GCMS SVOC TIC results should be considered to be estimated and qualified with NJ flags unless the TIC analyte detected is an instrument calibrated compound that is just not part of the TAL for this submittal in which case no qualification is required other than the TIC qualification code or J flag if the result is detected below the RL.

GCMS VOC QC batch 278001 LCS recovery was an outlier biased high for cyclohexane. Qualification of client sample results was not required based on this QC outlier alone.

GCMS-SIM SVOC QC batch 276166 LCS/LCSduplicate RPD was an outlier for pentachlorophenol. Qualification of client sample results was not required based on this method blank detection.

GCMS SVOC QC batch 276223 LCSduplicate recovery only was an outlier biased high for benzaldehyde. Qualification of client sample results was not required based on this high bias QC outlier.

Metals method blanks had detections below the RL in QC batch 275634 for arsenic and vanadium and in QC batch 276235 for vanadium. Client samples -001, -002, -003, -004 and -006 dissolved vanadium results and client samples -002 and -005 total vanadium results and client samples -002, -004 and -005 total arsenic results should be considered to be non-detect at the RL and qualified with UB flags. Client samples -001, -003, -004, -006 total vanadium results and client sample -005 dissolved vanadium result and client samples -001, -003 and -006 total arsenic results should be considered to be non-detect at the concentration reported and qualified with B flags.

GCMS VOC QC batch 278001 and Metals QC batch 276235 and 275634 MS recovery outliers were not determined

using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

Cyanide client sample -006 MS/MSD recoveries were outliers biased low (MS/MSD RPD also an outlier). Client samples -006 cyanide results should be considered to be estimated and qualified with UJ flags if non-detect and J flags if detected.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

2.0 VOLATILE ORGANIC COMPOUNDS (VOCs) – METHOD SW846 8260C and SIM Analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

2.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) VOCs

2.1.1 TUNING AND MASS CALIBRATION – GC/MS VOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

2.1.2 INITIAL CALIBRATION – GC/MS VOCs

Initial calibration data for VOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS VOCs

Initial calibration verification (ICV) standards for VOC analyses were reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

2.2 CONTINUING CALIBRATION – GC/MS VOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.3 INTERNAL STANDARDS – GC/MS VOCs

Internal standard (IS) data were reviewed and met criteria without exception.

2.4 SURROGATE SPIKE RECOVERIES – GC/MS VOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.
If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

2.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS VOCs

A laboratory control sample (LCS) was prepared and analyzed for VOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

2.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS VOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.
CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

2.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS VOCs

There were no field duplicate comparisons performed as part of this validation request.

2.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS VOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

2.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS VOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable unless noted otherwise in verification/validation summary.

2.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS VOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

2.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS VOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

3.0 SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) – METHOD SW846 8270D and SIM analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

3.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) SVOCs

3.1.1 TUNING AND MASS CALIBRATION – GC/MS SVOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

3.1.2 INITIAL CALIBRATION – GC/MS SVOCs

Initial calibration data for SVOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

3.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS SVOCs

Initial calibration verification (ICV) standards for SVOC analyses were reviewed and met criteria specified by the laboratory with no exceptions.

3.2 CONTINUING CALIBRATION – GC/MS SVOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary

3.3 INTERNAL STANDARDS – GC/MS SVOCs

Internal standard (IS) data were reviewed and met criteria without exception.

3.4 SURROGATE SPIKE RECOVERIES – GC/MS SVOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

3.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS SVOCs

A laboratory control sample (LCS) was prepared and analyzed for SVOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

3.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS SVOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

3.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS SVOCs

There were no field duplicate comparisons performed as part of this validation request.

3.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS SVOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

3.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS SVOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable without exception.

3.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS SVOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

3.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS SVOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

4.0 POLYCHLORINATED BIPHENYLS (PCBs) – METHOD SW846 8082A

The target analyte list was defined by the client as the standard 7 aroclors.

4.1 CALIBRATION – GAS CHROMATOGRAPH-ECD
4.1.1 TUNING AND MASS CALIBRATION – PCB

Not applicable for this analysis.

4.1.2 INITIAL CALIBRATION – PCB

Initial calibration data for PCBs were reviewed and met the criteria for instrument sensitivity and linearity of response without exception.

4.1.3 INITIAL CALIBRATION VERIFICATION – PCB

Initial calibration verification (ICV) standards for PCB analyses were reviewed and met criteria specified by the laboratory with no exceptions.

4.2 CONTINUING CALIBRATION – PCBs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

4.3 INTERNAL STANDARDS – PCB

Internal standard (IS) data were reviewed and met criteria unless noted otherwise in verification/validation summary. (NOTE: Lab quantitation approach DID use internal standard quantitation for this submittal).

4.4 SURROGATE SPIKE RECOVERIES – PCB

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

4.5 LABORATORY CONTROL SAMPLE ANALYSES - PCB

A laboratory control sample (LCS) was prepared and analyzed for PCBs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary..

4.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - PCB

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

4.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - PCB

There were no field duplicate comparisons performed as part of this validation request.

4.8 EXTRACT CLEANUP - PCB

Extract cleanups were performed in accordance with laboratory SOP's and as noted in level 4 data package prep logs.

4.9 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - PCB

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

4.10 TENTATIVELY IDENTIFIED COMPOUNDS - PCB

Not requested for this analytical procedure.

4.11 BLANKS – METHOD/FIELD/CALIBRATION - PCB

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

5.0 HPLC/IC – METHOD SW846 9056A – CHLORIDE AND SULFATE

5.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

5.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

5.3 CONTINUTING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

5.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

5.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

5.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

5.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

5.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

6.0 METALS – ICPMS by Method 6020 TOTAL AND DISSOLVED and Mercury by Method 7470A

The following samples provided in this SDG underwent a Level IV review for either/and metals or mercury analyses:

- Method 6020A: ALL
- Method 7470A: ALL

6.1 ICP/MS TUNING AND MASS CALIBRATION

Instrument tuning data were reviewed. Tuning elements were analyzed. All tuning criteria were met for the analyses, indicating proper optimization of the instrumentation.

6.2 INITIAL CALIBRATION

Initial calibration data for metals and mercury were reviewed and met the criteria for linearity of response without exception.

6.3 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards for metals and mercury analyses were reviewed and met criteria unless otherwise noted in verification/validation summary section of this document.

An initial calibration blank (ICB) was analyzed for metals and mercury analyses. Metals and mercury were reported as non-detect in each ICB analysis unless noted otherwise in verification/validation summary.

6.4 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for metals and mercury analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

6.5 INTERFERENCE CHECK STANDARD

The interference check standard results were reviewed and found to meet criteria.

6.6 INTERNAL STANDARDS

Internal standard (IS) data were reviewed and found to meet criteria unless noted otherwise in verification/validation summary.

6.7 LABORATORY CONTROL SAMPLE ANALYSIS

A laboratory control sample (LCS) was prepared and analyzed for metals and mercury. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

6.8 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE (MS/MSD) ANALYSES

The MS/MSD recoveries and RPD's were either not performed using a client sample or were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

6.9 CONTRACT REQUIRED DETECTION LIMIT STANDARD ANALYSES

Each contract required detection limit (CRDL) standard was analyzed at the proper frequency and were within laboratory control limits unless noted otherwise in verification/validation summary.

6.10 ICP SERIAL DILUTION

Serial dilutions were analyzed at the proper frequency and were either not performed using the client sample or were within laboratory control limits unless noted otherwise in verification/validation summary.

6.11 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

6.12 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

6.13 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

7.0 GENERAL CHEMISTRY- TOTAL AND AMENABLE CYANIDE AND ALKALINITY – METHODS 9012B and 2320B

7.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

7.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

7.3 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

7.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

7.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent

sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

7.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

7.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

7.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

8.0 REPRESENTATIVENESS EVALUATION

Representativeness is a qualitative evaluation of whether the data represents actual environmental conditions. Representativeness was evaluated using holding time criteria, which reflect the length of time after sample collection that a sample or extract remains representative of environmental conditions. Depending on the analysis, either one or two holding times were evaluated.

i.) For those analyses that do not include a sample extraction, only one holding time was evaluated: the length of time between sample collection and analysis.

ii.) For analyses that require sample extraction prior to analysis, two holding times were evaluated: the length of time from sampling until extraction and the length of time from extraction to analysis.

Holding times are compared to standard method specific holding times accepted or recommended by the United States Environmental Protection Agency (USEPA). Those holding times outside of USEPA acceptance criteria are qualitatively evaluated to determine their effect on sample representativeness.

Representativeness was also evaluated by analysis of laboratory method blanks and field equipment blanks. Laboratory method blanks and field equipment blanks are used to identify sources of contamination not associated with environmental conditions.

8.1 SAMPLE PRESERVATION AND HOLDING TIMES

Sample holding time and preservation requirements are summarized in Appendix 5.

All sample extractions and/or analyses were performed within the specified holding times unless noted otherwise in verification/validation summary.

All samples were properly preserved and cooled to 0-6°C after collection.

8.2 METHOD BLANK SUMMARY

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

Evaluation of blank contamination includes directions on the interpretation of the affected analytical results.

9.0 USABILITY AND COMPARABIILTY

Usability of data was evaluated by assuring that all the analytical requests were met, samples were received in the proper condition, and all analyses were performed within the appropriate holding times unless noted otherwise in verification/validation summary

No data evaluated within this delivery group was considered unusable (qualified with an R flag) due to sample integrity, sample matrix interference or batch quality control issues unless noted otherwise in verification/validation summary.

10.0 QC SUMMARY

All sample results meet the project specific QAPP standard for usability with exceptions defined by validation and verification qualifiers as applied. Please reference the following tables for a summary of the investigative field sample data and their valid qualifiers based on Level 4 technical review of the analytical data.

APPENDIX 1

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Nashville
Laboratory Submittal: 85658-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	Metals by ICP Mass Spectroscopy(D)	Metals by ICP Mass Spectroscopy	Mercury (Manual Cold Vapor)(D)	Mercury (Manual Cold Vapor)	TOTAL AND AMENABLE CYANIDE (AUTOMATED COLORIMETRIC, WITH OFF-LINE DISTILLATION)	Inorganic Anions by IC	Alkalinity Prep
490856581	SR-3 Seep 2-081915	8/19/2015	11:15:00	X	X	X	X	X	X	X	X	X	X	X	X
490856582	SR-3 Pond-081915	8/19/2015	11:45:00	X	X	X	X	X	X	X	X	X	X	X	X
490856583	SR-3 Seep 1-081915	8/19/2015	12:10:00	X	X	X	X	X	X	X	X	X	X	X	X
490856584	Dup-04-081915	8/19/2015	12:00:00	X	X	X	X	X	X	X	X	X	X	X	X
490856585	SW-NOB-02-081915	8/19/2015	2:30:00	X	X	X	X	X	X	X	X	X	X	X	X
490856586	SW-PAB-04-081915	8/19/2015	3:00:00	X	X	X	X	X	X	X	X	X	X	X	X
490856587	RW-10 (120-130)-081915	8/19/2015	9:25:00	X	X	X	X	X	X	X	X	X	X	X	X
490856588	TB-10-082015	8/20/2015	12:01:00	X	X										

APPENDIX 2

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85658-1
August 2015

Description

- Standard Report Cover page
- Table of Contents
- SDG Case Narrative
- Sample Summary
- Executive Summary detection highlights
- Method Summary
- Method/Analyst Summary
- Analytical Results
- Surrogate Summary
- Quality Control Results
- Data Qualifiers
- QC Summary Association
- Lab Chronicle
- GCMS Volatiles Data - Method 8260C and SIM
  - QC Summary Data
    - Surrogate recoveries (form II)
    - Check Sample recoveries (form III)
    - Matrix spike/Matrix spike duplicate report (form III)
    - Method blank report (form IV)
    - Tuning and mass calibrations (form V)
    - Internal Standard and RT area summary (form VIII)
  - Sample Data
    - GCMS VOA Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Total Ion Profile Chromatogram
    - Ion profiles of detected target analyte peaks
    - Manual integration if applicable
    - Tentatively Identified Compound Reports (if applicable)
  - Standards Data
    - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
    - ICAL Raw integration data from instrument
    - ICAL Total Ion Profile Chromatogram
    - ICV check standard recovery report (Form VII)
    - ICV check standard total ion profile with integration
    - GCMS VOA Continuing Calibration Data (Form VII)
    - CCV raw integration data from instrument
    - CCV Total Ion Profile Chromatogram
    - Manual integration if applicable
  - Raw QC Data
    - Tune information (not included with SIM package)
    - FORM I - QC data
    - Method Blank integration/internal standard and total ion profile raw data
    - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
    - MS and MSD integration/internal standard and total ion profile raw data
  - Miscellaneous Data
    - Run logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
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NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85658-1
August 2015

Description

GCMS Semivolatiles Data - Method 8270D and SIM

- QC Summary Data
  - Surrogate recoveries (form II)
  - Check Sample recoveries (form III)
  - Method blank report (form IV)
  - Tuning and mass calibrations (form V) (not applicable for SIM)
  - Internal Standard and RT area summary (form VIII)
- Sample Data
  - GCMS VOA Organics Analysis Data Sheet (Form I)
  - Raw integration data from instrument
  - Total Ion Profile Chromatogram
  - Ion profiles of detected target analyte peaks
  - Manual integration if applicable
  - Tentatively Identified Compound Reports (if applicable)
- Standards Data
  - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
  - ICAL Raw integration data from instrument
  - ICAL Total Ion Profile Chromatogram
  - ICV check standard recovery report
  - ICV check standard total ion profile with integration
  - GCMS VOA Continuing Calibration Data (Form VII)
  - CCV raw integration data from instrument
  - CCV Total Ion Profile Chromatogram
  - Manual integration if applicable
- Raw QC Data
  - Tune information (not applicable for SIM)
  - Method Blank integration/internal standard and total ion profile raw data
  - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
- Miscellaneous Data
  - Instrument run logs
  - Extraction bench sheets

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85658-1
August 2015

Description

- Polychlorinated Biphenyls Data (PCB)
  - QC Summary data
    - Surrogate recoveries (form II)
    - Check Sample Recovery data (form III)
    - Method Blank data (form IV)
    - Analytical sequence with RT check (Form VIII)
    - Identification Summary (Form X)
  - Sample Data
    - Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Chromatogram
  - Standards Data (both columns)
    - Initial Calibration Data External Standard RT Summary (Form VI)
    - Initial Calibration Data Summary with average RF
    - Raw integration data from instrument with manual integrations where applicable
    - ICAL chromatograms
    - Continuing Calibration Data (Form VII) with RT Summaries
    - ICV raw integration and chromatograms
    - CCV raw integration data from instrument
    - CCV chromatogram
  - Raw QC Data
    - LCS/LCSD sample data report and integration and chromatograms
    - Method blank integration and chromatograms
  - Miscellaneous Data
    - Sequence table (run log)
    - PCB Batch Worksheet
- HPLC/IC - 9056A ORGFM_28D - Anions, Ion Chromatography - Sulfate and Chloride
  - Raw Data and Data Summaries for:
    - LCS/LCSD (form III)
    - MS/MSD (form III)
    - METHOD BLANKS (Form IV)
    - SAMPLE DATA (Form I)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VI)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VII)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - QC DATA (Form I)
      - Raw instrument data and chromatography
    - Analysis Run Logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85658-1
August 2015

Description

METALS DATA (ICPMS and mercury)
- Forms Data
  - Cover Page
  - Inorganic Analysis Data Sheet - Metals Dissolved/Total Recoverable (1A-IN)
  - CCV standard report - mercury and ICPMS (2A-IN)
  - CRQL report - mercury and ICPMS (2B-IN)
  - ICB report - mercury and ICPMS (3-IN)
  - Method blank report (3-IN)
  - Interference check standard A - ICPMS (4A-IN)
  - Interference check standard AB - ICPMS (4A-IN)
  - MS/MSD Sample recovery (5A-IN)
  - PDS Summary (5B-IN)
  - LCS Recovery form (7A-IN)
  - LCS Duplicate Recover (7D-IN)
  - ICP-MS Serial Dilutions (8-IN)
  - Detection Limits Form (9-IN)
  - Linear dynamic ranges - ICPMS (11-IN)
  - Prep log - mercury and ICPMS (12-IN)
  - Run log - ICPMS and Mercury (13-IN)
  - ICP-MS TUNE (14-IN)
  - ICPMS Internal Standards Relative Intensity Summary (15-IN)
- Instrument Printouts
  - ICP-MS Raw instrument data
  - Mercury raw instrument data, run logs and calibrations
- Miscellaneous Data
  - Metals Batch Worksheet

GENERAL CHEMISTRY - Total and Amenable Cyanide and Alkalinity
- Cover Page
- Raw Data and Data Summaries for:
  - Sample Data (Form 1B-IN)
  - CCV/CCB (Form 2-IN)
  - METHOD BLANKS (Form 3-IN)
  - MATRIX SPIKES (Form 5-IN)
  - Sample DUPLICATES (Form 6-IN)
  - LCS/LCSD (Form 7-IN)
  - Detection Limits Form (9-IN)
  - Prep log (12-IN)
  - Analysis Run Logs (13-IN)
  - Raw Data - instrument sample sequence and calibration curve
  - Alkalinity Reagents
  - Alkalinity pH meter calibration
  - Alkalinity sequence log and raw data
  - General Chemistry Batch Worksheets

Shipping and Receiving Documents
- COC forms
- Cooler Receipt Form, checklist and narrative

APPENDIX 3

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85658-1

		Sample Name:	SR-3 Seep 2-081915				SR-3 Pond-081915				SR-3 Seep 1-081915			
		Lab Sample ID:	490856581				490856582				490856583			
		Sample Date:	8/19/2015				8/19/2015				8/19/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
Benzene	71-43-2	0.67	1.0	ug/l	J	ND	1.0	ug/l	---	0.33	1.0	ug/l	J
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	1.8	1.0	ug/l	---	ND	1.0	ug/l	---	0.83	1.0	ug/l	J
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	0.26	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropyl alcohol - TIC	67-63-0												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic2												
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	1.3	10	ug/l	J	1.6	10	ug/l	J	2.0	10	ug/l	J
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85658-1

		Sample Name:	SR-3 Seep 2-081915				SR-3 Pond-081915				SR-3 Seep 1-081915			
		Lab Sample ID:	490856581				490856582				490856583			
		Sample Date:	8/19/2015				8/19/2015				8/19/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	1H-Pyrrole, 3,5-dimethyl-2-phenyl- - TIC	3274-53-1												
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2-Chlorophenol	95-57-8	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	2-Methylphenol	95-48-7	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2-Naphthalenecarboxylic acid - TIC	93-09-4												
	2-Nitroaniline	88-74-4	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	2-Nitrophenol	88-75-5	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5												
	3-Nitroaniline	99-09-2	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	4-Chloroaniline	106-47-8	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	4-Nitroaniline	100-01-6	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	4-Nitrophenol	100-02-7	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3												
	Acenaphthene	83-32-9	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Acenaphthylene	208-96-8	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Acetophenone	98-86-2	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Anthracene	120-12-7	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Atrazine	1912-24-9	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Benzaldehyde	100-52-7	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Benzo[g,h,i]perylene	191-24-2	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Caprolactam	105-60-2	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Carbazole	86-74-8	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Chrysene	218-01-9	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Dibenzofuran	132-64-9	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Diethyl phthalate	84-66-2	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Diethyltoluamide - TIC	134-62-3					3.3	---	ug/l	NJ				
	Dimethyl phthalate	131-11-3	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Diphenyl	92-52-4	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Fluoranthene	206-44-0	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Fluorene	86-73-7	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Hexachloroethane	67-72-1	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Isophorone	78-59-1	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	n-Hexadecanoic acid - TIC	57-10-3	4.3	---	ug/l	NJ					4.0	---	ug/l	NJ
	N-Nitrosodi-n-propylamine	621-64-7	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Naphthalene	91-20-3	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Nitrobenzene	98-95-3	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Octadecanoic acid - TIC	57-11-4	4.1	---	ug/l	NJ	5.3	---	ug/l	NJ	3.5	---	ug/l	NJ
	Phenanthrene	85-01-8	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Phenol	108-95-2	ND	8.9	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Pyrene	129-00-0	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Tetradecanoic acid - TIC	544-63-8												
	Tridecanoic acid - TIC	638-53-9					5.8	---	ug/l	NJ				
OSW-8270DSIM														
	Benzo[a]anthracene	56-55-3	ND	0.047	ug/l	---	ND	0.044	ug/l	---	ND	0.045	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.047	ug/l	---	ND	0.044	ug/l	---	ND	0.045	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.047	ug/l	---	ND	0.044	ug/l	---	ND	0.045	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.019	ug/l	---	ND	0.018	ug/l	---	ND	0.018	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.38	ug/l	---	ND	0.35	ug/l	---	ND	0.36	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.75	ug/l	---	ND	0.70	ug/l	---	ND	0.73	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.28	ug/l	---	ND	0.26	ug/l	---	ND	0.27	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85658-1

			Sample Name:	SR-3 Seep 2-081915			SR-3 Pond-081915				SR-3 Seep 1-081915			
			Lab Sample ID:	490856581			490856582				490856583			
			Sample Date:	8/19/2015			8/19/2015				8/19/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.45	ug/l	---	ND	0.50	ug/l	---
	PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.45	ug/l	---	ND	0.50	ug/l	---
	PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.45	ug/l	---	ND	0.50	ug/l	---
	PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.45	ug/l	---	ND	0.50	ug/l	---
	PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.45	ug/l	---	ND	0.50	ug/l	---
	PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.45	ug/l	---	ND	0.50	ug/l	---
	PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.45	ug/l	---	ND	0.50	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.45	ug/l	---	ND	0.50	ug/l	---
Metals														
	OSW-6020A													
	Aluminum	7429-90-5	0.063	0.020	mg/l	---	ND	0.020	mg/l	---	0.60	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	ND	0.020	mg/l	---	ND	0.020	mg/l	---
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.0013	0.0020	mg/l	J
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Arsenic	7440-38-2	0.0027	0.0020	mg/l	B	0.0018	0.0020	mg/l	UB	0.0047	0.0020	mg/l	B
	Arsenic - Dissolved	7440-38-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Barium	7440-39-3	0.22	0.0020	mg/l	---	0.075	0.0020	mg/l	---	0.27	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.18	0.0020	mg/l	---	0.071	0.0020	mg/l	---	0.15	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	24.8	1.0	mg/l	---	27.6	1.0	mg/l	---	26.1	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	24.4	1.0	mg/l	---	26.5	1.0	mg/l	---	23.5	1.0	mg/l	---
	Chromium	7440-47-3	0.0021	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.0027	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt	7440-48-4	0.00069	0.0020	mg/l	J	ND	0.0020	mg/l	---	0.0034	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.0012	0.0020	mg/l	J
	Copper	7440-50-8	0.0012	0.0020	mg/l	J	ND	0.0020	mg/l	---	0.0061	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Iron	7439-89-6	43.2	0.025	mg/l	---	0.54	0.025	mg/l	---	74.4	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	0.018	0.025	mg/l	J	0.062	0.025	mg/l	---	ND	0.025	mg/l	---
	Lead	7439-92-1	0.00081	0.0020	mg/l	J	0.00028	0.0020	mg/l	J	0.0043	0.0020	mg/l	---
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Magnesium	7439-95-4	3.8	1.0	mg/l	---	4.5	1.0	mg/l	---	4.0	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	3.9	1.0	mg/l	---	4.4	1.0	mg/l	---	3.7	1.0	mg/l	---
	Manganese	7439-96-5	0.81	0.0020	mg/l	---	0.052	0.0020	mg/l	---	1.1	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5	0.84	0.0020	mg/l	---	0.020	0.0020	mg/l	---	0.84	0.0020	mg/l	---
	Nickel	7440-02-0	0.0012	0.0020	mg/l	J	0.00071	0.0020	mg/l	J	0.0046	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.00092	0.0020	mg/l	J
	Potassium	7440-09-7	1.6	1.0	mg/l	---	1.7	1.0	mg/l	---	1.6	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	1.5	1.0	mg/l	---	1.6	1.0	mg/l	---	1.3	1.0	mg/l	---
	Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.00098	0.0020	mg/l	UB
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	4.7	1.0	mg/l	---	6.3	1.0	mg/l	---	3.5	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	3.5	1.0	mg/l	---	10.9	1.0	mg/l	---	3.4	1.0	mg/l	---
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Vanadium	7440-62-2	0.0040	0.0020	mg/l	B	0.00093	0.0020	mg/l	UB	0.0048	0.0020	mg/l	B
	Vanadium - Dissolved	7440-62-2	0.00097	0.0020	mg/l	UB	0.0010	0.0020	mg/l	UB	0.00095	0.0020	mg/l	UB
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	0.039	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	1.54	1.00	mg/l	---	4.20	1.00	mg/l	---	1.58	1.00	mg/l	---
	Sulfate	14808-79-8	1.52	1.00	mg/l	---	1.12	1.00	mg/l	---	0.95	1.00	mg/l	J
Prep														
	APHA-2320B													
	Bicarbonate Alkalinity as CaCO3	E-14508	91.4	10.0	mg/l	---	79.4	10.0	mg/l	---	82.5	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	91.4	10.0	mg/l	---	79.4	10.0	mg/l	---	82.5	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85658-1

		Sample Name:	Dup-04-081915				SW-NOB-02-081915				SW-PAB-04-081915			
		Lab Sample ID:	490856584				490856585				490856586			
		Sample Date:	8/19/2015				8/19/2015				8/19/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropyl alcohol - TIC	67-63-0												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic2												
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	0.44	10	ug/l	J	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85658-1

		Sample Name:	Dup-04-081915				SW-NOB-02-081915				SW-PAB-04-081915			
		Lab Sample ID:	490856584				490856585				490856586			
		Sample Date:	8/19/2015				8/19/2015				8/19/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1H-Pyrrole, 3,5-dimethyl-2-phenyl- - TIC	3274-53-1												
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Naphthalenecarboxylic acid - TIC	93-09-4												
	2-Nitroaniline	88-74-4	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5												
	3-Nitroaniline	99-09-2	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Nitrophenol	100-02-7	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3												
	Acenaphthene	83-32-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acenaphthylene	208-96-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Atrazine	1912-24-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyltoluamide - TIC	134-62-3												
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluoranthene	206-44-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Fluorene	86-73-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	n-Hexadecanoic acid - TIC	57-10-3												
	N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Nitrobenzene	98-95-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Octadecanoic acid - TIC	57-11-4												
	Phenanthrene	85-01-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Pyrene	129-00-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Tetradecanoic acid - TIC	544-63-8									3.4	---	ug/l	NJ
	Tridecanoic acid - TIC	638-53-9												
OSW-8270DSIM														
	Benzo[a]anthracene	56-55-3	ND	0.048	ug/l	---	ND	0.048	ug/l	---	ND	0.048	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.048	ug/l	---	ND	0.048	ug/l	---	ND	0.048	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.048	ug/l	---	ND	0.048	ug/l	---	ND	0.048	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.019	ug/l	---	ND	0.019	ug/l	---	ND	0.019	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.38	ug/l	---	ND	0.38	ug/l	---	ND	0.38	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.77	ug/l	---	ND	0.77	ug/l	---	ND	0.77	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.29	ug/l	---	ND	0.29	ug/l	---	ND	0.29	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85658-1

		Sample Name:	Dup-04-081915				SW-NOB-02-081915				SW-PAB-04-081915			
		Lab Sample ID:	490856584				490856585				490856586			
		Sample Date:	8/19/2015				8/19/2015				8/19/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other													
OSW-8082A													
PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Metals													
OSW-6020A													
Aluminum	7429-90-5	0.20	0.020	mg/l	---	0.53	0.020	mg/l	---	0.20	0.020	mg/l	---
Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	0.018	0.020	mg/l	J	ND	0.020	mg/l	---
Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	0.00057	0.0020	mg/l	J	ND	0.0020	mg/l	---
Arsenic	7440-38-2	0.0019	0.0020	mg/l	UB	0.0015	0.0020	mg/l	UB	0.0020	0.0020	mg/l	B
Arsenic - Dissolved	7440-38-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Barium	7440-39-3	0.039	0.0020	mg/l	---	0.015	0.0020	mg/l	---	0.041	0.0020	mg/l	---
Barium - Dissolved	7440-39-3	0.029	0.0020	mg/l	---	0.0064	0.0020	mg/l	---	0.030	0.0020	mg/l	---
Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
Calcium	7440-70-2	27.3	1.0	mg/l	---	12.0	1.0	mg/l	---	27.5	1.0	mg/l	---
Calcium - Dissolved	7440-70-2	26.4	1.0	mg/l	---	11.1	1.0	mg/l	---	27.3	1.0	mg/l	---
Chromium	7440-47-3	0.00053	0.0020	mg/l	J	0.0012	0.0020	mg/l	J	0.0037	0.0020	mg/l	---
Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Cobalt	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Copper	7440-50-8	0.0011	0.0020	mg/l	J	0.0018	0.0020	mg/l	J	0.0012	0.0020	mg/l	J
Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Iron	7439-89-6	1.9	0.025	mg/l	---	1.1	0.025	mg/l	---	2.0	0.025	mg/l	---
Iron - Dissolved	7439-89-6	0.037	0.025	mg/l	---	0.16	0.025	mg/l	---	0.042	0.025	mg/l	---
Lead	7439-92-1	0.00044	0.0020	mg/l	J	0.0012	0.0020	mg/l	J	0.00049	0.0020	mg/l	J
Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Magnesium	7439-95-4	5.6	1.0	mg/l	---	5.0	1.0	mg/l	---	5.7	1.0	mg/l	---
Magnesium - Dissolved	7439-95-4	5.6	1.0	mg/l	---	4.7	1.0	mg/l	---	5.8	1.0	mg/l	---
Manganese	7439-96-5	0.31	0.0020	mg/l	---	0.093	0.0020	mg/l	---	0.36	0.0020	mg/l	---
Manganese - Dissolved	7439-96-5	0.034	0.0020	mg/l	---	0.015	0.0020	mg/l	---	0.023	0.0020	mg/l	---
Nickel	7440-02-0	0.0010	0.0020	mg/l	J	0.0017	0.0020	mg/l	J	0.0011	0.0020	mg/l	J
Nickel - Dissolved	7440-02-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Potassium	7440-09-7	1.2	1.0	mg/l	---	1.1	1.0	mg/l	---	1.2	1.0	mg/l	---
Potassium - Dissolved	7440-09-7	1.1	1.0	mg/l	---	0.94	1.0	mg/l	J	1.1	1.0	mg/l	---
Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Sodium	7440-23-5	12.1	1.0	mg/l	---	3.3	1.0	mg/l	---	20.9	1.0	mg/l	---
Sodium - Dissolved	7440-23-5	5.7	1.0	mg/l	---	12.6	1.0	mg/l	---	6.0	1.0	mg/l	---
Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
Vanadium	7440-62-2	0.0015	0.0020	mg/l	UB	0.0030	0.0020	mg/l	B	0.0015	0.0020	mg/l	UB
Vanadium - Dissolved	7440-62-2	0.0010	0.0020	mg/l	UB	0.0020	0.0020	mg/l	B	0.0011	0.0020	mg/l	UB
Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
OSW-7470A													
Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry													
OSW-9012B													
Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	UJ
OSW-9056A													
Chloride	16887-00-6	6.11	1.00	mg/l	---	1.42	1.00	mg/l	---	6.41	1.00	mg/l	---
Sulfate	14808-79-8	3.98	1.00	mg/l	---	6.20	1.00	mg/l	---	3.95	1.00	mg/l	---
Prep													
APHA-2320B													
Bicarbonate Alkalinity as CaCO3	E-14508	83.0	10.0	mg/l	---	43.3	10.0	mg/l	---	83.0	10.0	mg/l	---
Total Alkalinity as CaCO3	E-14506	83.0	10.0	mg/l	---	43.3	10.0	mg/l	---	83.0	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85658-1

		Sample Name:	RW-10 (120-130)-081915				TB-10-082015			
		Lab Sample ID:	490856587				490856588			
		Sample Date:	8/19/2015				8/20/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC									
OSW-8260C									
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	5.3	50	ug/l	J	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	43	25	ug/l	---	3.5	25	ug/l	J
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	3.2	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropyl alcohol - TIC	67-63-0	48	50	ug/l	J				
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	0.22	1.0	ug/l	J	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic2	27	---	ug/l	NJ				
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSIM									
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85658-1

		Sample Name:	RW-10 (120-130)-081915				TB-10-082015			
		Lab Sample ID:	490856587				490856588			
		Sample Date:	8/19/2015				8/20/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC										
OSW-8270D										
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---				
	1H-Pyrrole, 3,5-dimethyl-2-phenyl- - TIC	3274-53-1	3.5	---	ug/l	NJ				
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---				
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---				
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---				
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---				
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---				
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---				
	2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---				
	2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---				
	2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---				
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---				
	2-Chlorophenol	95-57-8	ND	10	ug/l	---				
	2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---				
	2-Methylphenol	95-48-7	ND	10	ug/l	---				
	2-Naphthalenecarboxylic acid - TIC	93-09-4	5.6	---	ug/l	NJ				
	2-Nitroaniline	88-74-4	ND	25	ug/l	---				
	2-Nitrophenol	88-75-5	ND	10	ug/l	---				
	3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---				
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---				
	3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5	15	---	ug/l	NJ				
	3-Nitroaniline	99-09-2	ND	25	ug/l	---				
	4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---				
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---				
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---				
	4-Chloroaniline	106-47-8	ND	10	ug/l	---				
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---				
	4-Nitroaniline	100-01-6	ND	25	ug/l	---				
	4-Nitrophenol	100-02-7	ND	25	ug/l	---				
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3	7.7	---	ug/l	NJ				
	Acenaphthene	83-32-9	ND	2.0	ug/l	---				
	Acenaphthylene	208-96-8	ND	2.0	ug/l	---				
	Acetophenone	98-86-2	ND	10	ug/l	---				
	Anthracene	120-12-7	ND	2.0	ug/l	---				
	Atrazine	1912-24-9	ND	10	ug/l	---				
	Benzaldehyde	100-52-7	ND	10	ug/l	---				
	Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---				
	Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---				
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---				
	Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---				
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---				
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---				
	Caprolactam	105-60-2	ND	10	ug/l	---				
	Carbazole	86-74-8	ND	10	ug/l	---				
	Chrysene	218-01-9	ND	2.0	ug/l	---				
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---				
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---				
	Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---				
	Dibenzofuran	132-64-9	ND	10	ug/l	---				
	Diethyl phthalate	84-66-2	ND	10	ug/l	---				
	Diethyltoluamide - TIC	134-62-3								
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---				
	Diphenyl	92-52-4	ND	10	ug/l	---				
	Fluoranthene	206-44-0	ND	2.0	ug/l	---				
	Fluorene	86-73-7	ND	2.0	ug/l	---				
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---				
	Hexachloroethane	67-72-1	ND	10	ug/l	---				
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---				
	Isophorone	78-59-1	ND	10	ug/l	---				
	n-Hexadecanoic acid - TIC	57-10-3	9.9	---	ug/l	NJ				
	N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---				
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---				
	Naphthalene	91-20-3	ND	2.0	ug/l	---				
	Nitrobenzene	98-95-3	ND	10	ug/l	---				
	Octadecanoic acid - TIC	57-11-4	8.7	---	ug/l	NJ				
	Phenanthrene	85-01-8	ND	2.0	ug/l	---				
	Phenol	108-95-2	8.6	10	ug/l	J				
	Pyrene	129-00-0	ND	2.0	ug/l	---				
	Tetradecanoic acid - TIC	544-63-8								
	Tridecanoic acid - TIC	638-53-9								
OSW-8270DSIM										
	Benzo[a]anthracene	56-55-3	ND	0.047	ug/l	---				
	Benzo[a]pyrene	50-32-8	ND	0.047	ug/l	---				
	Benzo[b]fluoranthene	205-99-2	ND	0.047	ug/l	---				
	Hexachlorobenzene	118-74-1	ND	0.019	ug/l	---				
	Hexachlorobutadiene	87-68-3	ND	0.38	ug/l	---				
	N-Nitrosodimethylamine	62-75-9	ND	0.75	ug/l	---				
	Pentachlorophenol	87-86-5	ND	0.28	ug/l	---				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85658-1

			Sample Name:	RW-10 (120-130)-081915			TB-10-082015			
			Lab Sample ID:	490856587			490856588			
			Sample Date:	8/19/2015			8/20/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other										
OSW-8082A										
	PCB-1016	12674-11-2	ND	0.50	ug/l	---				
	PCB-1221	11104-28-2	ND	0.50	ug/l	---				
	PCB-1232	11141-16-5	ND	0.50	ug/l	---				
	PCB-1242	53469-21-9	ND	0.50	ug/l	---				
	PCB-1248	12672-29-6	ND	0.50	ug/l	---				
	PCB-1254	11097-69-1	ND	0.50	ug/l	---				
	PCB-1260	11096-82-5	ND	0.50	ug/l	---				
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---				
Metals										
OSW-6020A										
	Aluminum	7429-90-5	0.17	0.020	mg/l	---				
	Aluminum - Dissolved	7429-90-5	0.13	0.020	mg/l	---				
	Antimony	7440-36-0	ND	0.0020	mg/l	---				
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---				
	Arsenic	7440-38-2	0.0075	0.0020	mg/l	---				
	Arsenic - Dissolved	7440-38-2	0.0067	0.0020	mg/l	---				
	Barium	7440-39-3	0.017	0.0020	mg/l	---				
	Barium - Dissolved	7440-39-3	0.015	0.0020	mg/l	---				
	Beryllium	7440-41-7	ND	0.0020	mg/l	---				
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---				
	Cadmium	7440-43-9	ND	0.0010	mg/l	---				
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---				
	Calcium	7440-70-2	50.8	1.0	mg/l	---				
	Calcium - Dissolved	7440-70-2	46.0	1.0	mg/l	---				
	Chromium	7440-47-3	ND	0.0020	mg/l	---				
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---				
	Cobalt	7440-48-4	ND	0.0020	mg/l	---				
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---				
	Copper	7440-50-8	ND	0.0020	mg/l	---				
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---				
	Iron	7439-89-6	0.028	0.025	mg/l	---				
	Iron - Dissolved	7439-89-6	ND	0.025	mg/l	---				
	Lead	7439-92-1	ND	0.0020	mg/l	---				
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---				
	Magnesium	7439-95-4	ND	1.0	mg/l	---				
	Magnesium - Dissolved	7439-95-4	ND	1.0	mg/l	---				
	Manganese	7439-96-5	ND	0.0020	mg/l	---				
	Manganese - Dissolved	7439-96-5	ND	0.0020	mg/l	---				
	Nickel	7440-02-0	0.013	0.0020	mg/l	---				
	Nickel - Dissolved	7440-02-0	0.011	0.0020	mg/l	---				
	Potassium	7440-09-7	28.6	1.0	mg/l	---				
	Potassium - Dissolved	7440-09-7	24.6	1.0	mg/l	---				
	Selenium	7782-49-2	0.0033	0.0020	mg/l	---				
	Selenium - Dissolved	7782-49-2	0.0027	0.0020	mg/l	---				
	Silver	7440-22-4	ND	0.0020	mg/l	---				
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---				
	Sodium	7440-23-5	65.8	1.0	mg/l	---				
	Sodium - Dissolved	7440-23-5	64.9	1.0	mg/l	---				
	Thallium	7440-28-0	ND	0.0020	mg/l	---				
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---				
	Vanadium	7440-62-2	0.0088	0.0020	mg/l	---				
	Vanadium - Dissolved	7440-62-2	0.0071	0.0020	mg/l	---				
	Zinc	7440-66-6	ND	0.025	mg/l	---				
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---				
OSW-7470A										
	Mercury	7439-97-6	ND	0.00020	mg/l	---				
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---				
General Chemistry										
OSW-9012B										
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---				
OSW-9056A										
	Chloride	16887-00-6	8.09	1.00	mg/l	---				
	Sulfate	14808-79-8	134	1.00	mg/l	---				
Prep										
APHA-2320B										
	Bicarbonate Alkalinity as CaCO3	E-14508	ND	10.0	mg/l	---				
	Total Alkalinity as CaCO3	E-14506	121	10.0	mg/l	---				

APPENDIX 4

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85658-1

		Sample Name:	SR-3 Seep 2-081915				SR-3 Pond-081915				SR-3 Seep 1-081915				Dup-04-081915				SW-NOB-02-081915				SW-PAB-04-081915				RW-10 (120-130)-081915				TB-10-082015			
		Lab Sample ID:	490856581				490856582				490856583				490856584				490856585				490856586				490856587				490856588			
		Sample Date:	8/19/2015				8/19/2015				8/19/2015				8/19/2015				8/19/2015				8/19/2015				8/19/2015				8/20/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																																		
	OSW-8260C																																	
	Isopropyl alcohol - TIC	67-63-0																									48	50	ug/l	J				
	Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
	Unknown - TIC	Tic2																									27	---	ug/l	NJ				
GC/MS SVOC																																		
	OSW-8260CSIM																																	
	1,4-Dioxane	123-91-1					1.6	10	ug/l	J																								
	OSW-8270D																																	
	1H-Pyrrole, 3,5-dimethyl-2-phenyl- - TIC	3274-53-1																									3.5	---	ug/l	NJ				
	2-Naphthalenecarboxylic acid - TIC	93-09-4																									5.6	---	ug/l	NJ				
	3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5																									15	---	ug/l	NJ				
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3																									7.7	---	ug/l	NJ				
	Diethyltoluamide - TIC	134-62-3					3.3	---	ug/l	NJ																								
	n-Hexadecanoic acid - TIC	57-10-3	4.3	---	ug/l	NJ					4.0	---	ug/l	NJ													9.9	---	ug/l	NJ				
	Octadecanoic acid - TIC	57-11-4	4.1	---	ug/l	NJ	5.3	---	ug/l	NJ	3.5	---	ug/l	NJ													8.7	---	ug/l	NJ				
	Tetradecanoic acid - TIC	544-63-8																					3.4	---	ug/l	NJ								
	Tridecanoic acid - TIC	638-53-9					5.8	---	ug/l	NJ																								
Metals																																		
	OSW-6020A																																	
	Arsenic	7440-38-2	0.0027	0.0020	mg/l	B	0.0018	0.0020	mg/l	UB	0.0047	0.0020	mg/l	B	0.0019	0.0020	mg/l	UB	0.0015	0.0020	mg/l	UB	0.0020	0.0020	mg/l	B								
	Selenium	7782-49-2									0.00098	0.0020	mg/l	UB																				
	Vanadium	7440-62-2	0.0040	0.0020	mg/l	B	0.00093	0.0020	mg/l	UB	0.0048	0.0020	mg/l	B	0.0015	0.0020	mg/l	UB	0.0030	0.0020	mg/l	B	0.0015	0.0020	mg/l	UB								
	Vanadium - Dissolved	7440-62-2	0.00097	0.0020	mg/l	UB	0.0010	0.0020	mg/l	UB	0.00095	0.0020	mg/l	UB	0.0010	0.0020	mg/l	UB	0.0020	0.0020	mg/l	B	0.0011	0.0020	mg/l	UB								
General Chemistry																																		
	OSW-9012B																																	
	Cyanide, Total	57-12-5																					ND	0.010	mg/l	UJ								

APPENDIX 5

EPA Sample Holding Time and Preservation Requirements

Parameter	*Reference Method*	*Matrix*	*Preservation & Storage*	*Holding Times*
Volatile Organics by GCMS	OSW-8260C/SIM	Water	Acidify ph<2 Refrigeration 0-6oC	14 days
Semivolatile Organics by GCMS	OSW-8270D/SIM	Water	Refrigeration 0-6oC	7 days Extraction 40 days Analysis
Polychlorinated Biphenyls by GC/ECD	OSW-8082A	Water	Refrigeration 0-6oC	365 days - Extraction - Analysis
Metals by ICP/ICPMS Spectroscopy	OSW-6010B OSW-6020A	Water	Acidify pH<2 Refrigeration 0-6oC	180 days
Mercury in Aqueous Waste	OSW-7470A	Water	Acidify pH<2 Refrigeration 0-6oC	28 days
Alkalinity	EPA 2320B	Water	Refrigeration 0-6oC	14 days
Chloride and Sulfate	OSW-9056A	Water	Refrigeration 0-6oC	28 days
Total and Amenable Cyanide	OSW-9012B	Water	Test for presence of Sulfide – if unknown collect two samples and treat one with Lead Carbonate. Then adjust sample to pH of greater than or equal to 12with NaOH. Refrigeration at 0-4C –(also may require treatment for aldehydes and chlorine/hypochlorite/sulfite)	14 days if preserved. 24 hours or sooner if unpreserved

ATTACHMENT A

CHAIN OF CUSTODY DOCUMENT(S)

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
85658

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

09/21/2015

Client Information	Sampler: Robert Lautenberg	Lab PM: Brown, Shali	Carri	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
				Preservation Code:																		
1	SR-3 Seep 2-081915	8/19/15	11:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
2	SR-3 Pond-081915	8/19/15	11:45	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
3	SR-3 Seep 1-081915	8/19/15	12:10	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
4	Dup-04-081915	8/19/15	12:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
5	SW-NOB-02-081915	8/19/15	14:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
6	SW-PAB-04-081915	8/19/15	15:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
7	RW-10(120-130)-081915	8/19/15	09:25	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
8	TB-10-082015	8/20/15	—	—	Water	N	N	✓	✓													
					Water																	
					Water																	
					Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/20/15 915	Cornerst		8/20/15 915	TA
2		8-20-15 1230	TA		8-21-15 0920	TAN
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.0, 1.0, 0.7

E-Mail Date: 2015-10-16
E-Mail To: tim.roeper@cornerstoneeg.com
cc:

U.S. Mail: Tim Roeper
Cornerstone Environmental Group
100 Crystal Run Road, Suite 101
Middletown, NY 10941

ANALYTICAL DATA VALIDATION REPORT
Ringwood Mines/Landfill
Ford Motor Company
CLIENT PROJECT NUMBER - not available
CADENA PROJECT E203361
SAMPLES COLLECTED August 2015
SUBMITTAL #: 490-85779-1

PREPARED BY:
CADENA, INC.
1099 Highland Drive
Ann Arbor, MI 48108
Telephone: 517-819-0356
Fax: 734-975-6709
Contact: Jim Tomalia (jtomalia@cadenaco.com)
Date: 2015-10-16
www.CADENACO.com

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LIST OF ATTACHMENTS

ATTACHMENT A CHAIN OF CUSTODY DOCUMENT(S) and LABORATORY CORRESPONDENCES

1.0 INTRODUCTION

The following document details an assessment of the analytical data reported by TestAmerica-Nashville Laboratory the data in the submittals listed below which were collected from the Ringwood Mines/Landfill site as noted. A sampling and analysis summary that lists all sample ID's and testing as related to the laboratory submittal numbers is presented in Appendix 1. A summary of all of the analytical data is presented in Appendix 3. Copies of sample Chain of Custody (COC) documents and cooler receipt forms for samples discussed in this report are included in Attachment A.
Note: One field sample from this submittal was collected in triplicate to facilitate use of this sample as the QC batch MS/MSD for each analysis where appropriate (MS not required for alkalinity).

Table 1.1

Laboratory Submittal	***Sample Date***	***Laboratory Receipt Date***
490-85779-1	8/20-21/2015	8/22/2015

The samples noted below were validated against the associated method/parameter in order to achieve the validation requirements for this SDG:

Table 1.2

Parameter	***Reference Method***	***Analyte Listing***
Volatile Organics	OSW-8260C	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8260CSIM	1,2-Dibromo-3-Chloropropane,1,4-Dioxane,EthyleneDibromide,1,2,3-Trichloropropane
Semi-Volatile Organics	OSW-8270D	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8270DSIM	Extended list includes the following: Benzo(a)anthracene,Benzo(a)pyrene, Benzo(b)fluoranthene,Hexachlorobenzene, Hexachlorobutadiene,N-Nitrosodimethylamine,Pentachlorophenol
PCB	OSW-8082A	7 Standard Aroclors
Metals	OSW-6020A/7470A	Total and dissolved TAL Metals
Ion Chromatography	OSW-9056A	Chloride and Sulfate
Total Cyanide	OSW-9021B	Total and Amenable Cyanide
General Chemistry	APHA-2320B	Total and Bicarbonate Alkalinity

All "SW" analytical methods were referenced from "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition, November 1986 (with all subsequent revisions). The "SM" analytical method was referenced from the "Standard Methods for the Examination of Water and Waste water", latest promulgated revision. "EPA" methods were referenced from the revisions noted.

Laboratory Standard Operating Procedures (SOPs) associated with the methods utilized for this laboratory submittal were not available to CADENA for the purpose of validating this SDG.

Level IV data review provides a comprehensive or extensive review of the analytical data allowing for the complete reconstruction of the chemical analysis. A Level IV (Tier 3) data review was performed on the samples listed in Table 1.2 above by (CADENA).

All of the data that was recalculated was consistent with the reported results to within at least 2 significant figures. Final results may not recalculate exactly beyond this level of precision, in some cases, due to differences in available significant figures between the hardcopy raw data provided and the data utilized for calculations by the laboratory that came directly from the instrument. A table of the laboratory documents reviewed in preparing this report is included in Appendix 2.

The data was reviewed in accordance with the analytical methods and the documents listed below: (NOTE: laboratory criteria – control limits – were utilized to evaluate the data where available. Comparison to NFG criteria are noted when lab criteria was not available or for informational purposes when lab data exceeds NFG criteria).

i.) "Standard Operating Procedure HW-6 Rev12 March 2001: CLP Organics Data Review and Preliminary Review" USEPA Region 2 as identified in project QAPP.
ii.) "Standard Operating Procedure HW-2, Rev11, Jan 1992: Evaluation of Metals Data for the CLP Program" as identified in the project QAPP.

The Level VI review findings are presented in the following subsections.

An overview of the review findings is presented in table format. Several data qualifier flags were utilized in the review process. The definitions of these qualifier flags are as follows:

- J Indicates an estimated value.
- U Indicates the compound or analyte was analyzed for, but not detected at or above the stated limit.
- UJ The analyte/compound was not detected above the reported sample quantitation limit. However, the quantitation limit is considered to be approximate due to associated quality assurance results.
- UB The analyte was detected in the sample at a level between the MDL and RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the reporting limit.
- B The analyte was detected in the sample at a level above the RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the concentration reported.
- R The analyte/compound results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte/compound cannot be verified.

All flags have been incorporated into the data tables in this report.

1.1 VALIDATION QUALIFIER EXECUTIVE SUMMARY

VALIDATION SUMMARY

GCMS VOC and SIM

GCMS VOC Continuing Calibration Verification standards 278001/3 analyzed on 9/1 and CCV 278444/2 analyzed on 9/2 had multiple responses outside of laboratory control limits. High bias outliers did not have an effect on client sample data or were not associated with target analytes for this submittal. Low bias recoveries were observed for target analytes chloromethane and methyl acetate in the CCV from 9/1 and chloromethane, bromomethane, acetone and methyl acetate from 9/2. The TIC analyte was already qualified as estimated due to being detected below the RL. All client sample methyl acetate and chloromethane results and client samples -001, -002, -003, -004, -005, -006, -007 acetone and bromomethane results were non-detect so the associated reporting limits should be considered to be estimated and qualified with UJ flags based on the low bias CCV responses.

GCMS SVOC and SIM

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

PCB

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

METALS

Metals Continuing Calibration Blank (CCB) CCB-490-277043/43 at 16:04 of 8/27 analytical sequence had a detection for selenium above the MDL but below the RL. Based on this CCB detection client samples 490-85779-002, -004, -005 and -007 total selenium results should be considered to be non-detect at the RL and qualified with UB flags.

Client sample -003 total sodium result was above the instrument linear dynamic range (LDR) so this result should be considered to be estimated and qualified with an E flag.

INORGANICS

CYANIDE – Sample -006 raw data recalculation generated a result of <0.007mg/L but the original lab report value was 0.0084mg/L for cyanide. Lab provided the following explanation for the discrepancy: 490-58779-06 – Cyanide - The instrument/ raw data records the final result to the 4th exponent during the upload the data was transferred to TALS as the 3rd exponent. Result has been changed from 0.00845 to 0.000845. We will be getting you revised reports on this one.

Revised data has been re-loaded to CLMS database and revised report posted to project. Revised data is reflected in this validation report as well.

The following observations **DID NOT** result in qualification but were noted during the validation review:

GCMS VOC

CCV outliers were not associated with target analytes for this submittal.

GCMS VOC-SIM

CCV for sequence 276673 on 8/27 had outliers that were not associated with reported sample results. ICV for sequence 277064 on 8/28 were reported on form VII as outliers based on known spike values reported. Verification with laboratory indicated that the known spike values should

have been 10 and 0.5 (instead of 2000/100) as was historically reported for other sequences to these ICV recoveries were considered to be acceptable when compared to these historical values.

GCMS SVOC

No additional observations to report based on review of level 4 data package.

GCMS SVOC-SIM

No additional observations to report based on review of level 4 data package.

METALS

QC batch PDS and SERIAL DILUTION outliers were not determined using samples from this submittal so qualification was not required based on these sample-specific QC outliers.

CRQL's were consistently within lab control limits with the exception of potassium which was consistently biased high.

PCB – internal standard technique was used for both columns. Some initial and continuing calibration outliers were observed for specific aroclor 1016/1260 peaks on the secondary columns but these outliers did not result in qualification of final client sample results.

RAW DATA NOT INCLUDED IN ORIGINAL LAB LEVEL 4 DATA PACKAGE:

CYANIDE – Confirmation was required from lab for sample -006 cyanide result which did not reconcile with re-calculated results.

DISSOLVED MERCURY – Sample raw data was not included – duplicate of total mercury run was reported instead.

VERIFICATION SUMMARY

The following qualifications and associated data flags were applied based on the initial level 2 review of this data package.

The following minor QC exceptions or missing information were noted:

GCMS VOC trip blank had a detection below the RL for acetone. Client samples -008 and -010 acetone results should be considered to be non-detect at the RL and qualified with UB flags.

GCMS-SIM VOC surrogate recoveries were outliers biased high for 1 out of 4 surrogates in client sample -003. GCMS-SIM VOC detected results in this sample should be considered to be estimated and qualified with J flags. Non-detect results do not require qualification.

GCMS VOC and GCMS SVOC TIC results should be considered to be estimated and qualified with NJ flags unless the TIC analyte detected is an instrument calibrated compound that is just not part of the TAL for this submittal in which case no qualification is required other than the TIC qualification code or J flag if the result is detected below the RL.

GCMS VOC QC batch 278001 and 278444 LCS recovery was an outlier biased high for cyclohexane. Qualification of client sample results was not required based on these high bias QC outliers.

GCMS VOC QC batch 278444 method blank had a detection below the RL for methylene chloride. Qualification of client sample results was not required based on this method blank detection.

GCMS SVOC QC batch 276471 and 276884 MS recoveries were not reported in the laboratory submittal QC summary. These QC results will be evaluated as part of the level 4 data package review to follow. (no MS/MSD results were reported in level 4 data package for these batches either).

Metals method blanks had detections below the RL in QC batch 275892 and 276511 for total and dissolved vanadium. Client samples -001, -002, -003, -004, -005, -006, -007, -008, -009 and -010 dissolved vanadium results and client samples -001, -002, -003, -004, -008, -009 and -010 total vanadium results should be considered to be

non-detect at the RL and qualified with UB flags. Client samples -005, -006 and -007 total vanadium results should be considered to be non-detect at the concentration reported and qualified with B flags.

GCMS VOC QC batch 278001 and 278444 and Cyanide QC batch 276133 and Inorganic Ion QC batch 278255 MS recovery outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

Cyanide sample -010 MS recovery only was an outlier biased low. Qualification of client sample results is not required based on this QC outlier alone.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

2.0 VOLATILE ORGANIC COMPOUNDS (VOCs) – METHOD SW846 8260C and SIM Analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

2.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) VOCs

2.1.1 TUNING AND MASS CALIBRATION – GC/MS VOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

2.1.2 INITIAL CALIBRATION – GC/MS VOCs

Initial calibration data for VOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS VOCs

Initial calibration verification (ICV) standards for VOC analyses were reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

2.2 CONTINUING CALIBRATION – GC/MS VOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.3 INTERNAL STANDARDS – GC/MS VOCs

Internal standard (IS) data were reviewed and met criteria without exception.

2.4 SURROGATE SPIKE RECOVERIES – GC/MS VOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.
If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.
All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

2.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS VOCs

A laboratory control sample (LCS) was prepared and analyzed for VOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

2.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS VOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.
CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

2.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS VOCs

There were no field duplicate comparisons performed as part of this validation request.

2.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS VOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

2.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS VOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable unless noted otherwise in verification/validation summary.

2.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS VOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified

as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

2.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS VOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

3.0 SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) – METHOD SW846 8270D and SIM analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

3.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) SVOCs

3.1.1 TUNING AND MASS CALIBRATION – GC/MS SVOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

3.1.2 INITIAL CALIBRATION – GC/MS SVOCs

Initial calibration data for SVOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

3.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS SVOCs

Initial calibration verification (ICV) standards for SVOC analyses were reviewed and met criteria specified by the laboratory with no exceptions.

3.2 CONTINUING CALIBRATION – GC/MS SVOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary

3.3 INTERNAL STANDARDS – GC/MS SVOCs

Internal standard (IS) data were reviewed and met criteria without exception.

3.4 SURROGATE SPIKE RECOVERIES – GC/MS SVOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

3.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS SVOCs

A laboratory control sample (LCS) was prepared and analyzed for SVOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

3.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS SVOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

3.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS SVOCs

There were no field duplicate comparisons performed as part of this validation request.

3.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS SVOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

3.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS SVOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable without exception.

3.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS SVOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

3.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS SVOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

4.0 POLYCHLORINATED BIPHENYLS (PCBs) – METHOD SW846 8082A

The target analyte list was defined by the client as the standard 7 aroclors.

4.1 CALIBRATION – GAS CHROMATOGRAPH-ECD
4.1.1 TUNING AND MASS CALIBRATION – PCB

Not applicable for this analysis.

4.1.2 INITIAL CALIBRATION – PCB

Initial calibration data for PCBs were reviewed and met the criteria for instrument sensitivity and linearity of response without exception.

4.1.3 INITIAL CALIBRATION VERIFICATION – PCB

Initial calibration verification (ICV) standards for PCB analyses were reviewed and met criteria specified by the laboratory with no exceptions.

4.2 CONTINUING CALIBRATION – PCBs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

4.3 INTERNAL STANDARDS – PCB

Internal standard (IS) data were reviewed and met criteria unless noted otherwise in verification/validation summary. (NOTE: Lab quantitation approach DID use internal standard quantitation for this submittal).

4.4 SURROGATE SPIKE RECOVERIES – PCB

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

4.5 LABORATORY CONTROL SAMPLE ANALYSES - PCB

A laboratory control sample (LCS) was prepared and analyzed for PCBs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary..

4.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - PCB

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

4.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - PCB

There were no field duplicate comparisons performed as part of this validation request.

4.8 EXTRACT CLEANUP - PCB

Extract cleanups were performed in accordance with laboratory SOP's and as noted in level 4 data package prep logs.

4.9 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - PCB

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

4.10 TENTATIVELY IDENTIFIED COMPOUNDS - PCB

Not requested for this analytical procedure.

4.11 BLANKS – METHOD/FIELD/CALIBRATION - PCB

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

5.0 HPLC/IC – METHOD SW846 9056A – CHLORIDE AND SULFATE

5.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

5.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

5.3 CONTINUTING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

5.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

5.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

5.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

5.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

5.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

6.0 METALS – ICPMS by Method 6020 TOTAL AND DISSOLVED and Mercury by Method 7470A

The following samples provided in this SDG underwent a Level IV review for either/and metals or mercury analyses:

- Method 6020A: ALL
- Method 7470A: ALL

6.1 ICP/MS TUNING AND MASS CALIBRATION

Instrument tuning data were reviewed. Tuning elements were analyzed. All tuning criteria were met for the analyses, indicating proper optimization of the instrumentation.

6.2 INITIAL CALIBRATION

Initial calibration data for metals and mercury were reviewed and met the criteria for linearity of response without exception.

6.3 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards for metals and mercury analyses were reviewed and met criteria unless otherwise noted in verification/validation summary section of this document.

An initial calibration blank (ICB) was analyzed for metals and mercury analyses. Metals and mercury were reported as non-detect in each ICB analysis unless noted otherwise in verification/validation summary.

6.4 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for metals and mercury analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

6.5 INTERFERENCE CHECK STANDARD

The interference check standard results were reviewed and found to meet criteria.

6.6 INTERNAL STANDARDS

Internal standard (IS) data were reviewed and found to meet criteria unless noted otherwise in verification/validation summary.

6.7 LABORATORY CONTROL SAMPLE ANALYSIS

A laboratory control sample (LCS) was prepared and analyzed for metals and mercury. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

6.8 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE (MS/MSD) ANALYSES

The MS/MSD recoveries and RPD's were either not performed using a client sample or were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

6.9 CONTRACT REQUIRED DETECTION LIMIT STANDARD ANALYSES

Each contract required detection limit (CRDL) standard was analyzed at the proper frequency and were within laboratory control limits unless noted otherwise in verification/validation summary.

6.10 ICP SERIAL DILUTION

Serial dilutions were analyzed at the proper frequency and were either not performed using the client sample or were within laboratory control limits unless noted otherwise in verification/validation summary.

6.11 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

6.12 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

6.13 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

7.0 GENERAL CHEMISTRY- TOTAL AND AMENABLE CYANIDE AND ALKALINITY – METHODS 9012B and 2320B

7.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

7.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

7.3 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

7.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

7.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD’s were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

7.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

7.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

7.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

8.0 REPRESENTATIVENESS EVALUATION

Representativeness is a qualitative evaluation of whether the data represents actual environmental conditions. Representativeness was evaluated using holding time criteria, which reflect the length of time after sample collection that a sample or extract remains representative of environmental conditions. Depending on the analysis, either one or two holding times were evaluated.

i.) For those analyses that do not include a sample extraction, only one holding time was evaluated: the length of time between sample collection and analysis.

ii.) For analyses that require sample extraction prior to analysis, two holding times were evaluated: the length of time from sampling until extraction and the length of time from extraction to analysis.

Holding times are compared to standard method specific holding times accepted or recommended by the United States Environmental Protection Agency (USEPA). Those holding times outside of USEPA acceptance criteria are qualitatively evaluated to determine their effect on sample representativeness.

Representativeness was also evaluated by analysis of laboratory method blanks and field equipment blanks. Laboratory method blanks and field equipment blanks are used to identify sources of contamination not associated with environmental conditions.

8.1 SAMPLE PRESERVATION AND HOLDING TIMES

Sample holding time and preservation requirements are summarized in Appendix 5.

All sample extractions and/or analyses were performed within the specified holding times unless noted otherwise in verification/validation summary.

All samples were properly preserved and cooled to 0-6°C after collection.

8.2 METHOD BLANK SUMMARY

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

Evaluation of blank contamination includes directions on the interpretation of the affected analytical results.

9.0 USABILITY AND COMPARABIILTY

Usability of data was evaluated by assuring that all the analytical requests were met, samples were received in the proper condition, and all analyses were performed within the appropriate holding times unless noted otherwise in verification/validation summary

No data evaluated within this delivery group was considered unusable (qualified with an R flag) due to sample integrity, sample matrix interference or batch quality control issues unless noted otherwise in verification/validation summary.

10.0 QC SUMMARY

All sample results meet the project specific QAPP standard for usability with exceptions defined by validation and verification qualifiers as applied. Please reference the following tables for a summary of the investigative field sample data and their valid qualifiers based on Level 4 technical review of the analytical data.

APPENDIX 1

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Nashville
Laboratory Submittal: 85779-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	Metals by ICP Mass Spectroscopy(D)	Metals by ICP Mass Spectroscopy	Mercury (Manual Cold Vapor)(D)	Mercury (Manual Cold Vapor)	TOTAL AND AMENABLE CYANIDE (AUTOMATED COLORIMETRIC, WITH OFF-LINE DISTILLATION)	Inorganic Anions by IC	Alkalinity Prep
490857791	SW-PMB-02-082015	8/20/2015	9:30:00	X	X	X	X	X	X	X	X	X	X	X	X
4908577910	RW-8 (204-214)-082015	8/20/2015	2:15:00	X	X	X	X	X	X	X	X	X	X	X	X
4908577911	TB-11-082115	8/21/2015	12:01:00	X	X										
490857792	SW-PMB-01-082015	8/20/2015	10:10:00	X	X	X	X	X	X	X	X	X	X	X	X
490857793	SW-03-082015	8/20/2015	11:00:00	X	X	X	X	X	X	X	X	X	X	X	X
490857794	SW-MRB-03-082015	8/20/2015	11:40:00	X	X	X	X	X	X	X	X	X	X	X	X
490857795	SW-MRB-02-082015	8/20/2015	12:15:00	X	X	X	X	X	X	X	X	X	X	X	X
490857796	SW-MRB-01-082015	8/20/2015	2:15:00	X	X	X	X	X	X	X	X	X	X	X	X
490857797	SW-MRB-00-082015	8/20/2015	3:00:00	X	X	X	X	X	X	X	X	X	X	X	X
490857798	PMP-Pond-082015	8/20/2015	4:00:00	X	X	X	X	X	X	X	X	X	X	X	X
490857799	RW-10A (51-61)-082015	8/20/2015	9:15:00	X	X	X	X	X	X	X	X	X	X	X	X

APPENDIX 2

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85779-1
August 2015

Description

- Standard Report Cover page
- Table of Contents
- SDG Case Narrative
- Sample Summary
- Executive Summary detection highlights
- Method Summary
- Method/Analyst Summary
- Analytical Results
- Surrogate Summary
- Quality Control Results
- Data Qualifiers
- QC Summary Association
- Lab Chronicle
- GCMS Volatiles Data - Method 8260C and SIM
  - QC Summary Data
    - Surrogate recoveries (form II)
    - Check Sample recoveries (form III)
    - Matrix spike/Matrix spike duplicate report (form III)
    - Method blank report (form IV)
    - Tuning and mass calibrations (form V)
    - Internal Standard and RT area summary (form VIII)
  - Sample Data
    - GCMS VOA Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Total Ion Profile Chromatogram
    - Ion profiles of detected target analyte peaks
    - Manual integration if applicable
    - Tentatively Identified Compound Reports (if applicable)
  - Standards Data
    - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
    - ICAL Raw integration data from instrument
    - ICAL Total Ion Profile Chromatogram
    - ICV check standard recovery report (Form VII)
    - ICV check standard total ion profile with integration
    - GCMS VOA Continuing Calibration Data (Form VII)
    - CCV raw integration data from instrument
    - CCV Total Ion Profile Chromatogram
    - Manual integration if applicable
  - Raw QC Data
    - Tune information (not included with SIM package)
    - FORM I - QC data
    - Method Blank integration/internal standard and total ion profile raw data
    - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
    - MS and MSD integration/internal standard and total ion profile raw data
  - Miscellaneous Data
    - Run logs

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NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85779-1
August 2015

Description

GCMS Semivolatiles Data - Method 8270D and SIM

- QC Summary Data
  - Surrogate recoveries (form II)
  - Check Sample recoveries (form III)
  - Method blank report (form IV)
  - Tuning and mass calibrations (form V) (not applicable for SIM)
  - Internal Standard and RT area summary (form VIII)
- Sample Data
  - GCMS VOA Organics Analysis Data Sheet (Form I)
  - Raw integration data from instrument
  - Total Ion Profile Chromatogram
  - Ion profiles of detected target analyte peaks
  - Manual integration if applicable
  - Tentatively Identified Compound Reports (if applicable)
- Standards Data
  - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
  - ICAL Raw integration data from instrument
  - ICAL Total Ion Profile Chromatogram
  - ICV check standard recovery report
  - ICV check standard total ion profile with integration
  - GCMS VOA Continuing Calibration Data (Form VII)
  - CCV raw integration data from instrument
  - CCV Total Ion Profile Chromatogram
  - Manual integration if applicable
- Raw QC Data
  - Tune information (not applicable for SIM)
  - Method Blank integration/internal standard and total ion profile raw data
  - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
- Miscellaneous Data
  - Instrument run logs
  - Extraction bench sheets

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NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
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August 2015

Description

- Polychlorinated Biphenyls Data (PCB)
  - QC Summary data
    - Surrogate recoveries (form II)
    - Check Sample Recovery data (form III)
    - Method Blank data (form IV)
    - Analytical sequence with RT check (Form VIII)
    - Identification Summary (Form X)
  - Sample Data
    - Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Chromatogram
  - Standards Data (both columns)
    - Initial Calibration Data External Standard RT Summary (Form VI)
    - Initial Calibration Data Summary with average RF
    - Raw integration data from instrument with manual integrations where applicable
    - ICAL chromatograms
    - Continuing Calibration Data (Form VII) with RT Summaries
    - ICV raw integration and chromatograms
    - CCV raw integration data from instrument
    - CCV chromatogram
  - Raw QC Data
    - LCS/LCSD sample data report and integration and chromatograms
    - Method blank integration and chromatograms
  - Miscellaneous Data
    - Sequence table (run log)
    - PCB Batch Worksheet
- HPLC/IC - 9056A ORGFM_28D - Anions, Ion Chromatography - Sulfate and Chloride
  - Raw Data and Data Summaries for:
    - LCS/LCSD (form III)
    - MS/MSD (form III)
    - METHOD BLANKS (Form IV)
    - SAMPLE DATA (Form I)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VI)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VII)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - QC DATA (Form I)
      - Raw instrument data and chromatography
    - Analysis Run Logs

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NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
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Description

METALS DATA (ICPMS and mercury)
- Forms Data
  - Cover Page
  - Inorganic Analysis Data Sheet - Metals Dissolved/Total Recoverable (1A-IN)
  - CCV standard report - mercury and ICPMS (2A-IN)
  - CRQL report - mercury and ICPMS (2B-IN)
  - ICB report - mercury and ICPMS (3-IN)
  - Method blank report (3-IN)
  - Interference check standard A - ICPMS (4A-IN)
  - Interference check standard AB - ICPMS (4A-IN)
  - MS/MSD Sample recovery (5A-IN)
  - PDS Summary (5B-IN)
  - LCS Recovery form (7A-IN)
  - LCS Duplicate Recover (7D-IN)
  - ICP-MS Serial Dilutions (8-IN)
  - Detection Limits Form (9-IN)
  - Linear dynamic ranges - ICPMS (11-IN)
  - Prep log - mercury and ICPMS (12-IN)
  - Run log - ICPMS and Mercury (13-IN)
  - ICP-MS TUNE (14-IN)
  - ICPMS Internal Standards Relative Intensity Summary (15-IN)
- Instrument Printouts
  - ICP-MS Raw instrument data
  - Mercury raw instrument data, run logs and calibrations
- Miscellaneous Data
  - Metals Batch Worksheet

GENERAL CHEMISTRY - Total and Amenable Cyanide and Alkalinity
- Cover Page
- Raw Data and Data Summaries for:
  - Sample Data (Form 1B-IN)
  - CCV/CCB (Form 2-IN)
  - METHOD BLANKS (Form 3-IN)
  - MATRIX SPIKES (Form 5-IN)
  - Sample DUPLICATES (Form 6-IN)
  - LCS/LCSD (Form 7-IN)
  - Detection Limits Form (9-IN)
  - Prep log (12-IN)
  - Analysis Run Logs (13-IN)
  - Raw Data - instrument sample sequence and calibration curve
  - Alkalinity Reagents
  - Alkalinity pH meter calibration
  - Alkalinity sequence log and raw data
  - General Chemistry Batch Worksheets

Shipping and Receiving Documents
- COC forms
- Cooler Receipt Form, checklist and narrative

APPENDIX 3

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85779-1

		Sample Name:	SW-PMB-02-082015				RW-8 (204-214)-082015				TB-11-082115			
		Lab Sample ID:	490857791				4908577910				4908577911			
		Sample Date:	8/20/2015				8/20/2015				8/21/2015			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	UJ	4.1	25	ug/l	UB	2.7	25	ug/l	J
Benzene	71-43-2	ND	1.0	ug/l	---	0.57	1.0	ug/l	J	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	UJ	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	2.3	10	ug/l	J	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85779-1

			Sample Name:	SW-PMB-02-082015			RW-8 (204-214)-082015				TB-11-082115			
			Lab Sample ID:	490857791			4908577910				4908577911			
			Sample Date:	8/20/2015			8/20/2015				8/21/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
	OSW-8270D													
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	14-Pentadecenoic acid - TIC	17351-34-7					23	---	ug/l	NJ				
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	2,4,5-Trichlorophenol	95-95-4	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	2,4,6-Trichlorophenol	88-06-2	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	2,4-Dichlorophenol	120-83-2	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	2,4-Dimethylphenol	105-67-9	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	2,4-Dinitrophenol	51-28-5	ND	22	ug/l	---	ND	23	ug/l	---				
	2,4-Dinitrotoluene	121-14-2	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	2,6-Dinitrotoluene	606-20-2	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	2-Chloronaphthalene	91-58-7	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	2-Chlorophenol	95-57-8	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	2-Methylnaphthalene	91-57-6	ND	1.8	ug/l	---	ND	1.8	ug/l	---				
	2-Methylphenol	95-48-7	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	2-Nitroaniline	88-74-4	ND	22	ug/l	---	ND	23	ug/l	---				
	2-Nitrophenol	88-75-5	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	3 & 4 Methylphenol	65794-96-9	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	3,3'-Dichlorobenzidine	91-94-1	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5					22	---	ug/l	NJ				
	3-Nitroaniline	99-09-2	ND	22	ug/l	---	ND	23	ug/l	---				
	4,6-Dinitro-2-methylphenol	534-52-1	ND	22	ug/l	---	ND	23	ug/l	---				
	4-Bromophenyl phenyl ether	101-55-3	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	4-Chloro-3-methylphenol	59-50-7	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	4-Chloroaniline	106-47-8	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	4-Chlorophenyl phenyl ether	7005-72-3	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	4-Nitroaniline	100-01-6	ND	22	ug/l	---	ND	23	ug/l	---				
	4-Nitrophenol	100-02-7	ND	22	ug/l	---	ND	23	ug/l	---				
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3					5.8	---	ug/l	NJ				
	9-Octadecenamide, (Z)- - TIC	301-02-0					4.3	---	ug/l	NJ				
	9-Octadecenoic acid, (E)- - TIC	112-79-8												
	Acenaphthene	83-32-9	ND	1.8	ug/l	---	ND	1.8	ug/l	---				
	Acenaphthylene	208-96-8	ND	1.8	ug/l	---	ND	1.8	ug/l	---				
	Acetophenone	98-86-2	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Anthracene	120-12-7	ND	1.8	ug/l	---	ND	1.8	ug/l	---				
	Atrazine	1912-24-9	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Benzaldehyde	100-52-7	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2					37	---	ug/l	NJ				
	Benzo[g,h,i]perylene	191-24-2	ND	1.8	ug/l	---	ND	1.8	ug/l	---				
	Benzo[k]fluoranthene	207-08-9	ND	1.8	ug/l	---	ND	1.8	ug/l	---				
	Bis(2-chloroethoxy)methane	111-91-1	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Bis(2-chloroethyl)ether	111-44-4	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Butyl benzyl phthalate	85-68-7	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Caprolactam	105-60-2	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Carbazole	86-74-8	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Cholestan-3-ol, 4-methyl-, (3.beta.,4.al - TIC	3903-57-9												
	Chrysene	218-01-9	ND	1.8	ug/l	---	ND	1.8	ug/l	---				
	Di-n-butyl phthalate	84-74-2	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Di-n-octyl phthalate	117-84-0	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Dibenz(a,h)anthracene	53-70-3	ND	1.8	ug/l	---	ND	1.8	ug/l	---				
	Dibenzofuran	132-64-9	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Diethyl phthalate	84-66-2	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Diethyltoluamide - TIC	134-62-3												
	Dimethyl phthalate	131-11-3	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Diphenyl	92-52-4	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Eicosane - TIC	112-95-8					3.1	---	ug/l	NJ				
	Fluoranthene	206-44-0	ND	1.8	ug/l	---	ND	1.8	ug/l	---				
	Fluorene	86-73-7	ND	1.8	ug/l	---	ND	1.8	ug/l	---				
	Hexachlorocyclopentadiene	77-47-4	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Hexachloroethane	67-72-1	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Hexadeca-2,6,10,14-tetraen-1-ol, 3,7,11, - TIC	7614-21-3					3.1	---	ug/l	NJ				
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	1.8	ug/l	---	ND	1.8	ug/l	---				
	Isophorone	78-59-1	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	N-Nitrosodi-n-propylamine	621-64-7	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	N-Nitrosodiphenylamine	86-30-6	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Naphthalene	91-20-3	ND	1.8	ug/l	---	ND	1.8	ug/l	---				
	Nitrobenzene	98-95-3	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Nonanoic acid - TIC	112-05-0					69	---	ug/l	NJ				
	Octadecanoic acid - TIC	57-11-4												
	Oleic Acid - TIC	112-80-1												
	Phenanthrene	85-01-8	ND	1.8	ug/l	---	ND	1.8	ug/l	---				
	Phenol	108-95-2	ND	8.9	ug/l	---	ND	9.1	ug/l	---				
	Pyrene	129-00-0	ND	1.8	ug/l	---	ND	1.8	ug/l	---				
	Tetradecanoic acid - TIC	544-63-8					6.9	---	ug/l	NJ				
	Tridecanoic acid - TIC	638-53-9												
	[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	366-29-0												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85779-1

			Sample Name:	SW-PMB-02-082015			RW-8 (204-214)-082015				TB-11-082115			
			Lab Sample ID:	490857791			4908577910				4908577911			
			Sample Date:	8/20/2015			8/20/2015				8/21/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---				
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---				
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---				
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.45	ug/l	---	ND	0.50	ug/l	---				
	PCB-1221	11104-28-2	ND	0.45	ug/l	---	ND	0.50	ug/l	---				
	PCB-1232	11141-16-5	ND	0.45	ug/l	---	ND	0.50	ug/l	---				
	PCB-1242	53469-21-9	ND	0.45	ug/l	---	ND	0.50	ug/l	---				
	PCB-1248	12672-29-6	ND	0.45	ug/l	---	ND	0.50	ug/l	---				
	PCB-1254	11097-69-1	ND	0.45	ug/l	---	ND	0.50	ug/l	---				
	PCB-1260	11096-82-5	ND	0.45	ug/l	---	ND	0.50	ug/l	---				
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.45	ug/l	---	ND	0.50	ug/l	---				
Metals														
OSW-6020A														
	Aluminum	7429-90-5	0.013	0.020	mg/l	J	ND	0.020	mg/l	---				
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	ND	0.020	mg/l	---				
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Antimony - Dissolved	7440-36-0	0.00060	0.0020	mg/l	J	ND	0.0020	mg/l	---				
	Arsenic	7440-38-2	ND	0.0020	mg/l	---	0.0020	0.0020	mg/l	---				
	Arsenic - Dissolved	7440-38-2	ND	0.0020	mg/l	---	0.0019	0.0020	mg/l	J				
	Barium	7440-39-3	0.015	0.0020	mg/l	---	0.037	0.0020	mg/l	---				
	Barium - Dissolved	7440-39-3	0.018	0.0020	mg/l	---	0.041	0.0020	mg/l	---				
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---				
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---				
	Calcium	7440-70-2	26.7	1.0	mg/l	---	67.5	1.0	mg/l	---				
	Calcium - Dissolved	7440-70-2	46.9	1.0	mg/l	---	63.5	1.0	mg/l	---				
	Chromium	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Cobalt	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Copper	7440-50-8	ND	0.0020	mg/l	---	0.0011	0.0020	mg/l	J				
	Copper - Dissolved	7440-50-8	0.0013	0.0020	mg/l	J	ND	0.0020	mg/l	---				
	Iron	7439-89-6	0.25	0.025	mg/l	---	1.5	0.025	mg/l	---				
	Iron - Dissolved	7439-89-6	0.023	0.025	mg/l	J	0.24	0.025	mg/l	---				
	Lead	7439-92-1	ND	0.0020	mg/l	---	0.00097	0.0020	mg/l	J				
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Magnesium	7439-95-4	8.7	1.0	mg/l	---	20.0	1.0	mg/l	---				
	Magnesium - Dissolved	7439-95-4	13.1	1.0	mg/l	---	20.9	1.0	mg/l	---				
	Manganese	7439-96-5	0.22	0.0020	mg/l	---	0.31	0.0020	mg/l	---				
	Manganese - Dissolved	7439-96-5	0.16	0.0020	mg/l	---	0.27	0.0020	mg/l	---				
	Nickel	7440-02-0	ND	0.0020	mg/l	---	0.035	0.0020	mg/l	---				
	Nickel - Dissolved	7440-02-0	0.0087	0.0020	mg/l	---	0.024	0.0020	mg/l	---				
	Potassium	7440-09-7	1.3	1.0	mg/l	---	10.3	1.0	mg/l	---				
	Potassium - Dissolved	7440-09-7	3.8	1.0	mg/l	---	16.3	1.0	mg/l	---				
	Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Sodium	7440-23-5	56.3	1.0	mg/l	---	87.5	1.0	mg/l	---				
	Sodium - Dissolved	7440-23-5	51.0	1.0	mg/l	---	92.5	1.0	mg/l	---				
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Vanadium	7440-62-2	0.0015	0.0020	mg/l	UB	0.0014	0.0020	mg/l	UB				
	Vanadium - Dissolved	7440-62-2	0.0011	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB				
	Zinc	7440-66-6	ND	0.025	mg/l	---	0.022	0.025	mg/l	J				
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---				
OSW-7470A														
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---				
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---				
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---				
OSW-9056A														
	Chloride	16887-00-6	87.0	1.00	mg/l	---	55.2	1.00	mg/l	---				
	Sulfate	14808-79-8	7.16	1.00	mg/l	---	149	1.00	mg/l	---				
Prep														
APHA-2320B														
	Bicarbonate Alkalinity as CaCO3	E-14508	138	10.0	mg/l	---	216	10.0	mg/l	---				
	Total Alkalinity as CaCO3	E-14506	138	10.0	mg/l	---	216	10.0	mg/l	---				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85779-1

			Sample Name:	SW-PMB-01-082015				SW-03-082015				SW-MRB-03-082015			
			Lab Sample ID:	490857792				490857793				490857794			
			Sample Date:	8/20/2015				8/20/2015				8/20/2015			
Analyte		Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
OSW-8260C														
	1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
	2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acetone	67-64-1	ND	25	ug/l	UJ	ND	25	ug/l	UJ	ND	25	ug/l	UJ
	Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromomethane	74-83-9	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
	Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloromethane	74-87-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
	Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
	Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim														
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	1,4-Dioxane	123-91-1	0.73	10	ug/l	J	ND	10	ug/l	---	ND	10	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85779-1

			Sample Name:	SW-PMB-01-082015				SW-03-082015				SW-MRB-03-082015			
			Lab Sample ID:	490857792				490857793				490857794			
			Sample Date:	8/20/2015				8/20/2015				8/20/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	14-Pentadecenoic acid - TIC	17351-34-7												
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	2-Chlorophenol	95-57-8	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	2-Methylphenol	95-48-7	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	2-Nitroaniline	88-74-4	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	2-Nitrophenol	88-75-5	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5												
	3-Nitroaniline	99-09-2	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	4-Chloroaniline	106-47-8	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	4-Nitroaniline	100-01-6	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	4-Nitrophenol	100-02-7	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3												
	9-Octadecenamide, (Z)- - TIC	301-02-0												
	9-Octadecenoic acid, (E)- - TIC	112-79-8					3.2	---	ug/l	NJ				
	Acenaphthene	83-32-9	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Acenaphthylene	208-96-8	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Acetophenone	98-86-2	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Anthracene	120-12-7	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Atrazine	1912-24-9	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Benzaldehyde	100-52-7	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2												
	Benzo[g,h,i]perylene	191-24-2	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Caprolactam	105-60-2	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Carbazole	86-74-8	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Cholestan-3-ol, 4-methyl-, (3.beta.,4.al - TIC	3903-57-9												
	Chrysene	218-01-9	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Dibenzofuran	132-64-9	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Diethyl phthalate	84-66-2	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Diethyltoluamide - TIC	134-62-3												
	Dimethyl phthalate	131-11-3	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Diphenyl	92-52-4	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Eicosane - TIC	112-95-8												
	Fluoranthene	206-44-0	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Fluorene	86-73-7	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Hexachloroethane	67-72-1	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Hexadeca-2,6,10,14-tetraen-1-ol, 3,7,11, - TIC	7614-21-3												
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Isophorone	78-59-1	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Naphthalene	91-20-3	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Nitrobenzene	98-95-3	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Nonanoic acid - TIC	112-05-0												
	Octadecanoic acid - TIC	57-11-4	3.0	---	ug/l	NJ					3.8	---	ug/l	NJ
	Oleic Acid - TIC	112-80-1												
	Phenanthrene	85-01-8	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Phenol	108-95-2	ND	8.9	ug/l	---	ND	8.8	ug/l	---	ND	8.8	ug/l	---
	Pyrene	129-00-0	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Tetradecanoic acid - TIC	544-63-8												
	Tridecanoic acid - TIC	638-53-9	4.8	---	ug/l	NJ								
	[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	366-29-0												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85779-1

			Sample Name:	SW-PMB-01-082015				SW-03-082015				SW-MRB-03-082015			
			Lab Sample ID:	490857792				490857793				490857794			
			Sample Date:	8/20/2015				8/20/2015				8/20/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---	ND	0.30	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.43	ug/l	---	ND	0.43	ug/l	---	ND	0.50	ug/l	---
	PCB-1221	11104-28-2	ND	0.43	ug/l	---	ND	0.43	ug/l	---	ND	0.50	ug/l	---
	PCB-1232	11141-16-5	ND	0.43	ug/l	---	ND	0.43	ug/l	---	ND	0.50	ug/l	---
	PCB-1242	53469-21-9	ND	0.43	ug/l	---	ND	0.43	ug/l	---	ND	0.50	ug/l	---
	PCB-1248	12672-29-6	ND	0.43	ug/l	---	ND	0.43	ug/l	---	ND	0.50	ug/l	---
	PCB-1254	11097-69-1	ND	0.43	ug/l	---	ND	0.43	ug/l	---	ND	0.50	ug/l	---
	PCB-1260	11096-82-5	ND	0.43	ug/l	---	ND	0.43	ug/l	---	ND	0.50	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.43	ug/l	---	ND	0.43	ug/l	---	ND	0.50	ug/l	---
Metals														
OSW-6020A														
	Aluminum	7429-90-5	0.071	0.020	mg/l	---	0.010	0.020	mg/l	J	0.027	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	ND	0.020	mg/l	---	ND	0.020	mg/l	---
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	0.00091	0.0020	mg/l	J	ND	0.0020	mg/l	---	0.00094	0.0020	mg/l	J
	Arsenic	7440-38-2	0.0010	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Arsenic - Dissolved	7440-38-2	0.00065	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Barium	7440-39-3	0.055	0.0020	mg/l	---	0.045	0.0020	mg/l	---	0.016	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.046	0.0020	mg/l	---	0.051	0.0020	mg/l	---	0.016	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	49.4	1.0	mg/l	---	45.9	1.0	mg/l	---	48.5	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	49.3	1.0	mg/l	---	46.8	1.0	mg/l	---	25.9	1.0	mg/l	---
	Chromium	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	0.00078	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Cobalt	7440-48-4	0.00055	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.00085	0.0020	mg/l	J
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	0.0011	0.0020	mg/l	J	0.00077	0.0020	mg/l	J
	Iron	7439-89-6	7.8	0.025	mg/l	---	0.24	0.025	mg/l	---	0.42	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	0.56	0.025	mg/l	---	0.066	0.025	mg/l	---	0.036	0.025	mg/l	---
	Lead	7439-92-1	0.00049	0.0020	mg/l	J	ND	0.0020	mg/l	---	0.00029	0.0020	mg/l	J
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Magnesium	7439-95-4	9.1	1.0	mg/l	---	12.6	1.0	mg/l	---	12.8	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	9.5	1.0	mg/l	---	13.4	1.0	mg/l	---	8.8	1.0	mg/l	---
	Manganese	7439-96-5	1.8	0.0020	mg/l	---	0.39	0.0020	mg/l	---	0.23	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5	1.1	0.0020	mg/l	---	0.39	0.0020	mg/l	---	0.17	0.0020	mg/l	---
	Nickel	7440-02-0	0.00053	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0	0.00065	0.0020	mg/l	J	0.00086	0.0020	mg/l	J	0.00062	0.0020	mg/l	J
	Potassium	7440-09-7	8.4	1.0	mg/l	---	2.0	1.0	mg/l	---	3.8	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	8.3	1.0	mg/l	---	2.1	1.0	mg/l	---	1.3	1.0	mg/l	---
	Selenium	7782-49-2	0.00062	0.0020	mg/l	UB	ND	0.0020	mg/l	---	0.00097	0.0020	mg/l	UB
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	61.7	1.0	mg/l	---	284	1.0	mg/l	E	49.7	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	64.3	1.0	mg/l	---	309	5.0	mg/l	---	57.6	1.0	mg/l	---
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Vanadium	7440-62-2	0.0016	0.0020	mg/l	UB	0.0015	0.0020	mg/l	UB	0.0015	0.0020	mg/l	UB
	Vanadium - Dissolved	7440-62-2	0.00090	0.0020	mg/l	UB	0.00092	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A														
	Chloride	16887-00-6	112	1.00	mg/l	---	520	5.00	mg/l	---	126	1.00	mg/l	---
	Sulfate	14808-79-8	1.76	1.00	mg/l	---	14.1	1.00	mg/l	---	6.40	1.00	mg/l	---
Prep														
APHA-2320B														
	Bicarbonate Alkalinity as CaCO3	E-14508	147	10.0	mg/l	---	47.0	10.0	mg/l	---	38.7	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	147	10.0	mg/l	---	47.0	10.0	mg/l	---	38.7	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85779-1

			Sample Name:	SW-MRB-02-082015				SW-MRB-01-082015				SW-MRB-00-082015			
			Lab Sample ID:	490857795				490857796				490857797			
			Sample Date:	8/20/2015				8/20/2015				8/20/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
OSW-8260C														
	1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
	2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acetone	67-64-1	ND	25	ug/l	UJ	ND	25	ug/l	UJ	ND	25	ug/l	UJ
	Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromomethane	74-83-9	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
	Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloromethane	74-87-3	ND	1.0	ug/l	UB	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
	Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
	Toluene	108-88-3	0.33	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim														
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85779-1

			Sample Name:	SW-MRB-02-082015				SW-MRB-01-082015				SW-MRB-00-082015			
			Lab Sample ID:	490857795				490857796				490857797			
			Sample Date:	8/20/2015				8/20/2015				8/20/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	14-Pentadecenoic acid - TIC	17351-34-7												
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2-Chlorophenol	95-57-8	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	2-Methylphenol	95-48-7	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	2-Nitroaniline	88-74-4	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	2-Nitrophenol	88-75-5	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5												
	3-Nitroaniline	99-09-2	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	4-Chloroaniline	106-47-8	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	4-Nitroaniline	100-01-6	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	4-Nitrophenol	100-02-7	ND	22	ug/l	---	ND	22	ug/l	---	ND	22	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3												
	9-Octadecenamide, (Z)- - TIC	301-02-0												
	9-Octadecenoic acid, (E)- - TIC	112-79-8												
	Acenaphthene	83-32-9	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Acenaphthylene	208-96-8	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Acetophenone	98-86-2	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Anthracene	120-12-7	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Atrazine	1912-24-9	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Benzaldehyde	100-52-7	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2												
	Benzo[g,h,i]perylene	191-24-2	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Caprolactam	105-60-2	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Carbazole	86-74-8	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Cholestan-3-ol, 4-methyl-, (3.beta.,4.al - TIC	3903-57-9												
	Chrysene	218-01-9	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Dibenzofuran	132-64-9	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Diethyl phthalate	84-66-2	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Diethyltoluamide - TIC	134-62-3									17	---	ug/l	NJ
	Dimethyl phthalate	131-11-3	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Diphenyl	92-52-4	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Eicosane - TIC	112-95-8												
	Fluoranthene	206-44-0	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Fluorene	86-73-7	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Hexachloroethane	67-72-1	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Hexadeca-2,6,10,14-tetraen-1-ol, 3,7,11, - TIC	7614-21-3												
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Isophorone	78-59-1	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Naphthalene	91-20-3	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Nitrobenzene	98-95-3	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Nonanoic acid - TIC	112-05-0												
	Octadecanoic acid - TIC	57-11-4												
	Oleic Acid - TIC	112-80-1	5.8	---	ug/l	NJ								
	Phenanthrene	85-01-8	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Phenol	108-95-2	ND	8.8	ug/l	---	ND	8.9	ug/l	---	ND	8.9	ug/l	---
	Pyrene	129-00-0	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Tetradecanoic acid - TIC	544-63-8												
	Tridecanoic acid - TIC	638-53-9	4.8	---	ug/l	NJ								
	[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	366-29-0												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85779-1

			Sample Name:	SW-MRB-02-082015				SW-MRB-01-082015				SW-MRB-00-082015			
			Lab Sample ID:	490857795				490857796				490857797			
			Sample Date:	8/20/2015				8/20/2015				8/20/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---	ND	0.30	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.46	ug/l	---	ND	0.46	ug/l	---	ND	0.46	ug/l	---
	PCB-1221	11104-28-2	ND	0.46	ug/l	---	ND	0.46	ug/l	---	ND	0.46	ug/l	---
	PCB-1232	11141-16-5	ND	0.46	ug/l	---	ND	0.46	ug/l	---	ND	0.46	ug/l	---
	PCB-1242	53469-21-9	ND	0.46	ug/l	---	ND	0.46	ug/l	---	ND	0.46	ug/l	---
	PCB-1248	12672-29-6	ND	0.46	ug/l	---	ND	0.46	ug/l	---	ND	0.46	ug/l	---
	PCB-1254	11097-69-1	ND	0.46	ug/l	---	ND	0.46	ug/l	---	ND	0.46	ug/l	---
	PCB-1260	11096-82-5	ND	0.46	ug/l	---	ND	0.46	ug/l	---	ND	0.46	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.46	ug/l	---	ND	0.46	ug/l	---	ND	0.46	ug/l	---
Metals														
OSW-6020A														
	Aluminum	7429-90-5	0.22	0.020	mg/l	---	0.16	0.020	mg/l	---	0.47	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	0.010	0.020	mg/l	J	0.011	0.020	mg/l	J	0.078	0.020	mg/l	---
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	0.0032	0.0020	mg/l	---	0.0019	0.0020	mg/l	J	0.0015	0.0020	mg/l	J
	Arsenic	7440-38-2	0.00080	0.0020	mg/l	J	0.00076	0.0020	mg/l	J	0.00065	0.0020	mg/l	J
	Arsenic - Dissolved	7440-38-2	0.00054	0.0020	mg/l	J	0.00059	0.0020	mg/l	J	0.00060	0.0020	mg/l	J
	Barium	7440-39-3	0.018	0.0020	mg/l	---	0.026	0.0020	mg/l	---	0.014	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.015	0.0020	mg/l	---	0.022	0.0020	mg/l	---	0.012	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	8.7	1.0	mg/l	---	9.7	1.0	mg/l	---	7.3	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	8.4	1.0	mg/l	---	9.4	1.0	mg/l	---	6.9	1.0	mg/l	---
	Chromium	7440-47-3	0.0011	0.0020	mg/l	J	0.00059	0.0020	mg/l	J	0.00096	0.0020	mg/l	J
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.00070	0.0020	mg/l	J
	Cobalt	7440-48-4	0.0013	0.0020	mg/l	J	0.0022	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	0.00057	0.0020	mg/l	J	0.00060	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Copper	7440-50-8	0.00061	0.0020	mg/l	J	0.0016	0.0020	mg/l	J	0.0033	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	0.0015	0.0020	mg/l	J	0.0027	0.0020	mg/l	---
	Iron	7439-89-6	8.7	0.025	mg/l	---	3.1	0.025	mg/l	---	1.3	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	0.84	0.025	mg/l	---	0.32	0.025	mg/l	---	0.33	0.025	mg/l	---
	Lead	7439-92-1	0.00091	0.0020	mg/l	J	0.0012	0.0020	mg/l	J	0.00087	0.0020	mg/l	J
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.00023	0.0020	mg/l	J
	Magnesium	7439-95-4	2.7	1.0	mg/l	---	3.1	1.0	mg/l	---	2.5	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	2.8	1.0	mg/l	---	3.2	1.0	mg/l	---	2.5	1.0	mg/l	---
	Manganese	7439-96-5	0.98	0.0020	mg/l	---	1.3	0.0020	mg/l	---	0.11	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5	0.50	0.0020	mg/l	---	0.64	0.0020	mg/l	---	0.045	0.0020	mg/l	---
	Nickel	7440-02-0	0.00063	0.0020	mg/l	J	0.0017	0.0020	mg/l	J	0.00073	0.0020	mg/l	J
	Nickel - Dissolved	7440-02-0	ND	0.0020	mg/l	---	0.0018	0.0020	mg/l	J	0.00079	0.0020	mg/l	J
	Potassium	7440-09-7	0.28	1.0	mg/l	J	0.64	1.0	mg/l	J	1.1	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	0.27	1.0	mg/l	J	0.64	1.0	mg/l	J	1.1	1.0	mg/l	---
	Selenium	7782-49-2	0.00093	0.0020	mg/l	UB	ND	0.0020	mg/l	---	0.00062	0.0020	mg/l	UB
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	5.7	1.0	mg/l	---	3.8	1.0	mg/l	---	2.5	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	4.3	1.0	mg/l	---	3.2	1.0	mg/l	---	2.5	1.0	mg/l	---
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Vanadium	7440-62-2	0.0025	0.0020	mg/l	B	0.0027	0.0020	mg/l	B	0.0032	0.0020	mg/l	B
	Vanadium - Dissolved	7440-62-2	0.0010	0.0020	mg/l	UB	0.0013	0.0020	mg/l	UB	0.0019	0.0020	mg/l	UB
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	0.018	0.025	mg/l	J	ND	0.025	mg/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	0.011	0.010	mg/l	---
OSW-9056A														
	Chloride	16887-00-6	3.27	1.00	mg/l	---	1.16	1.00	mg/l	---	1.62	1.00	mg/l	---
	Sulfate	14808-79-8	1.38	1.00	mg/l	---	1.61	1.00	mg/l	---	5.05	1.00	mg/l	---
Prep														
APHA-2320B														
	Bicarbonate Alkalinity as CaCO3	E-14508	30.0	10.0	mg/l	---	37.1	10.0	mg/l	---	22.4	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	30.0	10.0	mg/l	---	37.1	10.0	mg/l	---	22.4	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85779-1

			Sample Name:	PMP-Pond-082015			RW-10A (51-61)-082015			
			Lab Sample ID:	490857798			490857799			
			Sample Date:	8/20/2015			8/20/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC										
OSW-8260C										
	1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---
	1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---
	2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---
	Acetone	67-64-1	9.0	25	ug/l	UB	ND	25	ug/l	---
	Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloromethane	74-87-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ
	Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---
	Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim										
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85779-1

		Sample Name:	PMP-Pond-082015				RW-10A (51-61)-082015			
		Lab Sample ID:	490857798				490857799			
		Sample Date:	8/20/2015				8/20/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC										
OSW-8270D										
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	8.6	ug/l	---	ND	13	ug/l	---
	14-Pentadecenoic acid - TIC	17351-34-7								
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	8.6	ug/l	---	ND	13	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	8.6	ug/l	---	ND	13	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	8.6	ug/l	---	ND	13	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	8.6	ug/l	---	ND	13	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	8.6	ug/l	---	ND	13	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	8.6	ug/l	---	ND	13	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	22	ug/l	---	ND	31	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	8.6	ug/l	---	ND	13	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	8.6	ug/l	---	ND	13	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	8.6	ug/l	---	ND	13	ug/l	---
	2-Chlorophenol	95-57-8	ND	8.6	ug/l	---	ND	13	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	1.7	ug/l	---	ND	2.5	ug/l	---
	2-Methylphenol	95-48-7	ND	8.6	ug/l	---	ND	13	ug/l	---
	2-Nitroaniline	88-74-4	ND	22	ug/l	---	ND	31	ug/l	---
	2-Nitrophenol	88-75-5	ND	8.6	ug/l	---	ND	13	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	8.6	ug/l	---	ND	13	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	8.6	ug/l	---	ND	13	ug/l	---
	3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5								
	3-Nitroaniline	99-09-2	ND	22	ug/l	---	ND	31	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	22	ug/l	---	ND	31	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	8.6	ug/l	---	ND	13	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	8.6	ug/l	---	ND	13	ug/l	---
	4-Chloroaniline	106-47-8	ND	8.6	ug/l	---	ND	13	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	8.6	ug/l	---	ND	13	ug/l	---
	4-Nitroaniline	100-01-6	ND	22	ug/l	---	ND	31	ug/l	---
	4-Nitrophenol	100-02-7	ND	22	ug/l	---	ND	31	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3								
	9-Octadecenamide, (Z)- - TIC	301-02-0								
	9-Octadecenoic acid, (E)- - TIC	112-79-8								
	Acenaphthene	83-32-9	ND	1.7	ug/l	---	ND	2.5	ug/l	---
	Acenaphthylene	208-96-8	ND	1.7	ug/l	---	ND	2.5	ug/l	---
	Acetophenone	98-86-2	ND	8.6	ug/l	---	ND	13	ug/l	---
	Anthracene	120-12-7	ND	1.7	ug/l	---	ND	2.5	ug/l	---
	Atrazine	1912-24-9	ND	8.6	ug/l	---	ND	13	ug/l	---
	Benzaldehyde	100-52-7	ND	8.6	ug/l	---	ND	13	ug/l	---
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2								
	Benzo[g,h,i]perylene	191-24-2	ND	1.7	ug/l	---	ND	2.5	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.7	ug/l	---	ND	2.5	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	8.6	ug/l	---	ND	13	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	8.6	ug/l	---	ND	13	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	8.6	ug/l	---	ND	13	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	8.6	ug/l	---	ND	13	ug/l	---
	Caprolactam	105-60-2	ND	8.6	ug/l	---	ND	13	ug/l	---
	Carbazole	86-74-8	ND	8.6	ug/l	---	ND	13	ug/l	---
	Cholestan-3-ol, 4-methyl-, (3.beta.,4.al - TIC	3903-57-9	3.7	---	ug/l	NJ				
	Chrysene	218-01-9	ND	1.7	ug/l	---	ND	2.5	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	8.6	ug/l	---	ND	13	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	8.6	ug/l	---	ND	13	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	1.7	ug/l	---	ND	2.5	ug/l	---
	Dibenzofuran	132-64-9	ND	8.6	ug/l	---	ND	13	ug/l	---
	Diethyl phthalate	84-66-2	ND	8.6	ug/l	---	ND	13	ug/l	---
	Diethyltoluamide - TIC	134-62-3								
	Dimethyl phthalate	131-11-3	ND	8.6	ug/l	---	ND	13	ug/l	---
	Diphenyl	92-52-4	ND	8.6	ug/l	---	ND	13	ug/l	---
	Eicosane - TIC	112-95-8								
	Fluoranthene	206-44-0	ND	1.7	ug/l	---	ND	2.5	ug/l	---
	Fluorene	86-73-7	ND	1.7	ug/l	---	ND	2.5	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	8.6	ug/l	---	ND	13	ug/l	---
	Hexachloroethane	67-72-1	ND	8.6	ug/l	---	ND	13	ug/l	---
	Hexadeca-2,6,10,14-tetraen-1-ol, 3,7,11, - TIC	7614-21-3								
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	1.7	ug/l	---	ND	2.5	ug/l	---
	Isophorone	78-59-1	ND	8.6	ug/l	---	ND	13	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	8.6	ug/l	---	ND	13	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	8.6	ug/l	---	ND	13	ug/l	---
	Naphthalene	91-20-3	ND	1.7	ug/l	---	ND	2.5	ug/l	---
	Nitrobenzene	98-95-3	ND	8.6	ug/l	---	ND	13	ug/l	---
	Nonanoic acid - TIC	112-05-0								
	Octadecanoic acid - TIC	57-11-4								
	Oleic Acid - TIC	112-80-1	5.0	---	ug/l	NJ	24	---	ug/l	NJ
	Phenanthrene	85-01-8	ND	1.7	ug/l	---	ND	2.5	ug/l	---
	Phenol	108-95-2	ND	8.6	ug/l	---	ND	13	ug/l	---
	Pyrene	129-00-0	ND	1.7	ug/l	---	ND	2.5	ug/l	---
	Tetradecanoic acid - TIC	544-63-8	4.2	---	ug/l	NJ				
	Tridecanoic acid - TIC	638-53-9								
	[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	366-29-0					4.9	---	ug/l	NJ

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
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			Sample Name:	PMP-Pond-082015			RW-10A (51-61)-082015			
			Lab Sample ID:	490857798			490857799			
			Sample Date:	8/20/2015			8/20/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim										
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---
GC Other										
OSW-8082A										
	PCB-1016	12674-11-2	ND	0.46	ug/l	---	ND	0.46	ug/l	---
	PCB-1221	11104-28-2	ND	0.46	ug/l	---	ND	0.46	ug/l	---
	PCB-1232	11141-16-5	ND	0.46	ug/l	---	ND	0.46	ug/l	---
	PCB-1242	53469-21-9	ND	0.46	ug/l	---	ND	0.46	ug/l	---
	PCB-1248	12672-29-6	ND	0.46	ug/l	---	ND	0.46	ug/l	---
	PCB-1254	11097-69-1	ND	0.46	ug/l	---	ND	0.46	ug/l	---
	PCB-1260	11096-82-5	ND	0.46	ug/l	---	ND	0.46	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.46	ug/l	---	ND	0.46	ug/l	---
Metals										
OSW-6020A										
	Aluminum	7429-90-5	0.028	0.020	mg/l	---	ND	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	ND	0.020	mg/l	---
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	0.0016	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Arsenic	7440-38-2	ND	0.0020	mg/l	---	0.0021	0.0020	mg/l	---
	Arsenic - Dissolved	7440-38-2	ND	0.0020	mg/l	---	0.0015	0.0020	mg/l	J
	Barium	7440-39-3	0.086	0.0020	mg/l	---	0.016	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.086	0.0020	mg/l	---	0.014	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	20.5	1.0	mg/l	---	61.4	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	19.0	1.0	mg/l	---	66.3	1.0	mg/l	---
	Chromium	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	0.00081	0.0020	mg/l	J
	Cobalt	7440-48-4	ND	0.0020	mg/l	---	0.0038	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	0.0048	0.0020	mg/l	---
	Copper	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	0.0015	0.0020	mg/l	J
	Iron	7439-89-6	3.8	0.025	mg/l	---	0.70	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	0.70	0.025	mg/l	---	0.33	0.025	mg/l	---
	Lead	7439-92-1	0.00058	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Magnesium	7439-95-4	3.5	1.0	mg/l	---	14.6	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	3.3	1.0	mg/l	---	16.2	1.0	mg/l	---
	Manganese	7439-96-5	0.097	0.0020	mg/l	---	2.1	0.020	mg/l	---
	Manganese - Dissolved	7439-96-5	0.056	0.0020	mg/l	---	3.0	0.010	mg/l	---
	Nickel	7440-02-0	ND	0.0020	mg/l	---	0.029	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0	0.00089	0.0020	mg/l	J	0.015	0.0020	mg/l	---
	Potassium	7440-09-7	5.7	1.0	mg/l	---	3.0	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	5.2	1.0	mg/l	---	3.0	1.0	mg/l	---
	Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	2.4	1.0	mg/l	---	27.6	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	2.3	1.0	mg/l	---	16.7	1.0	mg/l	---
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Vanadium	7440-62-2	0.0015	0.0020	mg/l	UB	0.0017	0.0020	mg/l	UB
	Vanadium - Dissolved	7440-62-2	0.0011	0.0020	mg/l	UB	0.00090	0.0020	mg/l	UB
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	0.049	0.025	mg/l	---
OSW-7470A										
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry										
OSW-9012B										
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A										
	Chloride	16887-00-6	1.61	1.00	mg/l	---	2.61	1.00	mg/l	---
	Sulfate	14808-79-8	ND	1.00	mg/l	---	36.2	1.00	mg/l	---
Prep										
APHA-2320B										
	Bicarbonate Alkalinity as CaCO3	E-14508	74.9	10.0	mg/l	---	207	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	74.9	10.0	mg/l	---	207	10.0	mg/l	---

APPENDIX 4

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85779-1

Analyte	Cas No.	Sample Name: SW-PMB-02-082015 Lab Sample ID: 490857791 Sample Date: 8/20/2015				RW-8 (204-214)-082015 490857791 8/20/2015				TB-11-082115 490857791 8/21/2015				SW-PMB-01-082015 490857792 8/20/2015				SW-03-082015 490857793 8/20/2015				SW-MRB-03-082015 490857794 8/20/2015				SW-MRB-02-082015 490857795 8/20/2015				SW-MRB-01-082015 490857796 8/20/2015				SW-MRB-00-082015 490857797 8/20/2015				PMP-Pond-082015 490857798 8/20/2015				RW-10A (51-61)-082015 490857799 8/20/2015			
		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																																													
OSW-8260C																																													
Acetone	67-64-1	ND	25	ug/l	UJ	4.1	25	ug/l	UB					ND	25	ug/l	UJ	ND	25	ug/l	UJ	ND	25	ug/l	UJ	ND	25	ug/l	UJ	ND	25	ug/l	UJ	ND	25	ug/l	UJ	ND	25	ug/l	UJ	9.0	25	ug/l	UB				
Bromomethane	74-83-9	ND	1.0	ug/l	UJ									ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ								
Chloromethane	74-87-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UB	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
GC/MS SVOC																																													
OSW-8270D																																													
14-Pentadecenoic acid - TIC	17351-34-7					23	---	ug/l	NJ																																						
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5					22	---	ug/l	NJ																																						
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3					5.8	---	ug/l	NJ																																						
9-Octadecenamide, (Z)- - TIC	301-02-0					4.3	---	ug/l	NJ																																						
9-Octadecenoic acid, (E)- - TIC	112-79-8																	3.2	---	ug/l	NJ																										
Benzenesulfonamide, N-butyl- - TIC	3622-84-2					37	---	ug/l	NJ																																						
Cholestan-3-ol, 4-methyl-, (3.beta.,4.al - TIC	3903-57-9																																										3.7	---	ug/l	NJ				
Diethyltoluamide - TIC	134-62-3																																									17	---	ug/l	NJ				
Eicosane - TIC	112-95-8					3.1	---	ug/l	NJ																																						
Hexadeca-2,6,10,14-tetraen-1-ol, 3,7,11, - TIC	7614-21-3					3.1	---	ug/l	NJ																																						
Nonanoic acid - TIC	112-05-0					69	---	ug/l	NJ																																						
Octadecanoic acid - TIC	57-11-4													3.0	---	ug/l	NJ					3.8	---	ug/l	NJ																				
Oleic Acid - TIC	112-80-1																									5.8	---	ug/l	NJ													5.0	---	ug/l	NJ	24	---	ug/l	NJ
Tetradecanoic acid - TIC	544-63-8					6.9	---	ug/l	NJ																																			4.2	---	ug/l	NJ				
Tridecanoic acid - TIC	638-53-9													4.8	---	ug/l	NJ									4.8	---	ug/l	NJ																				
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	366-29-0																																												4.9	---	ug/l	NJ
Metals																																													
OSW-6020A																																													
Selenium	7782-49-2													0.00062	0.0020	mg/l	UB					0.00097	0.0020	mg/l	UB	0.00093	0.0020	mg/l	UB					0.00062	0.0020	mg/l	UB								
Sodium	7440-23-5																	284	1.0	mg/l	E																								
Vanadium	7440-62-2	0.0015	0.0020	mg/l	UB	0.0014	0.0020	mg/l	UB					0.0016	0.0020	mg/l	UB	0.0015	0.0020	mg/l	UB	0.0015	0.0020	mg/l	UB	0.0025	0.0020	mg/l	B	0.0027	0.0020	mg/l	B	0.0032	0.0020	mg/l	B	0.0015	0.0020	mg/l	UB	0.0017	0.0020	mg/l	UB
Vanadium - Dissolved	7440-62-2	0.0011	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB					0.00090	0.0020	mg/l	UB	0.00092	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB	0.0010	0.0020	mg/l	UB	0.0013	0.0020	mg/l	UB	0.0019	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB	0.00090	0.0020	mg/l	UB

APPENDIX 5

EPA Sample Holding Time and Preservation Requirements

Parameter	*Reference Method*	*Matrix*	*Preservation & Storage*	*Holding Times*
Volatile Organics by GCMS	OSW-8260C/SIM	Water	Acidify ph<2 Refrigeration 0-6oC	14 days
Semivolatile Organics by GCMS	OSW-8270D/SIM	Water	Refrigeration 0-6oC	7 days Extraction 40 days Analysis
Polychlorinated Biphenyls by GC/ECD	OSW-8082A	Water	Refrigeration 0-6oC	365 days - Extraction - Analysis
Metals by ICP/ICPMS Spectroscopy	OSW-6010B OSW-6020A	Water	Acidify pH<2 Refrigeration 0-6oC	180 days
Mercury in Aqueous Waste	OSW-7470A	Water	Acidify pH<2 Refrigeration 0-6oC	28 days
Alkalinity	EPA 2320B	Water	Refrigeration 0-6oC	14 days
Chloride and Sulfate	OSW-9056A	Water	Refrigeration 0-6oC	28 days
Total and Amenable Cyanide	OSW-9012B	Water	Test for presence of Sulfide – if unknown collect two samples and treat one with Lead Carbonate. Then adjust sample to pH of greater than or equal to 12with NaOH. Refrigeration at 0-4C –(also may require treatment for aldehydes and chlorine/hypochlorite/sulfite)	14 days if preserved. 24 hours or sooner if unpreserved

ATTACHMENT A

CHAIN OF CUSTODY DOCUMENT(S)
and LAB CORRESPONDENCES

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
85779

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

09/21/2015

Client Information	Sampler: Robert Lautzenheiser	Lab PM: Brown, Shali	Ca	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
	Preservation Code:																				
1 SW-PMB-02-082015	8/20/15	09:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
2 SW-PMB-01-082015	8/20/15	10:10	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
3 SW-03-082015	8/20/15	11:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
4 SW-MRB-03-082015	8/20/15	11:40	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
5 SW-MRB-02-082015	8/20/15	12:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
6 SW-MRB-01-082015	8/20/15	14:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
7 SW-MRB-00-082015	8/20/15	15:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
8 PMP Pond-082015	8/20/15	16:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
9 RW-10A(51-61)-082015	8/20/15	09:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
10 RW-8(204-214)-082015	8/20/15	14:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	H	✓	H	H					Limited Sample Volume, please analyze if sufficient volume available
11 TB-11-082115	8/21/15	—	—	Water	N	N	✓	✓													

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/21/15 830	Cornerstone	James Thiessen	8/21/15 830	TA
2	James Thiessen	8-21-15 1135	TA		8/21/15 1135	TABd
3		8/21/15 1900	TABd		8-22-15 1045	TAN

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.1

From: Gartner, Cathy <Cathy.Gartner@testamericainc.com>
Sent: Monday, October 12, 2015 12:04 PM
To: Jim Tomalia
Cc: Brown, Shali
Subject: RE: FORD Ringwood PM

Got it.

Cathy Gartner
Project Manager - Nashville
615-301-5041

From: Jim Tomalia [mailto:jtomalia@cadenaco.com]
Sent: Monday, October 12, 2015 10:58 AM
To: Gartner, Cathy
Cc: Brown, Shali
Subject: RE: FORD Ringwood PM

Thanks Cathy,
One more level 4 reviewed – 490-85779-1 and have a couple more questions:

CYANIDE - SAMPLE -006 - RAW DATA INDICATES RESULT OF 0.000845 (<0.007) BUT REPORTED RESULT WAS 0.0084? Analysis date 8/25

DISSOLVED MERCURY - SAMPLE RAW DATA NOT REPORTED - DUPLICATE OF 8/25 RUN REPORTED INSTEAD.

Thanks again for your help.

Jim Tomalia
CADENA Inc.
Senior Environmental Compliance Specialist
1099 Highland Drive, Suite E
Ann Arbor, MI 48108
(517) 819-0356 (cell)

From: Gartner, Cathy [mailto:Cathy.Gartner@testamericainc.com]
Sent: Monday, October 12, 2015 11:54 AM
To: Jim Tomalia <jtomalia@cadenaco.com>
Cc: Brown, Shali <Shali.Brown@testamericainc.com>
Subject: RE: FORD Ringwood PM

Hi, Jim,

I will pass this on to the lab.

I did get your last 2 e-mails as well about the additional issues.

From: Gartner, Cathy <Cathy.Gartner@testamericainc.com>
Sent: Monday, October 12, 2015 4:34 PM
To: Jim Tomalia
Cc: Brown, Shali
Subject: Information

Follow Up Flag: Follow up
Flag Status: Completed

Jim,

I have a little bit of information for you.

490-84924 – 8270 The amount used for extraction was 950 ml which gives a prep factor of 1.052. Multiply by raw result 3.44 for final calculation = 3.6.

490-58779-06 – Cyanide - The instrument/ raw data records the final result to the 4th exponent During the upload the data was transferred to TALS as the 3rd exponent. Result has been changed from 0.00845 to 0.000845. We will be getting you revised reports on this one.

The inorganics Operations manager is looking at the metals data. So far, all of the raw data has been in the Level 4 reports.

For example - Job 85779 Dissolved Mercury – pages 20153-57.

He is going to be working on pulling all of those numbers for you.

Cathy

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

Cathy Gartner
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Drive
Nashville, TN 37204
Tel 615-301-5041 | Fax 615-726-3404
www.testamericainc.com

E-Mail Date: 2015-10-27
E-Mail To: tim.roeper@cornerstoneeg.com
cc:

U.S. Mail: Tim Roeper
Cornerstone Environmental Group
100 Crystal Run Road, Suite 101
Middletown, NY 10941

ANALYTICAL DATA VALIDATION REPORT
Ringwood Mines/Landfill
Ford Motor Company
CLIENT PROJECT NUMBER - not available
CADENA PROJECT E203361
SAMPLES COLLECTED August 2015
SUBMITTAL #: 490-86046-1

PREPARED BY:
CADENA, INC.
1099 Highland Drive
Ann Arbor, MI 48108
Telephone: 517-819-0356
Fax: 734-975-6709
Contact: Jim Tomalia (jtomalia@cadenaco.com)
Date: 2015-10-27
www.CADENACO.com

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ATTACHMENT A CHAIN OF CUSTODY DOCUMENT(S)

1.0 INTRODUCTION

The following document details an assessment of the analytical data reported by TestAmerica-Nashville Laboratory the data in the submittals listed below which were collected from the Ringwood Mines/Landfill site as noted. A sampling and analysis summary that lists all sample ID's and testing as related to the laboratory submittal numbers is presented in Appendix 1. A summary of all of the analytical data is presented in Appendix 3. Copies of sample Chain of Custody (COC) documents and cooler receipt forms for samples discussed in this report are included in Attachment A.
Note: One field sample from this submittal was collected in triplicate to facilitate use of this sample as the QC batch MS/MSD for each analysis where appropriate (MS not required for alkalinity).

Table 1.1

Laboratory Submittal	***Sample Date***	***Laboratory Receipt Date***
490-86046-1	8/25-26/2015	8/27/2015

The samples noted below were validated against the associated method/parameter in order to achieve the validation requirements for this SDG:

Table 1.2

Parameter	***Reference Method***	***Analyte Listing***
Volatile Organics	OSW-8260C	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8260CSIM	1,2-Dibromo-3-Chloropropane,1,4-Dioxane,EthyleneDibromide,1,2,3-Trichloropropane
Semi-Volatile Organics	OSW-8270D	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8270DSIM	Extended list includes the following: Benzo(a)anthracene,Benzo(a)pyrene, Benzo(b)fluoranthene,Hexachlorobenzene, Hexachlorobutadiene,N-Nitrosodimethylamine,Pentachlorophenol
PCB	OSW-8082A	7 Standard Aroclors
Metals	OSW-6020A/7470A	Total and dissolved TAL Metals
Ion Chromatography	OSW-9056A	Chloride and Sulfate
Total Cyanide	OSW-9021B	Total and Amenable Cyanide
General Chemistry	APHA-2320B	Total and Bicarbonate Alkalinity

All "SW" analytical methods were referenced from "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition, November 1986 (with all subsequent revisions). The "SM" analytical method was referenced from the "Standard Methods for the Examination of Water and Waste water", latest promulgated revision. "EPA" methods were referenced from the revisions noted.

Laboratory Standard Operating Procedures (SOPs) associated with the methods utilized for this laboratory submittal were not available to CADENA for the purpose of validating this SDG.

Level IV data review provides a comprehensive or extensive review of the analytical data allowing for the complete reconstruction of the chemical analysis. A Level IV (Tier 3) data review was performed on the samples listed in Table 1.2 above by (CADENA).

All of the data that was recalculated was consistent with the reported results to within at least 2 significant figures. Final results may not recalculate exactly beyond this level of precision, in some cases, due to differences in available significant figures between the hardcopy raw data provided and the data utilized for calculations by the laboratory that came directly from the instrument. A table of the laboratory documents reviewed in preparing this report is included in Appendix 2.

The data was reviewed in accordance with the analytical methods and the documents listed below: (NOTE: laboratory criteria – control limits – were utilized to evaluate the data where available. Comparison to NFG criteria are noted when lab criteria was not available or for informational purposes when lab data exceeds NFG criteria).

i.) "Standard Operating Procedure HW-6 Rev12 March 2001: CLP Organics Data Review and Preliminary Review" USEPA Region 2 as identified in project QAPP.
ii.) "Standard Operating Procedure HW-2, Rev11, Jan 1992: Evaluation of Metals Data for the CLP Program" as identified in the project QAPP.

The Level VI review findings are presented in the following subsections.

An overview of the review findings is presented in table format. Several data qualifier flags were utilized in the review process. The definitions of these qualifier flags are as follows:

- J Indicates an estimated value.
- U Indicates the compound or analyte was analyzed for, but not detected at or above the stated limit.
- UJ The analyte/compound was not detected above the reported sample quantitation limit. However, the quantitation limit is considered to be approximate due to associated quality assurance results.
- UB The analyte was detected in the sample at a level between the MDL and RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the reporting limit.
- B The analyte was detected in the sample at a level above the RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the concentration reported.
- R The analyte/compound results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte/compound cannot be verified.

All flags have been incorporated into the data tables in this report.

1.1 VALIDATION QUALIFIER EXECUTIVE SUMMARY

VALIDATION SUMMARY

GCMS VOC and SIM

GCMS VOC Continuing Calibration Verification standards CCV 279129/2 analyzed on 9/4 had multiple responses outside of laboratory control limits. High bias outliers did not have an effect on client sample data or were not associated with target analytes for this submittal. Low bias recoveries were observed for target analyte methyl acetate. All client sample methyl acetate and results should be considered to be estimated and qualified with UJ flags if non-detect and J flags if detected based on this low bias CCV responses.

CCV 279465/2 analyzed on 9/5 was used to calculate re-analysis results for client samples -001 and -003. This CCV also had multiple outliers biased high and low but was acceptable for the reduces list target analytes associated with this sequence (1,1-dichloroethane only) so qualification was not required based on these CCV response outliers.

GCMS VOC-SIM Continuing Calibration Verification standard 278757/2 had an outlier biased high for 1,4-dioxane and 1 out of 4 surrogates. Client samples -001, -002, -003 and -005 1,4-dioxane results should be considered to be estimated and qualified with J flags based on this high bias CCV response outlier.

GCMS SVOC and SIM

GCMS SVOC sample results for 2,4-dinitrophenol were based on an initial calibration linear curve that has poor linearity for the concentration levels below the lowest concentration standard in the curve (2mg/L). This is reflected by the relatively similar results (about 6ug/l) for this analyte in spite of instrument responses that vary by over 10 times. All sample results for this analyte are already J flagged as estimated due to being detected below the RL (MDL=5.9ug/l) but qualifier code has been revised to BCL indicating that results are below reliable calibration levels so should be considered to be estimated with the potential for significant high bias.

GCMS SVOC-SIM sample re-extractions were performed outside of the referenced holding time so these results should be considered to be estimated and qualified with J flags if detected and UJ flags if non-detect. Note: these re-analysis results are not present in database so qualified data was not reported in ARS table associated with this validation report.

PCB

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

METALS

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

INORGANICS

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

The following observations **DID NOT** result in qualification but were noted during the validation review:

GCMS VOC

No additional observations to report.

GCMS VOC-SIM

ICV for sequence 277064 on 8/28 were reported on form VII as outliers based on known spike values reported. Verification with laboratory indicated that the known spike values should have been 10 and 0.5 (instead of 2000/100) as was historically reported for other sequences to these ICV recoveries were considered to be acceptable when compared to these historical values.

GCMS SVOC

Samples -002, -003, -005 were received at a pH of 12 according to the laboratory submittal prep log. This is outside of recommended preservation range for this analysis but sample pH was adjusted prior to sample prep so qualifications were not applied based on this preservation non-conformance.

GCMS SVOC-SIM

Samples -001, -002, -003, -005 were received at a pH of 11 according to the laboratory submittal prep log. This is outside of recommended preservation range for this analysis but sample pH was adjusted prior to sample prep so qualifications were not applied based on this preservation non-conformance.

METALS

Serial dilution sample -002 outliers (Barium, Calcium, Potassium, Sodium and Vanadium) noted in raw data were considered to be acceptable based on re-calculation of raw data so no qualification was required based on serial dilution outliers for this submittal. PDS results were either acceptable or not performed using a sample from this submittal so qualification was not required based on PDS QC results. CRQL responses were consistently high for Potassium but acceptable for all remaining elements.

PCB – internal standard technique was used for both columns. Some initial and continuing calibration outliers were observed for specific aroclor 1016/1260 peaks on the secondary columns but these outliers did not result in qualification of final client sample results.

Sample RW-2 (452-462)-082515 did not have sufficient sample volume available to be analyzed for PCB analysis.

RAW DATA NOT INCLUDED IN ORIGINAL LAB LEVEL 4 DATA PACKAGE:

TOTAL and DISSOLVED MERCURY – raw data reported did not include information specific to samples from this submittal. (Received from lab 2015-10-27).

VERIFICATION SUMMARY

The following qualifications and associated data flags were applied based on the initial level 2 review of this data package.

The following minor QC exceptions or missing information were noted:

GCMS VOC trip blank had a detection below the RL for acetone. Client sample -003 acetone result should be considered to be non-detect at the RL and qualified with a UB flag.

GCMS-SIM VOC QC batch 278757 CCV response outliers as noted in the laboratory submittal case narrative were not used to qualify results as part of this level 2 data package review.

GCMS-SIM and GCMS VOC and GCMS SVOC TIC results should be considered to be estimated and qualified with NJ flags unless the TIC analyte detected is an instrument calibrated compound that is just not part of the TAL for this submittal in which case no qualification is required other than the TIC qualification code or J flag if the result is detected below the RL.

GCMS-SIM VOC sample -001 surrogate recoveries were outliers biased high for 1 out of 4 surrogates. Client

sample -001 detected results should be considered to be estimated and qualified with J flags. Non-detect results do not require qualification.

GCMS VOC QC batch 279129 LCS recoveries were outliers biased high for cyclohexane, 1,1-dichloroethane and cis-1,2-dichloroethylene. Qualification of client sample results was not required based on these high bias QC outliers.

GCMS VOC QC batch 279465 method blank had a detection below the RL for methylene chloride. Qualification of client sample results was not required based on this method blank detection.

GCMS VOC sample -002 MS recovery only was an outlier biased high for cyclohexane. Qualification of client sample results was not required based on this QC outlier alone.

PCB sample -002 analysis was not performed due to insufficient sample volume available according to the laboratory submittal case narrative.

GCMS VOC QC batch 279465 MS recovery outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

GCMS SVOC QC batch 277997 LCS recoveries were outliers biased high for benzaldehyde. Qualification of client sample results was not required based on this high bias QC outlier. Surrogates were outliers biased high for 1 out of 2 acid fraction surrogates in the QC batch LCS and method blank but qualification was not required based on these QC outliers alone.

GCMS-SIM SVOC QC batch 278972 LCS recoveries were outliers biased high along with the LCS/LCSduplicate RPD outliers for benzo(a)anthracene, benzo(a)pyrene and benzo(b)fluoranthene. QC batch 277972 LCS/LCSduplicate RPD only was an outlier for pentachlorophenol. Qualification of client sample results was not required based on these high bias QC outliers. QC batch 278994 LCS/LCSduplicate RPD's only were outliers for these sample analytes and also did not result in qualification for client sample results.

Metals method blanks had detections below the RL in QC batch 277068 for dissolved manganese and dissolved vanadium and in QC batch 277578 for total vanadium. Client samples -001, -003, -005 dissolved vanadium results should be considered to be non-detect at the RL and qualified with UB flags. Client samples -003 and -005 total vanadium results should be considered to be non-detect at the concentration reported and qualified with B flags.

Metals sample -002 MS/MSD recoveries were not considered to be statistically reliable due to elevated levels of target analyte in the original sample matrix relative to the amount spiked (4X rule) so were not used to qualify results for total and dissolved calcium, potassium and sodium.

Cyanide sample -002 MS/MSD recoveries were outliers biased low. Client sample -002 cyanide results should be considered to be estimated and qualified with a UJ flag.

Chloride and Sulfate sample -002 MS/MSD recoveries were outliers biased low. Client sample -002 chloride and sulfate results should be considered to be estimated and qualified with J flags.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

2.0 VOLATILE ORGANIC COMPOUNDS (VOCs) – METHOD SW846 8260C and SIM Analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

2.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) VOCs

2.1.1 TUNING AND MASS CALIBRATION – GC/MS VOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

2.1.2 INITIAL CALIBRATION – GC/MS VOCs

Initial calibration data for VOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS VOCs

Initial calibration verification (ICV) standards for VOC analyses were reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

2.2 CONTINUING CALIBRATION – GC/MS VOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.3 INTERNAL STANDARDS – GC/MS VOCs

Internal standard (IS) data were reviewed and met criteria without exception.

2.4 SURROGATE SPIKE RECOVERIES – GC/MS VOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

2.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS VOCs

A laboratory control sample (LCS) was prepared and analyzed for VOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

2.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS VOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.
CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

2.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS VOCs

There were no field duplicate comparisons performed as part of this validation request.

2.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS VOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

2.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS VOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable unless noted otherwise in verification/validation summary.

2.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS VOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

2.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS VOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

3.0 SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) – METHOD SW846 8270D and SIM analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

3.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) SVOCs

3.1.1 TUNING AND MASS CALIBRATION – GC/MS SVOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

3.1.2 INITIAL CALIBRATION – GC/MS SVOCs

Initial calibration data for SVOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

3.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS SVOCs

Initial calibration verification (ICV) standards for SVOC analyses were reviewed and met criteria specified by the laboratory with no exceptions.

3.2 CONTINUING CALIBRATION – GC/MS SVOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary

3.3 INTERNAL STANDARDS – GC/MS SVOCs

Internal standard (IS) data were reviewed and met criteria without exception.

3.4 SURROGATE SPIKE RECOVERIES – GC/MS SVOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

3.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS SVOCs

A laboratory control sample (LCS) was prepared and analyzed for SVOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

3.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS SVOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

3.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS SVOCs

There were no field duplicate comparisons performed as part of this validation request.

3.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS SVOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

3.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS SVOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable without exception.

3.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS SVOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

3.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS SVOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

4.0 POLYCHLORINATED BIPHENYLS (PCBs) – METHOD SW846 8082A

The target analyte list was defined by the client as the standard 7 aroclors.

4.1 CALIBRATION – GAS CHROMATOGRAPH-ECD
4.1.1 TUNING AND MASS CALIBRATION – PCB

Not applicable for this analysis.

4.1.2 INITIAL CALIBRATION – PCB

Initial calibration data for PCBs were reviewed and met the criteria for instrument sensitivity and linearity of response without exception.

4.1.3 INITIAL CALIBRATION VERIFICATION – PCB

Initial calibration verification (ICV) standards for PCB analyses were reviewed and met criteria specified by the laboratory with no exceptions.

4.2 CONTINUING CALIBRATION – PCBs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

4.3 INTERNAL STANDARDS – PCB

Internal standard (IS) data were reviewed and met criteria unless noted otherwise in verification/validation summary. (NOTE: Lab quantitation approach DID use internal standard quantitation for this submittal).

4.4 SURROGATE SPIKE RECOVERIES – PCB

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

4.5 LABORATORY CONTROL SAMPLE ANALYSES - PCB

A laboratory control sample (LCS) was prepared and analyzed for PCBs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary..

4.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - PCB

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

4.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - PCB

There were no field duplicate comparisons performed as part of this validation request.

4.8 EXTRACT CLEANUP - PCB

Extract cleanups were performed in accordance with laboratory SOP's and as noted in level 4 data package prep logs.

4.9 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - PCB

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

4.10 TENTATIVELY IDENTIFIED COMPOUNDS - PCB

Not requested for this analytical procedure.

4.11 BLANKS – METHOD/FIELD/CALIBRATION - PCB

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

5.0 HPLC/IC – METHOD SW846 9056A – CHLORIDE AND SULFATE

5.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

5.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

5.3 CONTINUTING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

5.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

5.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

5.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

5.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

5.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

6.0 METALS – ICPMS by Method 6020 TOTAL AND DISSOLVED and Mercury by Method 7470A

The following samples provided in this SDG underwent a Level IV review for either/and metals or mercury analyses:

- Method 6020A: ALL
- Method 7470A: ALL

6.1 ICP/MS TUNING AND MASS CALIBRATION

Instrument tuning data were reviewed. Tuning elements were analyzed. All tuning criteria were met for the analyses, indicating proper optimization of the instrumentation.

6.2 INITIAL CALIBRATION

Initial calibration data for metals and mercury were reviewed and met the criteria for linearity of response without exception.

6.3 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards for metals and mercury analyses were reviewed and met criteria unless otherwise noted in verification/validation summary section of this document.

An initial calibration blank (ICB) was analyzed for metals and mercury analyses. Metals and mercury were reported as non-detect in each ICB analysis unless noted otherwise in verification/validation summary.

6.4 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for metals and mercury analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

6.5 INTERFERENCE CHECK STANDARD

The interference check standard results were reviewed and found to meet criteria.

6.6 INTERNAL STANDARDS

Internal standard (IS) data were reviewed and found to meet criteria unless noted otherwise in verification/validation summary.

6.7 LABORATORY CONTROL SAMPLE ANALYSIS

A laboratory control sample (LCS) was prepared and analyzed for metals and mercury. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

6.8 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE (MS/MSD) ANALYSES

The MS/MSD recoveries and RPD's were either not performed using a client sample or were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

6.9 CONTRACT REQUIRED DETECTION LIMIT STANDARD ANALYSES

Each contract required detection limit (CRDL) standard was analyzed at the proper frequency and were within laboratory control limits unless noted otherwise in verification/validation summary.

6.10 ICP SERIAL DILUTION

Serial dilutions were analyzed at the proper frequency and were either not performed using the client sample or were within laboratory control limits unless noted otherwise in verification/validation summary.

6.11 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

6.12 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

6.13 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

7.0 GENERAL CHEMISTRY- TOTAL AND AMENABLE CYANIDE AND ALKALINITY – METHODS 9012B and 2320B

7.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

7.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

7.3 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

7.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

7.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

7.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

7.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

7.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

8.0 REPRESENTATIVENESS EVALUATION

Representativeness is a qualitative evaluation of whether the data represents actual environmental conditions. Representativeness was evaluated using holding time criteria, which reflect the length of time after sample collection that a sample or extract remains representative of environmental conditions. Depending on the analysis, either one or two holding times were evaluated.

i.) For those analyses that do not include a sample extraction, only one holding time was evaluated: the length of time between sample collection and analysis.

ii.) For analyses that require sample extraction prior to analysis, two holding times were evaluated: the length of time from sampling until extraction and the length of time from extraction to analysis.

Holding times are compared to standard method specific holding times accepted or recommended by the United States Environmental Protection Agency (USEPA). Those holding times outside of USEPA acceptance criteria are qualitatively evaluated to determine their effect on sample representativeness.

Representativeness was also evaluated by analysis of laboratory method blanks and field equipment blanks. Laboratory method blanks and field equipment blanks are used to identify sources of contamination not associated with environmental conditions.

8.1 SAMPLE PRESERVATION AND HOLDING TIMES

Sample holding time and preservation requirements are summarized in Appendix 5.

All sample extractions and/or analyses were performed within the specified holding times unless noted otherwise in verification/validation summary.

All samples were properly preserved and cooled to 0-6°C after collection.

8.2 METHOD BLANK SUMMARY

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

Evaluation of blank contamination includes directions on the interpretation of the affected analytical results.

9.0 USABILITY AND COMPARABIILTY

Usability of data was evaluated by assuring that all the analytical requests were met, samples were received in the proper condition, and all analyses were performed within the appropriate holding times unless noted otherwise in verification/validation summary

No data evaluated within this delivery group was considered unusable (qualified with an R flag) due to sample integrity, sample matrix interference or batch quality control issues unless noted otherwise in verification/validation summary.

10.0 QC SUMMARY

All sample results meet the project specific QAPP standard for usability with exceptions defined by validation and verification qualifiers as applied. Please reference the following tables for a summary of the investigative field sample data and their valid qualifiers based on Level 4 technical review of the analytical data.

APPENDIX 1

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Nashville
Laboratory Submittal: 86046-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	Metals by ICP Mass Spectroscopy(D)	Metals by ICP Mass Spectroscopy	Mercury (Manual Cold Vapor)(D)	Mercury (Manual Cold Vapor)	TOTAL AND AMENABLE CYANIDE (AUTOMATED COLORIMETRIC, WITH OFF-LINE DISTILLATION)	Inorganic Anions by IC	Alkalinity Prep
490860461	RW-3DS (155-160)-082515	8/25/2015	8:40:00	X	X	X	X	X	X	X	X	X	X	X	X
490860462	RW-2 (452-462)-082515	8/25/2015	1:30:00	X	X	X	X		X	X	X	X	X	X	X
490860463	Dup-04-082515	8/25/2015	12:00:00	X	X	X	X	X	X	X	X	X	X	X	X
490860464	TB-14-082515	8/26/2015	1:00:00	X	X										
490860465	RW-11D (262-267)-082615	8/26/2015	10:30:00	X	X	X	X	X	X	X	X	X	X	X	X

APPENDIX 2

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-86046-1
August 2015

Description

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  - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
  - MS and MSD integration/internal standard and total ion profile raw data
- Miscellaneous Data
  - Run logs

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NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-86046-1
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  - Internal Standard and RT area summary (form VIII)
- Sample Data
  - GCMS VOA Organics Analysis Data Sheet (Form I)
  - Raw integration data from instrument
  - Total Ion Profile Chromatogram
  - Ion profiles of detected target analyte peaks
  - Manual integration if applicable
  - Tentatively Identified Compound Reports (if applicable)
- Standards Data
  - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
  - ICAL Raw integration data from instrument
  - ICAL Total Ion Profile Chromatogram
  - ICV check standard recovery report
  - ICV check standard total ion profile with integration
  - GCMS VOA Continuing Calibration Data (Form VII)
  - CCV raw integration data from instrument
  - CCV Total Ion Profile Chromatogram
  - Manual integration if applicable
- Raw QC Data
  - Tune information (not applicable for SIM)
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LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
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    - ICAL (Form VII)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - QC DATA (Form I)
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    - Analysis Run Logs

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LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
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APPENDIX 3

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 86046-1

		Sample Name:	RW-3DS (155-160)-082515				RW-2 (452-462)-082515				Dup-04-082515			
		Lab Sample ID:	490860461				490860462				490860463			
		Sample Date:	8/25/2015				8/25/2015				8/25/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	1.0	1.0	ug/l	---	ND	1.0	ug/l	---	1.0	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Propene, 2-methyl- - TIC	115-11-7	3.3	---	ug/l	NJ	5.2	---	ug/l	NJ	5.5	---	ug/l	NJ
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Butanone, 3,3-dimethyl- - TIC	75-97-8												
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	16	25	ug/l	J	3.0	25	ug/l	UB
Benzene	71-43-2	ND	1.0	ug/l	---	0.24	1.0	ug/l	J	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	11	1.0	ug/l	---	1.8	1.0	ug/l	---	12	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Cysteic acid - TIC	1000131-23-1	8.6	---	ug/l	NJ								
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	0.19	1.0	ug/l	J	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	0.26	1.0	ug/l	J	ND	1.0	ug/l	---	0.23	1.0	ug/l	J
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isobutyl alcohol - TIC	78-83-1	38	50	ug/l	J					47	50	ug/l	J
Isopropyl alcohol - TIC	67-63-0					62	50	ug/l	---				
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	0.30	1.0	ug/l	J	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Toluene	108-88-3	0.60	1.0	ug/l	J	0.71	1.0	ug/l	J	0.48	1.0	ug/l	J
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic2					3.1	---	ug/l	NJ				
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	38	10	ug/l	J	4.7	10	ug/l	J	36	10	ug/l	J
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 86046-1

		Sample Name:	RW-3DS (155-160)-082515				RW-2 (452-462)-082515				Dup-04-082515			
		Lab Sample ID:	490860461				490860462				490860463			
		Sample Date:	8/25/2015				8/25/2015				8/25/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,4-Dioxane - TIC	123-91-1	9.9	10	ug/l	J					9.6	10	ug/l	J
	1-Heptadecene - TIC	6765-39-5												
	17-Pentatriacontene - TIC	6971-40-0												
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	6.6	25	ug/l	J	6.5	25	ug/l	J	6.8	25	ug/l	J
	2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Mercaptobenzothiazole - TIC	149-30-4	7.6	---	ug/l	NJ					8.0	---	ug/l	NJ
	2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitroaniline	88-74-4	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,5-di-tert-Butyl-4-hydroxybenzaldehyde - TIC	1620-98-0	9.5	---	ug/l	NJ					9.5	---	ug/l	NJ
	3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5	8.8	---	ug/l	NJ	18	---	ug/l	NJ	10	---	ug/l	NJ
	3-Nitroaniline	99-09-2	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Nitrophenol	100-02-7	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3	20	---	ug/l	NJ	12	---	ug/l	NJ	22	---	ug/l	NJ
	9,12-Octadecadienoic acid (Z,Z)- - TIC	60-33-3												
	9-Octadecenoic acid, (E)- - TIC	112-79-8	18	---	ug/l	NJ					19	---	ug/l	NJ
	Acenaphthene	83-32-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acenaphthylene	208-96-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Atrazine	1912-24-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzeneacetic acid - TIC	103-82-2					10	---	ug/l	NJ				
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2	7.6	---	ug/l	NJ					8.2	---	ug/l	NJ
	Benzoic Acid - TIC	65-85-0												
	Benzoic acid, 2,4-dimethyl- - TIC	611-01-8	5.5	---	ug/l	NJ								
	Benzoic acid, 2,5-dimethyl- - TIC	610-72-0									6.1	---	ug/l	NJ
	Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	1421-49-4									5.8	---	ug/l	NJ
	Benzothiazole - TIC	95-16-9	4.5	---	ug/l	NJ								
	Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cyclohexanone, 3,3,5-trimethyl- - TIC	873-94-9					5.1	---	ug/l	NJ				
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyltoluamide - TIC	134-62-3	5.6	---	ug/l	NJ					8.0	---	ug/l	NJ
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Ethanol, 1-(2-butoxyethoxy)- - TIC	54446-78-5												
	Ethanone, 1-(2-hydroxyphenyl)- - TIC	118-93-4					3.6	---	ug/l	NJ				
	Fluoranthene	206-44-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Fluorene	86-73-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Heptadecane, 2,6,10,15-tetramethyl- - TIC	54833-48-6									4.7	---	ug/l	NJ
	Heptadecanoic acid - TIC	506-12-7												
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexadecanoic acid, butyl ester - TIC	111-06-8									11	---	ug/l	NJ
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	n-Hexadecanoic acid - TIC	57-10-3	8.7	---	ug/l	NJ	5.0	---	ug/l	NJ				
	N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Nitrobenzene	98-95-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Nonanoic acid - TIC	112-05-0					5.5	---	ug/l	NJ				
	Octadecanoic acid - TIC	57-11-4	11	---	ug/l	NJ								
	Oleic Acid - TIC	112-80-1					19	---	ug/l	NJ				
	Phenanthrene	85-01-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Phenol	108-95-2	3.0	10	ug/l	J	10	10	ug/l	---	2.7	10	ug/l	J
	Pyrene	129-00-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Tetradecanoic acid - TIC	544-63-8					4.2	---	ug/l	NJ				
	Tridecanoic acid - TIC	638-53-9									6.3	---	ug/l	NJ
	Unknown - TIC	Tic1					6.7	---	ug/l	J				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 86046-1

			Sample Name:	RW-3DS (155-160)-082515				RW-2 (452-462)-082515				Dup-04-082515			
			Lab Sample ID:	490860461				490860462				490860463			
			Sample Date:	8/25/2015				8/25/2015				8/25/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
	OSW-8270DSim													
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---	ND	0.30	ug/l	---
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2	ND	0.50	ug/l	---					ND	0.50	ug/l	---
	PCB-1221	11104-28-2	ND	0.50	ug/l	---					ND	0.50	ug/l	---
	PCB-1232	11141-16-5	ND	0.50	ug/l	---					ND	0.50	ug/l	---
	PCB-1242	53469-21-9	ND	0.50	ug/l	---					ND	0.50	ug/l	---
	PCB-1248	12672-29-6	ND	0.50	ug/l	---					ND	0.50	ug/l	---
	PCB-1254	11097-69-1	ND	0.50	ug/l	---					ND	0.50	ug/l	---
	PCB-1260	11096-82-5	ND	0.50	ug/l	---					ND	0.50	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---					ND	0.50	ug/l	---
Metals														
	OSW-6020A													
	Aluminum	7429-90-5	0.082	0.020	mg/l	---	0.10	0.020	mg/l	---	0.077	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	0.061	0.10	mg/l	J	0.14	0.10	mg/l	---	0.055	0.10	mg/l	J
	Antimony	7440-36-0	0.00051	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	Arsenic	7440-38-2	0.012	0.0020	mg/l	---	0.0054	0.0020	mg/l	---	0.012	0.0020	mg/l	---
	Arsenic - Dissolved	7440-38-2	0.014	0.010	mg/l	---	0.0056	0.010	mg/l	J	0.012	0.010	mg/l	---
	Barium	7440-39-3	0.013	0.0020	mg/l	---	0.059	0.0020	mg/l	---	0.013	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.018	0.010	mg/l	---	0.070	0.010	mg/l	---	0.016	0.010	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0050	mg/l	---	ND	0.0050	mg/l	---	ND	0.0050	mg/l	---
	Calcium	7440-70-2	46.6	1.0	mg/l	---	132	50.0	mg/l	---	45.2	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	55.6	5.0	mg/l	---	145	5.0	mg/l	---	49.1	5.0	mg/l	---
	Chromium	7440-47-3	0.0035	0.0020	mg/l	---	0.00058	0.0020	mg/l	J	0.0032	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	Cobalt	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	Copper	7440-50-8	ND	0.0020	mg/l	---	0.0010	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	Iron	7439-89-6	0.012	0.025	mg/l	J	0.021	0.025	mg/l	J	0.027	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	ND	0.13	mg/l	---	ND	0.13	mg/l	---	ND	0.13	mg/l	---
	Lead	7439-92-1	ND	0.0020	mg/l	---	0.00020	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Lead - Dissolved	7439-92-1	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	Magnesium	7439-95-4	ND	1.0	mg/l	---	ND	1.0	mg/l	---	ND	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	ND	5.0	mg/l	---	ND	5.0	mg/l	---	ND	5.0	mg/l	---
	Manganese	7439-96-5	0.00059	0.0020	mg/l	J	ND	0.0020	mg/l	---	0.00080	0.0020	mg/l	J
	Manganese - Dissolved	7439-96-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	Nickel	7440-02-0	0.0056	0.0020	mg/l	---	0.0083	0.0020	mg/l	---	0.0054	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0	0.0037	0.010	mg/l	J	0.0088	0.010	mg/l	J	0.0035	0.010	mg/l	J
	Potassium	7440-09-7	54.8	1.0	mg/l	---	103	50.0	mg/l	---	51.7	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	56.0	5.0	mg/l	---	129	5.0	mg/l	---	52.4	5.0	mg/l	---
	Selenium	7782-49-2	0.0042	0.0020	mg/l	---	0.0036	0.0020	mg/l	---	0.0039	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	0.0031	0.010	mg/l	J	0.0049	0.010	mg/l	J	0.0041	0.010	mg/l	J
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	Sodium	7440-23-5	219	50.0	mg/l	---	371	50.0	mg/l	---	221	50.0	mg/l	---
	Sodium - Dissolved	7440-23-5	220	5.0	mg/l	---	382	5.0	mg/l	---	209	5.0	mg/l	---
	Thallium	7440-28-0	0.00070	0.0020	mg/l	J	0.00051	0.0020	mg/l	J	0.00024	0.0020	mg/l	J
	Thallium - Dissolved	7440-28-0	0.0012	0.010	mg/l	J	0.0029	0.010	mg/l	J	ND	0.010	mg/l	---
	Vanadium	7440-62-2	0.0058	0.0020	mg/l	---	0.040	0.0020	mg/l	---	0.0056	0.0020	mg/l	B
	Vanadium - Dissolved	7440-62-2	0.0085	0.010	mg/l	UB	0.040	0.010	mg/l	---	0.0083	0.010	mg/l	UB
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.13	mg/l	---	ND	0.13	mg/l	---	ND	0.13	mg/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	UJ	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	32.2	5.00	mg/l	---	601	5.00	mg/l	J	31.4	5.00	mg/l	---
	Sulfate	14808-79-8	464	5.00	mg/l	---	167	5.00	mg/l	J	467	5.00	mg/l	---
Prep														
	APHA-2320B													
	Bicarbonate Alkalinity as CaCO3	E-14508	ND	10.0	mg/l	---	ND	10.0	mg/l	---	ND	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	92.1	10.0	mg/l	---	127	10.0	mg/l	---	104	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 86046-1

		Sample Name:	TB-14-082515				RW-11D (262-267)-082615			
		Lab Sample ID:	490860464				490860465			
		Sample Date:	8/26/2015				8/26/2015			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**		**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC										
OSW-8260C										
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---		ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---		ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---		ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---		ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---		ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---		ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---		ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---		ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---		ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---		ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---		ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---		ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---		ND	1.0	ug/l	---
1-Propene, 2-methyl- - TIC	115-11-7									
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---		29	50	ug/l	J
2-Butanone, 3,3-dimethyl- - TIC	75-97-8						3.1	---	ug/l	NJ
2-Hexanone	591-78-6	ND	10	ug/l	---		ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---		ND	10	ug/l	---
Acetone	67-64-1	3.0	25	ug/l	J		45	25	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---		1.6	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---		63	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---		0.22	1.0	ug/l	J
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---		ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---		ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---		ND	5.0	ug/l	---
Cysteic acid - TIC	1000131-23-1									
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Isobutyl alcohol - TIC	78-83-1									
Isopropyl alcohol - TIC	67-63-0									
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	UJ		ND	10	ug/l	UJ
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---		ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---		ND	5.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---		ND	6.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---		ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---		ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Unknown - TIC	Tic2									
Vinyl chloride	75-01-4	ND	1.0	ug/l	---		ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---		ND	3.0	ug/l	---
OSW-8260CSim										
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---		ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---		ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---		26	10	ug/l	J
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---		ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 86046-1

		Sample Name:	TB-14-082515				RW-11D (262-267)-082615			
		Lab Sample ID:	490860464				490860465			
		Sample Date:	8/26/2015				8/26/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC										
OSW-8270D										
	1,2,4,5-Tetrachlorobenzene	95-94-3					ND	10	ug/l	---
	1,4-Dioxane - TIC	123-91-1					9.5	10	ug/l	J
	1-Heptadecene - TIC	6765-39-5					6.7	---	ug/l	NJ
	17-Pentatriacontene - TIC	6971-40-0					7.7	---	ug/l	NJ
	2,2'-oxybis[1-chloropropane]	108-60-1					ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2					ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4					ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2					ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2					ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9					ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5					6.6	25	ug/l	J
	2,4-Dinitrotoluene	121-14-2					ND	10	ug/l	---
	2,6-Dinitrotoluene	606-20-2					ND	10	ug/l	---
	2-Chloronaphthalene	91-58-7					ND	10	ug/l	---
	2-Chlorophenol	95-57-8					ND	10	ug/l	---
	2-Mercaptobenzothiazole - TIC	149-30-4					12	---	ug/l	NJ
	2-Methylnaphthalene	91-57-6					ND	2.0	ug/l	---
	2-Methylphenol	95-48-7					ND	10	ug/l	---
	2-Nitroaniline	88-74-4					ND	25	ug/l	---
	2-Nitrophenol	88-75-5					ND	10	ug/l	---
	3 & 4 Methylphenol	65794-96-9					ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1					ND	10	ug/l	---
	3,5-di-tert-Butyl-4-hydroxybenzaldehyde - TIC	1620-98-0					7.6	---	ug/l	NJ
	3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5					39	---	ug/l	NJ
	3-Nitroaniline	99-09-2					ND	25	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1					ND	25	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3					ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7					ND	10	ug/l	---
	4-Chloroaniline	106-47-8					ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3					ND	10	ug/l	---
	4-Nitroaniline	100-01-6					ND	25	ug/l	---
	4-Nitrophenol	100-02-7					ND	25	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3					78	---	ug/l	NJ
	9,12-Octadecadienoic acid (Z,Z)- - TIC	60-33-3					16	---	ug/l	NJ
	9-Octadecenoic acid, (E)- - TIC	112-79-8								
	Acenaphthene	83-32-9					ND	2.0	ug/l	---
	Acenaphthylene	208-96-8					ND	2.0	ug/l	---
	Acetophenone	98-86-2					ND	10	ug/l	---
	Anthracene	120-12-7					ND	2.0	ug/l	---
	Atrazine	1912-24-9					ND	10	ug/l	---
	Benzaldehyde	100-52-7					ND	10	ug/l	---
	Benzeneacetic acid - TIC	103-82-2								
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2								
	Benzoic Acid - TIC	65-85-0					8.5	---	ug/l	NJ
	Benzoic acid, 2,4-dimethyl- - TIC	611-01-8								
	Benzoic acid, 2,5-dimethyl- - TIC	610-72-0								
	Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	1421-49-4								
	Benzothiazole - TIC	95-16-9								
	Benzo[g,h,i]perylene	191-24-2					ND	2.0	ug/l	---
	Benzo[k]fluoranthene	207-08-9					ND	2.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1					ND	10	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4					ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7					ND	10	ug/l	---
	Butyl benzyl phthalate	85-68-7					ND	10	ug/l	---
	Caprolactam	105-60-2					ND	10	ug/l	---
	Carbazole	86-74-8					ND	10	ug/l	---
	Chrysene	218-01-9					ND	2.0	ug/l	---
	Cyclohexanone, 3,3,5-trimethyl- - TIC	873-94-9								
	Di-n-butyl phthalate	84-74-2					ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0					ND	10	ug/l	---
	Dibenz(a,h)anthracene	53-70-3					ND	2.0	ug/l	---
	Dibenzofuran	132-64-9					ND	10	ug/l	---
	Diethyl phthalate	84-66-2					ND	10	ug/l	---
	Diethyltoluamide - TIC	134-62-3								
	Dimethyl phthalate	131-11-3					ND	10	ug/l	---
	Diphenyl	92-52-4					ND	10	ug/l	---
	Ethanol, 1-(2-butoxyethoxy)- - TIC	54446-78-5					27	---	ug/l	NJ
	Ethanone, 1-(2-hydroxyphenyl)- - TIC	118-93-4								
	Fluoranthene	206-44-0					ND	2.0	ug/l	---
	Fluorene	86-73-7					ND	2.0	ug/l	---
	Heptadecane, 2,6,10,15-tetramethyl- - TIC	54833-48-6								
	Heptadecanoic acid - TIC	506-12-7					8.5	---	ug/l	NJ
	Hexachlorocyclopentadiene	77-47-4					ND	10	ug/l	---
	Hexachloroethane	67-72-1					ND	10	ug/l	---
	Hexadecanoic acid, butyl ester - TIC	111-06-8								
	Indeno[1,2,3-cd]pyrene	193-39-5					ND	2.0	ug/l	---
	Isophorone	78-59-1					ND	10	ug/l	---
	n-Hexadecanoic acid - TIC	57-10-3					19	---	ug/l	NJ
	N-Nitrosodi-n-propylamine	621-64-7					ND	10	ug/l	---
	N-Nitrosodiphenylamine	86-30-6					ND	10	ug/l	---
	Naphthalene	91-20-3					ND	2.0	ug/l	---
	Nitrobenzene	98-95-3					ND	10	ug/l	---
	Nonanoic acid - TIC	112-05-0					43	---	ug/l	NJ
	Octadecanoic acid - TIC	57-11-4					29	---	ug/l	NJ
	Oleic Acid - TIC	112-80-1								
	Phenanthrene	85-01-8					ND	2.0	ug/l	---
	Phenol	108-95-2					2.3	10	ug/l	J
	Pyrene	129-00-0					ND	2.0	ug/l	---
	Tetradecanoic acid - TIC	544-63-8					7.6	---	ug/l	NJ
	Tridecanoic acid - TIC	638-53-9								
	Unknown - TIC	Tic1								

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 86046-1

			Sample Name:	TB-14-082515			RW-11D (262-267)-082615			
			Lab Sample ID:	490860464			490860465			
			Sample Date:	8/26/2015			8/26/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
	OSW-8270DSim									
	Benzo[a]anthracene	56-55-3					ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8					ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2					ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1					ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3					ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9					ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5					ND	0.30	ug/l	---
GC Other										
	OSW-8082A									
	PCB-1016	12674-11-2					ND	0.50	ug/l	---
	PCB-1221	11104-28-2					ND	0.50	ug/l	---
	PCB-1232	11141-16-5					ND	0.50	ug/l	---
	PCB-1242	53469-21-9					ND	0.50	ug/l	---
	PCB-1248	12672-29-6					ND	0.50	ug/l	---
	PCB-1254	11097-69-1					ND	0.50	ug/l	---
	PCB-1260	11096-82-5					ND	0.50	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3					ND	0.50	ug/l	---
Metals										
	OSW-6020A									
	Aluminum	7429-90-5					0.73	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5					0.065	0.10	mg/l	J
	Antimony	7440-36-0					ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0					ND	0.010	mg/l	---
	Arsenic	7440-38-2					0.0024	0.0020	mg/l	---
	Arsenic - Dissolved	7440-38-2					ND	0.010	mg/l	---
	Barium	7440-39-3					0.54	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3					0.57	0.010	mg/l	---
	Beryllium	7440-41-7					ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7					ND	0.010	mg/l	---
	Cadmium	7440-43-9					ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9					ND	0.0050	mg/l	---
	Calcium	7440-70-2					383	50.0	mg/l	---
	Calcium - Dissolved	7440-70-2					439	5.0	mg/l	---
	Chromium	7440-47-3					0.040	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3					0.030	0.010	mg/l	---
	Cobalt	7440-48-4					ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4					ND	0.010	mg/l	---
	Copper	7440-50-8					0.0032	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8					ND	0.010	mg/l	---
	Iron	7439-89-6					0.49	0.025	mg/l	---
	Iron - Dissolved	7439-89-6					ND	0.13	mg/l	---
	Lead	7439-92-1					0.00069	0.0020	mg/l	J
	Lead - Dissolved	7439-92-1					ND	0.010	mg/l	---
	Magnesium	7439-95-4					ND	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4					ND	5.0	mg/l	---
	Manganese	7439-96-5					0.0063	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5					ND	0.010	mg/l	---
	Nickel	7440-02-0					0.017	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0					0.015	0.010	mg/l	---
	Potassium	7440-09-7					117	50.0	mg/l	---
	Potassium - Dissolved	7440-09-7					123	5.0	mg/l	---
	Selenium	7782-49-2					0.0010	0.0020	mg/l	J
	Selenium - Dissolved	7782-49-2					ND	0.010	mg/l	---
	Silver	7440-22-4					ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4					ND	0.010	mg/l	---
	Sodium	7440-23-5					210	50.0	mg/l	---
	Sodium - Dissolved	7440-23-5					209	5.0	mg/l	---
	Thallium	7440-28-0					ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0					ND	0.010	mg/l	---
	Vanadium	7440-62-2					0.0024	0.0020	mg/l	B
	Vanadium - Dissolved	7440-62-2					0.0013	0.010	mg/l	UB
	Zinc	7440-66-6					ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6					ND	0.13	mg/l	---
	OSW-7470A									
	Mercury	7439-97-6					ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6					ND	0.00020	mg/l	---
General Chemistry										
	OSW-9012B									
	Cyanide, Total	57-12-5					ND	0.010	mg/l	---
	OSW-9056A									
	Chloride	16887-00-6					40.5	1.00	mg/l	---
	Sulfate	14808-79-8					40.6	1.00	mg/l	---
Prep										
	APHA-2320B									
	Bicarbonate Alkalinity as CaCO3	E-14508					ND	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506					1300	10.0	mg/l	---

APPENDIX 4

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 86046-1

		Sample Name:	RW-3DS (155-160)-082515				RW-2 (452-462)-082515				Dup-04-082515				TB-14-082515				RW-11D (262-267)-082615			
		Lab Sample ID:	490860461				490860462				490860463				490860464				490860465			
		Sample Date:	8/25/2015				8/25/2015				8/25/2015				8/26/2015				8/26/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																						
	OSW-8260C																					
	1-Propene, 2-methyl- - TIC	115-11-7	3.3	---	ug/l	NJ	5.2	---	ug/l	NJ	5.5	---	ug/l	NJ								
	2-Butanone, 3,3-dimethyl- - TIC	75-97-8																	3.1	---	ug/l	NJ
	Acetone	67-64-1									3.0	25	ug/l	UB								
	Cysteic acid - TIC	1000131-23-1	8.6	---	ug/l	NJ																
	Isobutyl alcohol - TIC	78-83-1	38	50	ug/l	J					47	50	ug/l	J								
	Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
	Unknown - TIC	Tic2					3.1	---	ug/l	NJ												
GC/MS SVOC																						
	OSW-8260CSim																					
	1,4-Dioxane	123-91-1	9.9	10	ug/l	J	4.7	10	ug/l	J	9.6	10	ug/l	J					9.5	10	ug/l	J
	OSW-8270D																					
	1-Heptadecene - TIC	6765-39-5																	6.7	---	ug/l	NJ
	17-Pentatriacontene - TIC	6971-40-0																	7.7	---	ug/l	NJ
	2,4-Dinitrophenol	51-28-5	6.6	25	ug/l	J	6.5	25	ug/l	J	6.8	25	ug/l	J					6.6	25	ug/l	J
	2-Mercaptobenzothiazole - TIC	149-30-4	7.6	---	ug/l	NJ					8.0	---	ug/l	NJ					12	---	ug/l	NJ
	3,5-di-tert-Butyl-4-hydroxybenzaldehyde - TIC	1620-98-0	9.5	---	ug/l	NJ					9.5	---	ug/l	NJ					7.6	---	ug/l	NJ
	3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5	8.8	---	ug/l	NJ	18	---	ug/l	NJ	10	---	ug/l	NJ					39	---	ug/l	NJ
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3	20	---	ug/l	NJ	12	---	ug/l	NJ	22	---	ug/l	NJ					78	---	ug/l	NJ
	9,12-Octadecadienoic acid (Z,Z)- - TIC	60-33-3																	16	---	ug/l	NJ
	9-Octadecenoic acid, (E)- - TIC	112-79-8	18	---	ug/l	NJ					19	---	ug/l	NJ								
	Benzeneacetic acid - TIC	103-82-2					10	---	ug/l	NJ												
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2	7.6	---	ug/l	NJ					8.2	---	ug/l	NJ								
	Benzoic Acid - TIC	65-85-0																	8.5	---	ug/l	NJ
	Benzoic acid, 2,4-dimethyl- - TIC	611-01-8	5.5	---	ug/l	NJ																
	Benzoic acid, 2,5-dimethyl- - TIC	610-72-0									6.1	---	ug/l	NJ								
	Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	1421-49-4									5.8	---	ug/l	NJ								
	Benzothiazole - TIC	95-16-9	4.5	---	ug/l	NJ																
	Cyclohexanone, 3,3,5-trimethyl- - TIC	873-94-9					5.1	---	ug/l	NJ												
	Diethyltoluamide - TIC	134-62-3	5.6	---	ug/l	NJ					8.0	---	ug/l	NJ								
	Ethanol, 1-(2-butoxyethoxy)- - TIC	54446-78-5																	27	---	ug/l	NJ
	Ethanone, 1-(2-hydroxyphenyl)- - TIC	118-93-4					3.6	---	ug/l	NJ												
	Heptadecane, 2,6,10,15-tetramethyl- - TIC	54833-48-6									4.7	---	ug/l	NJ								
	Heptadecanoic acid - TIC	506-12-7																	8.5	---	ug/l	NJ
	Hexadecanoic acid, butyl ester - TIC	111-06-8									11	---	ug/l	NJ								
	n-Hexadecanoic acid - TIC	57-10-3	8.7	---	ug/l	NJ	5.0	---	ug/l	NJ									19	---	ug/l	NJ
	Nonanoic acid - TIC	112-05-0					5.5	---	ug/l	NJ									43	---	ug/l	NJ
	Octadecanoic acid - TIC	57-11-4	11	---	ug/l	NJ													29	---	ug/l	NJ
	Oleic Acid - TIC	112-80-1					19	---	ug/l	NJ												
	Tetradecanoic acid - TIC	544-63-8					4.2	---	ug/l	NJ									7.6	---	ug/l	NJ
	Tridecanoic acid - TIC	638-53-9									6.3	---	ug/l	NJ								
	Unknown - TIC	Tic1					6.7	---	ug/l	J												
Metals																						
	OSW-6020A																					
	Vanadium	7440-62-2									0.0056	0.0020	mg/l	B					0.0024	0.0020	mg/l	B
	Vanadium - Dissolved	7440-62-2	0.0085	0.010	mg/l	UB					0.0083	0.010	mg/l	UB					0.0013	0.010	mg/l	UB
General Chemistry																						
	OSW-9012B																					
	Cyanide, Total	57-12-5					ND	0.010	mg/l	UJ												
	OSW-9056A																					
	Chloride	16887-00-6					601	5.00	mg/l	J												
	Sulfate	14808-79-8					167	5.00	mg/l	J												

APPENDIX 5

EPA Sample Holding Time and Preservation Requirements

Parameter	*Reference Method*	*Matrix*	*Preservation & Storage*	*Holding Times*
Volatile Organics by GCMS	OSW-8260C/SIM	Water	Acidify ph<2 Refrigeration 0-6oC	14 days
Semivolatile Organics by GCMS	OSW-8270D/SIM	Water	Refrigeration 0-6oC	7 days Extraction 40 days Analysis
Polychlorinated Biphenyls by GC/ECD	OSW-8082A	Water	Refrigeration 0-6oC	365 days - Extraction - Analysis
Metals by ICP/ICPMS Spectroscopy	OSW-6010B OSW-6020A	Water	Acidify pH<2 Refrigeration 0-6oC	180 days
Mercury in Aqueous Waste	OSW-7470A	Water	Acidify pH<2 Refrigeration 0-6oC	28 days
Alkalinity	EPA 2320B	Water	Refrigeration 0-6oC	14 days
Chloride and Sulfate	OSW-9056A	Water	Refrigeration 0-6oC	28 days
Total and Amenable Cyanide	OSW-9012B	Water	Test for presence of Sulfide – if unknown collect two samples and treat one with Lead Carbonate. Then adjust sample to pH of greater than or equal to 12with NaOH. Refrigeration at 0-4C –(also may require treatment for aldehydes and chlorine/hypochlorite/sulfite)	14 days if preserved. 24 hours or sooner if unpreserved

ATTACHMENT A

CHAIN OF CUSTODY DOCUMENT(S)

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Loc: 490
86046

10/26/2015

Client Information	Sampler: Robert Lautenberg	Lab PM: Brown, Shali	Carrie	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 8456950200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requeste

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filterl)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
RW-3DS(155-160)-082515	8/25/15	08:40	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
RW-2(452-462)-082515 MS/MSD	8/25/15	13:30	G	Water	N	Y	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
Dup-04-082515	8/25/15	12:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
TB-14-082615	8/26/15	—	—	Water	N	N	✓	✓													
RW-11D(262-267)-082615	8/26/15	10:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	8/26/15 1225	Cornerstone	[signature]	8/26/15 12:25	TA
2	[signature]	8/26/15 1615	TA	[signature] 4.3/1.9	8/27/15 1000	TAN
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

E-Mail Date: 2015-10-14
E-Mail To: tim.roeper@cornerstoneeg.com
cc:

U.S. Mail: Tim Roeper
Cornerstone Environmental Group
100 Crystal Run Road, Suite 101
Middletown, NY 10941

ANALYTICAL DATA VALIDATION REPORT
Ringwood Mines/Landfill
Ford Motor Company
CLIENT PROJECT NUMBER - not available
CADENA PROJECT E203361
SAMPLES COLLECTED August 2015
SUBMITTAL #: 490-84924-1

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1.0 INTRODUCTION

The following document details an assessment of the analytical data reported by TestAmerica-Nashville Laboratory the data in the submittals listed below which were collected from the Ringwood Mines/Landfill site as noted. A sampling and analysis summary that lists all sample ID's and testing as related to the laboratory submittal numbers is presented in Appendix 1. A summary of all of the analytical data is presented in Appendix 3. Copies of sample Chain of Custody (COC) documents and cooler receipt forms for samples discussed in this report are included in Attachment A.
Note: One field sample from this submittal was collected in triplicate to facilitate use of this sample as the QC batch MS/MSD for each analysis where appropriate (MS not required for alkalinity).

Table 1.1

Laboratory Submittal	***Sample Date***	***Laboratory Receipt Date***
490-84924-1	8/10-11/2015	8/12/2015

The samples noted below were validated against the associated method/parameter in order to achieve the validation requirements for this SDG:

Table 1.2

Parameter	***Reference Method***	***Analyte Listing***
Volatile Organics	OSW-8260C	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8260CSIM	1,2-Dibromo-3-Chloropropane,1,4-Dioxane,EthyleneDibromide,1,2,3-Trichloropropane
Semi-Volatile Organics	OSW-8270D	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8270DSIM	Extended list includes the following: Benzo(a)anthracene,Benzo(a)pyrene, Benzo(b)fluoranthene,Hexachlorobenzene, Hexachlorobutadiene,N-Nitrosodimethylamine,Pentachlorophenol
PCB	OSW-8082A	7 Standard Aroclors
Metals	OSW-6020A/7470A	Total and dissolved TAL Metals
Ion Chromatography	OSW-9056A	Chloride and Sulfate
Total Cyanide	OSW-9021B	Total and Amenable Cyanide
General Chemistry	APHA-2320B	Total and Bicarbonate Alkalinity

All "SW" analytical methods were referenced from "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition, November 1986 (with all subsequent revisions). The "SM" analytical method was referenced from the "Standard Methods for the Examination of Water and Waste water", latest promulgated revision. "EPA" methods were referenced from the revisions noted.

Laboratory Standard Operating Procedures (SOPs) associated with the methods utilized for this laboratory submittal were not available to CADENA for the purpose of validating this SDG.

Level IV data review provides a comprehensive or extensive review of the analytical data allowing for the complete reconstruction of the chemical analysis. A Level IV (Tier 3) data review was performed on the samples listed in Table 1.2 above by (CADENA).

All of the data that was recalculated was consistent with the reported results to within at least 2 significant figures. Final results may not recalculate exactly beyond this level of precision, in some cases, due to differences in available significant figures between the hardcopy raw data provided and the data utilized for calculations by the laboratory that came directly from the instrument. A table of the laboratory documents reviewed in preparing this report is included in Appendix 2.

The data was reviewed in accordance with the analytical methods and the documents listed below: (NOTE: laboratory criteria – control limits – were utilized to evaluate the data where available. Comparison to NFG criteria are noted when lab criteria was not available or for informational purposes when lab data exceeds NFG criteria).

i.) "Standard Operating Procedure HW-6 Rev12 March 2001: CLP Organics Data Review and Preliminary Review" USEPA Region 2 as identified in project QAPP.
ii.) "Standard Operating Procedure HW-2, Rev11, Jan 1992: Evaluation of Metals Data for the CLP Program" as identified in the project QAPP.

The Level VI review findings are presented in the following subsections.

An overview of the review findings is presented in table format. Several data qualifier flags were utilized in the review process. The definitions of these qualifier flags are as follows:

- J Indicates an estimated value.
- U Indicates the compound or analyte was analyzed for, but not detected at or above the stated limit.
- UJ The analyte/compound was not detected above the reported sample quantitation limit. However, the quantitation limit is considered to be approximate due to associated quality assurance results.
- UB The analyte was detected in the sample at a level between the MDL and RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the reporting limit.
- B The analyte was detected in the sample at a level above the RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the concentration reported.
- R The analyte/compound results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte/compound cannot be verified.

All flags have been incorporated into the data tables in this report.

1.1 VALIDATION QUALIFIER EXECUTIVE SUMMARY

VALIDATION SUMMARY

GCMS VOC and SIM

GCMS VOC CCVIS 490-273958/2 responses were outliers biased low for bromomethane. Client sample -010 bromomethane results should be considered to be estimated and qualified with a UJ flag. Remaining CCV outliers were either for non-target analytes or were biased high for non-detect sample results.

GCMS SVOC and SIM

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

PCB

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

METALS

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

INORGANICS

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

The following observations **DID NOT** result in qualification but were noted during the validation review:

GCMS VOC

CCV/ICV – Sequences had outliers biased high that did not affect client sample results (associated results were either non-detect or outliers were not associated with target analytes).

GCMS VOC-SIM

No additional non-conforming observations to report.

GCMS SVOC

Sample 84924-008 phenol result did not re-calculate to reconcile with reported result within acceptable significant figure requirements. Reported phenol result was 3.6ug/L and recalculated result was 3.44ug/L. Discrepancy due to sample prep factors - reported result was correct.

METALS

CCV – analytical sequence 278731 beryllium response was an outlier high for both total and dissolved beryllium. All associated field sample results were less than the detection limit so qualification was not required based on these high bias QC outliers.

PDS - for sample -005 had recovery outliers biased low for calcium and silver. Calcium PDS was not considered to be reliable due to elevated levels of target analyte in the original sample matrix relative to the amount spiked (4X rule) so was not used to qualify client sample data and silver MS/MSD recoveries for sample -005 were acceptable so qualification was not made based on the low bias PDS recovery.

CRQL's outside of lab criteria biased high did not affect qualification of client sample results.

INFORMATION NOT INCLUDED WITH ORIGINAL LABORATORY LEVEL 4 DATA PACKAGE - ICPMS raw data for the analysis performed on 9/1/2015 was not included with

data package – This information was required only to confirm the total copper result for client sample 84924-011. Received from lab 10/19/2015.
MERCURY raw data for sequence date 08/19/2015 could not be located in data package – two sets of data for sequence date 8/18/2015 were reported. This is required for validation of all total mercury results. Received from lab 10/19/2015.
PCB – internal standard technique was used for both columns. Some initial and continuing calibration outliers were observed for specific aroclor 1016/1260 peaks on the secondary columns but these outliers did not affect sample quantitation. There was no ending CCV reported for the sequences evaluated.

VERIFICATION SUMMARY

The following qualifications and associated data flags were applied based on the initial level 2 review of this data package.
The following minor QC exceptions or missing information were noted:

GCMS VOC trip blank was non-detect for all target analytes.

GCMS VOC field blank had detections below the RL for bis-2-ethylhexylphthalate, total vanadium, dissolved vanadium and dissolved antimony. Client results for bis-2-ethylhexylphthalate should be considered to be non-detect at the concentration reported and qualified with B flags for samples -001, -002, -003, -004 and -008 and considered to be non-detect at the RL and qualified with UB flags for samples -005, -006 and -009.

GCMS VOC and GCMS SVOC TIC results should be considered to be estimated and qualified with NJ flags unless the TIC analyte detected is an instrument calibrated compound that is just not part of the TAL for this submittal in which case no qualification is required other than the TIC qualification code or J flag if the result is detected below the RL.

Dissolved metals analytical batch 278731 CCV response outliers were not used to qualify client sample results as part of this level 2 verification review. This level 4 data package QC information will be evaluated as part of the pending validation review and data will be qualified if applicable.

GCMS VOC SIM sample -005 MS/MSD recoveries were outliers biased low for 1,4-dioxane. Client sample -005 1,4-dioxane results should be considered to be estimated and qualified with a J flag.

Metals method blanks had detections below the RL in QC batch 272910 for sodium and vanadium and in QC batch 273171 for dissolved vanadium. Client samples -001, -002, -003, -004, -005, -006, -009, -010 and -011 total and dissolved vanadium results should be considered to be non-detect at the RL and qualified with UB flags.

Metals sample -005 MS and MSD recoveries were outliers with the recoveries biased low for total selenium. Client sample -005 total selenium results should be considered to be estimated and qualified with a UJ flag. MS/MSD recoveries for total and dissolved iron and total and dissolved calcium and total and dissolved manganese and dissolved magnesium were not considered to be statistically reliable so were not used to qualify results due to elevated levels of target analyte in the original sample matrix relative to the amount spiked (4X rule).

Cyanide client sample -005 MS/MSD recoveries were outliers biased low. Client sample -005 cyanide results should be considered to be estimated and qualified with a UJ flag. Cyanide QC batch 27467 MS recovery outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

2.0 VOLATILE ORGANIC COMPOUNDS (VOCs) – METHOD SW846 8260C and SIM Analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

2.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) VOCs

2.1.1 TUNING AND MASS CALIBRATION – GC/MS VOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

2.1.2 INITIAL CALIBRATION – GC/MS VOCs

Initial calibration data for VOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS VOCs

Initial calibration verification (ICV) standards for VOC analyses were reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

2.2 CONTINUING CALIBRATION – GC/MS VOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.3 INTERNAL STANDARDS – GC/MS VOCs

Internal standard (IS) data were reviewed and met criteria without exception.

2.4 SURROGATE SPIKE RECOVERIES – GC/MS VOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

2.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS VOCs

A laboratory control sample (LCS) was prepared and analyzed for VOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

2.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS VOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

2.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS VOCs

There were no field duplicate comparisons performed as part of this validation request.

2.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS VOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

2.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS VOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable unless noted otherwise in verification/validation summary.

2.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS VOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

2.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS VOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

3.0 SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) – METHOD SW846 8270D and SIM analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

3.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) SVOCs

3.1.1 TUNING AND MASS CALIBRATION – GC/MS SVOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

3.1.2 INITIAL CALIBRATION – GC/MS SVOCs

Initial calibration data for SVOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

3.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS SVOCs

Initial calibration verification (ICV) standards for SVOC analyses were reviewed and met criteria specified by the laboratory with no exceptions.

3.2 CONTINUING CALIBRATION – GC/MS SVOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary

3.3 INTERNAL STANDARDS – GC/MS SVOCs

Internal standard (IS) data were reviewed and met criteria without exception.

3.4 SURROGATE SPIKE RECOVERIES – GC/MS SVOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

3.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS SVOCs

A laboratory control sample (LCS) was prepared and analyzed for SVOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

3.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS SVOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

3.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS SVOCs

There were no field duplicate comparisons performed as part of this validation request.

3.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS SVOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

3.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS SVOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable without exception.

3.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS SVOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

3.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS SVOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

4.0 POLYCHLORINATED BIPHENYLS (PCBs) – METHOD SW846 8082A

The target analyte list was defined by the client as the standard 7 aroclors.

4.1 CALIBRATION – GAS CHROMATOGRAPH-ECD
4.1.1 TUNING AND MASS CALIBRATION – PCB

Not applicable for this analysis.

4.1.2 INITIAL CALIBRATION – PCB

Initial calibration data for PCBs were reviewed and met the criteria for instrument sensitivity and linearity of response without exception.

4.1.3 INITIAL CALIBRATION VERIFICATION – PCB

Initial calibration verification (ICV) standards for PCB analyses were reviewed and met criteria specified by the laboratory with no exceptions.

4.2 CONTINUING CALIBRATION – PCBs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

4.3 INTERNAL STANDARDS – PCB

Internal standard (IS) data were reviewed and met criteria unless noted otherwise in verification/validation summary. (NOTE: Lab quantitation approach DID use internal standard quantitation for this submittal).

4.4 SURROGATE SPIKE RECOVERIES – PCB

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

4.5 LABORATORY CONTROL SAMPLE ANALYSES - PCB

A laboratory control sample (LCS) was prepared and analyzed for PCBs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary..

4.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - PCB

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

4.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - PCB

There were no field duplicate comparisons performed as part of this validation request.

4.8 EXTRACT CLEANUP - PCB

Extract cleanups were performed in accordance with laboratory SOP's and as noted in level 4 data package prep logs.

4.9 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - PCB

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

4.10 TENTATIVELY IDENTIFIED COMPOUNDS - PCB

Not requested for this analytical procedure.

4.11 BLANKS – METHOD/FIELD/CALIBRATION - PCB

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

5.0 HPLC/IC – METHOD SW846 9056A – CHLORIDE AND SULFATE

5.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

5.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

5.3 CONTINUTING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

5.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

5.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

5.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

5.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

5.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

6.0 METALS – ICPMS by Method 6020 TOTAL AND DISSOLVED and Mercury by Method 7470A

The following samples provided in this SDG underwent a Level IV review for either/and metals or mercury analyses:

- Method 6020A: ALL
- Method 7470A: ALL

6.1 ICP/MS TUNING AND MASS CALIBRATION

Instrument tuning data were reviewed. Tuning elements were analyzed. All tuning criteria were met for the analyses, indicating proper optimization of the instrumentation.

6.2 INITIAL CALIBRATION

Initial calibration data for metals and mercury were reviewed and met the criteria for linearity of response without exception.

6.3 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards for metals and mercury analyses were reviewed and met criteria unless otherwise noted in verification/validation summary section of this document.

An initial calibration blank (ICB) was analyzed for metals and mercury analyses. Metals and mercury were reported as non-detect in each ICB analysis unless noted otherwise in verification/validation summary.

6.4 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for metals and mercury analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

6.5 INTERFERENCE CHECK STANDARD

The interference check standard results were reviewed and found to meet criteria.

6.6 INTERNAL STANDARDS

Internal standard (IS) data were reviewed and found to meet criteria unless noted otherwise in verification/validation summary.

6.7 LABORATORY CONTROL SAMPLE ANALYSIS

A laboratory control sample (LCS) was prepared and analyzed for metals and mercury. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

6.8 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE (MS/MSD) ANALYSES

The MS/MSD recoveries and RPD's were either not performed using a client sample or were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

6.9 CONTRACT REQUIRED DETECTION LIMIT STANDARD ANALYSES

Each contract required detection limit (CRDL) standard was analyzed at the proper frequency and were within laboratory control limits unless noted otherwise in verification/validation summary.

6.10 ICP SERIAL DILUTION

Serial dilutions were analyzed at the proper frequency and were either not performed using the client sample or were within laboratory control limits unless noted otherwise in verification/validation summary.

6.11 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

6.12 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

6.13 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

7.0 GENERAL CHEMISTRY- TOTAL AND AMENABLE CYANIDE AND ALKALINITY – METHODS 9012B and 2320B

7.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

7.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

7.3 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

7.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

7.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD’s were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

7.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

7.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

7.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

8.0 REPRESENTATIVENESS EVALUATION

Representativeness is a qualitative evaluation of whether the data represents actual environmental conditions. Representativeness was evaluated using holding time criteria, which reflect the length of time after sample collection that a sample or extract remains representative of environmental conditions. Depending on the analysis, either one or two holding times were evaluated.

i.) For those analyses that do not include a sample extraction, only one holding time was evaluated: the length of time between sample collection and analysis.

ii.) For analyses that require sample extraction prior to analysis, two holding times were evaluated: the length of time from sampling until extraction and the length of time from extraction to analysis.

Holding times are compared to standard method specific holding times accepted or recommended by the United States Environmental Protection Agency (USEPA). Those holding times outside of USEPA acceptance criteria are qualitatively evaluated to determine their effect on sample representativeness.

Representativeness was also evaluated by analysis of laboratory method blanks and field equipment blanks. Laboratory method blanks and field equipment blanks are used to identify sources of contamination not associated with environmental conditions.

8.1 SAMPLE PRESERVATION AND HOLDING TIMES

Sample holding time and preservation requirements are summarized in Appendix 5.

All sample extractions and/or analyses were performed within the specified holding times unless noted otherwise in verification/validation summary.

All samples were properly preserved and cooled to 0-6°C after collection.

8.2 METHOD BLANK SUMMARY

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

Evaluation of blank contamination includes directions on the interpretation of the affected analytical results.

9.0 USABILITY AND COMPARABIILTY

Usability of data was evaluated by assuring that all the analytical requests were met, samples were received in the proper condition, and all analyses were performed within the appropriate holding times unless noted otherwise in verification/validation summary

No data evaluated within this delivery group was considered unusable (qualified with an R flag) due to sample integrity, sample matrix interference or batch quality control issues unless noted otherwise in verification/validation summary.

10.0 QC SUMMARY

All sample results meet the project specific QAPP standard for usability with exceptions defined by validation and verification qualifiers as applied. Please reference the following tables for a summary of the investigative field sample data and their valid qualifiers based on Level 4 technical review of the analytical data.

APPENDIX 1

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Nashville
Laboratory Submittal: 84924-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	Metals by ICP Mass Spectroscopy(D)	Metals by ICP Mass Spectroscopy	(Manual Cold Vapor)(D)	(Manual Cold Vapor)	TOTAL AND AMENABLE COLORIMETRIC, WITH OFF-LINE DISTILLATION)	Anions by IC	Alkalinity Prep
490849241	OB-13-081015	8/10/2015	9:45:00	X	X	X	X	X	X	X	X	X	X	X	X
4908492410	RW-4A (62-72)-081015	8/10/2015	12:15:00	X	X	X	X	X	X	X	X	X	X	X	X
4908492411	FB-02-081115	8/11/2015	9:00:00	X	X	X	X	X	X	X	X	X	X	X	X
490849242	OB-3-081015	8/10/2015	11:50:00	X	X	X	X	X	X	X	X	X	X	X	X
490849243	Dup-02-081015	8/10/2015	12:00:00	X	X	X	X	X	X	X	X	X	X	X	X
490849244	OB-12-081015	8/10/2015	2:45:00	X	X	X	X	X	X	X	X	X	X	X	X
490849245	OB-5-081015	8/10/2015	10:25:00	X	X	X	X	X	X	X	X	X	X	X	X
490849246	OB-4-081015	8/10/2015	2:30:00	X	X	X	X	X	X	X	X	X	X	X	X
490849247	TB-05-081115	8/11/2015	12:01:00	X	X										
490849248	RW-3DD (175-180)-081015	8/10/2015	2:25:00	X	X	X	X	X	X	X	X	X	X	X	X
490849249	RW-4 (393-403)-081015	8/10/2015	9:40:00	X	X	X	X	X	X	X	X	X	X	X	X

APPENDIX 2

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-84924-1
August 2015

Description

- Standard Report Cover page
- Table of Contents
- SDG Case Narrative
- Sample Summary
- Executive Summary detection highlights
- Method Summary
- Method/Analyst Summary
- Analytical Results
- Surrogate Summary
- Quality Control Results
- Data Qualifiers
- QC Summary Association
- Lab Chronicle
- GCMS Volatiles Data - Method 8260C and SIM
  - QC Summary Data
    - Surrogate recoveries (form II)
    - Check Sample recoveries (form III)
    - Matrix spike/Matrix spike duplicate report (form III)
    - Method blank report (form IV)
    - Tuning and mass calibrations (form V)
    - Internal Standard and RT area summary (form VIII)
  - Sample Data
    - GCMS VOA Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Total Ion Profile Chromatogram
    - Ion profiles of detected target analyte peaks
    - Manual integration if applicable
    - Tentatively Identified Compound Reports (if applicable)
  - Standards Data
    - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
    - ICAL Raw integration data from instrument
    - ICAL Total Ion Profile Chromatogram
    - ICV check standard recovery report (Form VII)
    - ICV check standard total ion profile with integration
    - GCMS VOA Continuing Calibration Data (Form VII)
    - CCV raw integration data from instrument
    - CCV Total Ion Profile Chromatogram
    - Manual integration if applicable
  - Raw QC Data
    - Tune information (not included with SIM package)
    - FORM I - QC data
    - Method Blank integration/internal standard and total ion profile raw data
    - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
    - MS and MSD integration/internal standard and total ion profile raw data
  - Miscellaneous Data
    - Run logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-84924-1
August 2015

Description

GCMS Semivolatiles Data - Method 8270D and SIM

- QC Summary Data
  - Surrogate recoveries (form II)
  - Check Sample recoveries (form III)
  - Method blank report (form IV)
  - Tuning and mass calibrations (form V) (not applicable for SIM)
  - Internal Standard and RT area summary (form VIII)
- Sample Data
  - GCMS VOA Organics Analysis Data Sheet (Form I)
  - Raw integration data from instrument
  - Total Ion Profile Chromatogram
  - Ion profiles of detected target analyte peaks
  - Manual integration if applicable
  - Tentatively Identified Compound Reports (if applicable)
- Standards Data
  - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
  - ICAL Raw integration data from instrument
  - ICAL Total Ion Profile Chromatogram
  - ICV check standard recovery report
  - ICV check standard total ion profile with integration
  - GCMS VOA Continuing Calibration Data (Form VII)
  - CCV raw integration data from instrument
  - CCV Total Ion Profile Chromatogram
  - Manual integration if applicable
- Raw QC Data
  - Tune information (not applicable for SIM)
  - Method Blank integration/internal standard and total ion profile raw data
  - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
- Miscellaneous Data
  - Instrument run logs
  - Extraction bench sheets

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-84924-1
August 2015

Description

- Polychlorinated Biphenyls Data (PCB)
  - QC Summary data
    - Surrogate recoveries (form II)
    - Check Sample Recovery data (form III)
    - Method Blank data (form IV)
    - Analytical sequence with RT check (Form VIII)
    - Identification Summary (Form X)
  - Sample Data
    - Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Chromatogram
  - Standards Data (both columns)
    - Initial Calibration Data External Standard RT Summary (Form VI)
    - Initial Calibration Data Summary with average RF
    - Raw integration data from instrument with manual integrations where applicable
    - ICAL chromatograms
    - Continuing Calibration Data (Form VII) with RT Summaries
    - ICV raw integration and chromatograms
    - CCV raw integration data from instrument
    - CCV chromatogram
  - Raw QC Data
    - LCS/LCSD sample data report and integration and chromatograms
    - Method blank integration and chromatograms
  - Miscellaneous Data
    - Sequence table (run log)
    - PCB Batch Worksheet
- HPLC/IC - 9056A ORGFM_28D - Anions, Ion Chromatography - Sulfate and Chloride
  - Raw Data and Data Summaries for:
    - LCS/LCSD (form III)
    - MS/MSD (form III)
    - METHOD BLANKS (Form IV)
    - SAMPLE DATA (Form I)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VI)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VII)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - QC DATA (Form I)
      - Raw instrument data and chromatography
    - Analysis Run Logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-84924-1
August 2015

Description

METALS DATA (ICPMS and mercury)
- Forms Data
  - Cover Page
  - Inorganic Analysis Data Sheet - Metals Dissolved/Total Recoverable (1A-IN)
  - CCV standard report - mercury and ICPMS (2A-IN)
  - CRQL report - mercury and ICPMS (2B-IN)
  - ICB report - mercury and ICPMS (3-IN)
  - Method blank report (3-IN)
  - Interference check standard A - ICPMS (4A-IN)
  - Interference check standard AB - ICPMS (4A-IN)
  - MS/MSD Sample recovery (5A-IN)
  - PDS Summary (5B-IN)
  - LCS Recovery form (7A-IN)
  - LCS Duplicate Recover (7D-IN)
  - ICP-MS Serial Dilutions (8-IN)
  - Detection Limits Form (9-IN)
  - Linear dynamic ranges - ICPMS (11-IN)
  - Prep log - mercury and ICPMS (12-IN)
  - Run log - ICPMS and Mercury (13-IN)
  - ICP-MS TUNE (14-IN)
  - ICPMS Internal Standards Relative Intensity Summary (15-IN)
- Instrument Printouts
  - ICP-MS Raw instrument data
  - Mercury raw instrument data, run logs and calibrations
- Miscellaneous Data
  - Metals Batch Worksheet

GENERAL CHEMISTRY - Total and Amenable Cyanide and Alkalinity
- Cover Page
- Raw Data and Data Summaries for:
  - Sample Data (Form 1B-IN)
  - CCV/CCB (Form 2-IN)
  - METHOD BLANKS (Form 3-IN)
  - MATRIX SPIKES (Form 5-IN)
  - Sample DUPLICATES (Form 6-IN)
  - LCS/LCSD (Form 7-IN)
  - Detection Limits Form (9-IN)
  - Prep log (12-IN)
  - Analysis Run Logs (13-IN)
  - Raw Data - instrument sample sequence and calibration curve
  - Alkalinity Reagents
  - Alkalinity pH meter calibration
  - Alkalinity sequence log and raw data
  - General Chemistry Batch Worksheets

Shipping and Receiving Documents
- COC forms
- Cooler Receipt Form, checklist and narrative

APPENDIX 3

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84924-1

		Sample Name:	OB-13-081015				RW-4A (62-72)-081015				FB-02-081115			
		Lab Sample ID:	490849241				4908492410				4908492411			
		Sample Date:	8/10/2015				8/10/2015				8/11/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
OSW-8260C														
	1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
	2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	UJ	ND	1.0	ug/l	---
	Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Ethyl ether - TIC	60-29-7												
	Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Propene, hexafluoro- - TIC	116-15-4												
	Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
	Tetrahydrofuran - TIC	109-99-9												
	Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSIM														
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84924-1

		Sample Name:	OB-13-081015				RW-4A (62-72)-081015				FB-02-081115			
		Lab Sample ID:	490849241				4908492410				4908492411			
		Sample Date:	8/10/2015				8/10/2015				8/11/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	6.3	ug/l	---	ND	6.5	ug/l	---	ND	6.3	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2-Chlorophenol	95-57-8	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	0.51	ug/l	---	ND	0.52	ug/l	---	ND	0.51	ug/l	---
	2-Methylphenol	95-48-7	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2-Nitroaniline	88-74-4	ND	6.3	ug/l	---	ND	6.5	ug/l	---	ND	6.3	ug/l	---
	2-Nitrophenol	88-75-5	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	3-Nitroaniline	99-09-2	ND	6.3	ug/l	---	ND	6.5	ug/l	---	ND	6.3	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	6.3	ug/l	---	ND	6.5	ug/l	---	ND	6.3	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	4-Chloroaniline	106-47-8	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	4-Nitroaniline	100-01-6	ND	6.3	ug/l	---	ND	6.5	ug/l	---	ND	6.3	ug/l	---
	4-Nitrophenol	100-02-7	ND	6.3	ug/l	---	ND	6.5	ug/l	---	ND	6.3	ug/l	---
	Acenaphthene	83-32-9	ND	0.51	ug/l	---	ND	0.52	ug/l	---	ND	0.51	ug/l	---
	Acenaphthylene	208-96-8	ND	0.51	ug/l	---	ND	0.52	ug/l	---	ND	0.51	ug/l	---
	Acetophenone	98-86-2	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Anthracene	120-12-7	ND	0.51	ug/l	---	ND	0.52	ug/l	---	ND	0.51	ug/l	---
	Atrazine	1912-24-9	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Benzaldehyde	100-52-7	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Benzo[g,h,i]perylene	191-24-2	ND	0.51	ug/l	---	ND	0.52	ug/l	---	ND	0.51	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	0.51	ug/l	---	ND	0.52	ug/l	---	ND	0.51	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	3.1	2.5	ug/l	B	ND	2.6	ug/l	---	1.7	2.5	ug/l	J
	Butyl benzyl phthalate	85-68-7	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Caprolactam	105-60-2	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Carbazole	86-74-8	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Chrysene	218-01-9	ND	0.51	ug/l	---	ND	0.52	ug/l	---	ND	0.51	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.51	ug/l	---	ND	0.52	ug/l	---	ND	0.51	ug/l	---
	Dibenzofuran	132-64-9	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Diethyl phthalate	84-66-2	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Diethyltoluamide - TIC	134-62-3												
	Dimethyl phthalate	131-11-3	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Diphenyl	92-52-4	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Fluoranthene	206-44-0	ND	0.51	ug/l	---	ND	0.52	ug/l	---	ND	0.51	ug/l	---
	Fluorene	86-73-7	ND	0.51	ug/l	---	ND	0.52	ug/l	---	ND	0.51	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Hexachloroethane	67-72-1	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.51	ug/l	---	ND	0.52	ug/l	---	ND	0.51	ug/l	---
	Isophorone	78-59-1	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Naphthalene	91-20-3	ND	0.51	ug/l	---	ND	0.52	ug/l	---	ND	0.51	ug/l	---
	Nitrobenzene	98-95-3	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Phenanthrene	85-01-8	ND	0.51	ug/l	---	ND	0.52	ug/l	---	ND	0.51	ug/l	---
	Phenol	108-95-2	ND	2.5	ug/l	---	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Pyrene	129-00-0	ND	0.51	ug/l	---	ND	0.52	ug/l	---	ND	0.51	ug/l	---
OSW-8270DSIM														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---	ND	0.30	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84924-1

		Sample Name:	OB-13-081015				RW-4A (62-72)-081015				FB-02-081115			
		Lab Sample ID:	490849241				4908492410				4908492411			
		Sample Date:	8/10/2015				8/10/2015				8/11/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Metals														
	OSW-6020A													
	Aluminum	7429-90-5	0.020	0.020	mg/l	---	0.086	0.020	mg/l	---	ND	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	0.016	0.020	mg/l	J	ND	0.020	mg/l	---
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.00097	0.0020	mg/l	J
	Arsenic	7440-38-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Arsenic - Dissolved	7440-38-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Barium	7440-39-3	0.0046	0.0020	mg/l	---	0.0041	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.0045	0.0020	mg/l	---	0.0041	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	7.9	1.0	mg/l	---	9.8	1.0	mg/l	---	ND	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	7.6	1.0	mg/l	---	9.9	1.0	mg/l	---	ND	1.0	mg/l	---
	Chromium	7440-47-3	ND	0.0020	mg/l	---	0.00061	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper	7440-50-8	ND	0.0020	mg/l	---	0.00081	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Iron	7439-89-6	0.020	0.025	mg/l	J	0.14	0.025	mg/l	---	ND	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	ND	0.025	mg/l	---	0.019	0.025	mg/l	J	ND	0.025	mg/l	---
	Lead	7439-92-1	ND	0.0020	mg/l	---	0.00044	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Magnesium	7439-95-4	3.0	1.0	mg/l	---	4.0	1.0	mg/l	---	ND	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	2.9	1.0	mg/l	---	4.2	1.0	mg/l	---	ND	1.0	mg/l	---
	Manganese	7439-96-5	0.0045	0.0020	mg/l	---	0.0021	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5	0.0029	0.0020	mg/l	---	0.00086	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Nickel	7440-02-0	0.00061	0.0020	mg/l	J	0.027	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0	ND	0.0020	mg/l	---	0.028	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Potassium	7440-09-7	1.1	1.0	mg/l	---	1.2	1.0	mg/l	---	ND	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	1.1	1.0	mg/l	---	1.3	1.0	mg/l	---	ND	1.0	mg/l	---
	Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	3.2	1.0	mg/l	---	5.7	1.0	mg/l	---	ND	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	3.0	1.0	mg/l	---	5.9	1.0	mg/l	---	ND	1.0	mg/l	---
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Vanadium	7440-62-2	0.0014	0.0020	mg/l	UB	0.0017	0.0020	mg/l	UB	0.00093	0.0020	mg/l	UB
	Vanadium - Dissolved	7440-62-2	0.0013	0.0020	mg/l	UB	0.0014	0.0020	mg/l	UB	0.00086	0.0020	mg/l	UB
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	2.75	1.00	mg/l	---	1.31	1.00	mg/l	---	ND	1.00	mg/l	---
	Sulfate	14808-79-8	7.65	1.00	mg/l	---	9.97	1.00	mg/l	---	ND	1.00	mg/l	---
Prep														
	APHA-2320B													
	Bicarbonate Alkalinity as CaCO3	E-14508	24.4	10.0	mg/l	---	36.1	10.0	mg/l	---	ND	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	24.4	10.0	mg/l	---	36.1	10.0	mg/l	---	ND	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84924-1

		Sample Name:	OB-3-081015				Dup-02-081015				OB-12-081015			
		Lab Sample ID:	490849242				490849243				490849244			
		Sample Date:	8/10/2015				8/10/2015				8/10/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
OSW-8260C														
	1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
	2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Ethyl ether - TIC	60-29-7												
	Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Propene, hexafluoro- - TIC	116-15-4												
	Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
	Tetrahydrofuran - TIC	109-99-9												
	Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSIM														
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84924-1

		Sample Name:	OB-3-081015				Dup-02-081015				OB-12-081015			
		Lab Sample ID:	490849242				490849243				490849244			
		Sample Date:	8/10/2015				8/10/2015				8/10/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	6.4	ug/l	---	ND	6.6	ug/l	---	ND	6.4	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	2-Chlorophenol	95-57-8	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	0.51	ug/l	---	ND	0.53	ug/l	---	ND	0.51	ug/l	---
	2-Methylphenol	95-48-7	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	2-Nitroaniline	88-74-4	ND	6.4	ug/l	---	ND	6.6	ug/l	---	ND	6.4	ug/l	---
	2-Nitrophenol	88-75-5	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	3-Nitroaniline	99-09-2	ND	6.4	ug/l	---	ND	6.6	ug/l	---	ND	6.4	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	6.4	ug/l	---	ND	6.6	ug/l	---	ND	6.4	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	4-Chloroaniline	106-47-8	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	4-Nitroaniline	100-01-6	ND	6.4	ug/l	---	ND	6.6	ug/l	---	ND	6.4	ug/l	---
	4-Nitrophenol	100-02-7	ND	6.4	ug/l	---	ND	6.6	ug/l	---	ND	6.4	ug/l	---
	Acenaphthene	83-32-9	ND	0.51	ug/l	---	ND	0.53	ug/l	---	ND	0.51	ug/l	---
	Acenaphthylene	208-96-8	ND	0.51	ug/l	---	ND	0.53	ug/l	---	ND	0.51	ug/l	---
	Acetophenone	98-86-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Anthracene	120-12-7	ND	0.51	ug/l	---	ND	0.53	ug/l	---	ND	0.51	ug/l	---
	Atrazine	1912-24-9	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Benzaldehyde	100-52-7	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Benzo[g,h,i]perylene	191-24-2	ND	0.51	ug/l	---	ND	0.53	ug/l	---	ND	0.51	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	0.51	ug/l	---	ND	0.53	ug/l	---	ND	0.51	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	6.3	2.6	ug/l	B	3.6	2.6	ug/l	B	3.7	2.6	ug/l	B
	Butyl benzyl phthalate	85-68-7	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Caprolactam	105-60-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Carbazole	86-74-8	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Chrysene	218-01-9	ND	0.51	ug/l	---	ND	0.53	ug/l	---	ND	0.51	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.51	ug/l	---	ND	0.53	ug/l	---	ND	0.51	ug/l	---
	Dibenzofuran	132-64-9	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Diethyl phthalate	84-66-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Diethyltoluamide - TIC	134-62-3					4.7	---	ug/l	NJ				
	Dimethyl phthalate	131-11-3	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Diphenyl	92-52-4	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Fluoranthene	206-44-0	ND	0.51	ug/l	---	ND	0.53	ug/l	---	ND	0.51	ug/l	---
	Fluorene	86-73-7	ND	0.51	ug/l	---	ND	0.53	ug/l	---	ND	0.51	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Hexachloroethane	67-72-1	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.51	ug/l	---	ND	0.53	ug/l	---	ND	0.51	ug/l	---
	Isophorone	78-59-1	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Naphthalene	91-20-3	ND	0.51	ug/l	---	ND	0.53	ug/l	---	ND	0.51	ug/l	---
	Nitrobenzene	98-95-3	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Phenanthrene	85-01-8	ND	0.51	ug/l	---	ND	0.53	ug/l	---	ND	0.51	ug/l	---
	Phenol	108-95-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---	ND	2.6	ug/l	---
	Pyrene	129-00-0	ND	0.51	ug/l	---	ND	0.53	ug/l	---	ND	0.51	ug/l	---
OSW-8270DSIM														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---	ND	0.30	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84924-1

		Sample Name:	OB-3-081015				Dup-02-081015				OB-12-081015			
		Lab Sample ID:	490849242				490849243				490849244			
		Sample Date:	8/10/2015				8/10/2015				8/10/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Metals														
	OSW-6020A													
	Aluminum	7429-90-5	ND	0.020	mg/l	---	0.019	0.020	mg/l	J	0.021	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	0.0098	0.020	mg/l	J	0.014	0.020	mg/l	J
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Arsenic	7440-38-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Arsenic - Dissolved	7440-38-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Barium	7440-39-3	0.0029	0.0020	mg/l	---	0.0049	0.0020	mg/l	---	0.0030	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.0029	0.0020	mg/l	---	0.0045	0.0020	mg/l	---	0.0028	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	17.3	1.0	mg/l	---	8.2	1.0	mg/l	---	9.8	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	16.9	1.0	mg/l	---	7.7	1.0	mg/l	---	9.5	1.0	mg/l	---
	Chromium	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.00056	0.0020	mg/l	J
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.0046	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.0041	0.0020	mg/l	---
	Iron	7439-89-6	1.8	0.025	mg/l	---	0.020	0.025	mg/l	J	0.061	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	0.11	0.025	mg/l	---	ND	0.025	mg/l	---	0.014	0.025	mg/l	J
	Lead	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Magnesium	7439-95-4	4.9	1.0	mg/l	---	3.2	1.0	mg/l	---	3.7	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	4.8	1.0	mg/l	---	3.0	1.0	mg/l	---	3.5	1.0	mg/l	---
	Manganese	7439-96-5	0.13	0.0020	mg/l	---	0.0049	0.0020	mg/l	---	0.0019	0.0020	mg/l	J
	Manganese - Dissolved	7439-96-5	0.12	0.0020	mg/l	---	0.0035	0.0020	mg/l	---	0.0013	0.0020	mg/l	J
	Nickel	7440-02-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0	ND	0.0020	mg/l	---	0.00070	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Potassium	7440-09-7	1.1	1.0	mg/l	---	1.2	1.0	mg/l	---	0.61	1.0	mg/l	J
	Potassium - Dissolved	7440-09-7	1.1	1.0	mg/l	---	1.1	1.0	mg/l	---	0.61	1.0	mg/l	J
	Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	3.5	1.0	mg/l	---	3.2	1.0	mg/l	---	3.2	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	3.4	1.0	mg/l	---	3.4	1.0	mg/l	---	3.2	1.0	mg/l	---
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Vanadium	7440-62-2	0.0011	0.0020	mg/l	UB	0.0015	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB
	Vanadium - Dissolved	7440-62-2	0.00082	0.0020	mg/l	UB	0.0013	0.0020	mg/l	UB	0.00096	0.0020	mg/l	UB
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	1.66	1.00	mg/l	---	2.73	1.00	mg/l	---	1.22	1.00	mg/l	---
	Sulfate	14808-79-8	8.50	1.00	mg/l	---	7.34	1.00	mg/l	---	15.3	1.00	mg/l	---
Prep														
	APHA-2320B													
	Bicarbonate Alkalinity as CaCO3	E-14508	47.7	10.0	mg/l	---	22.9	10.0	mg/l	---	17.2	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	47.7	10.0	mg/l	---	22.9	10.0	mg/l	---	17.2	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84924-1

		Sample Name:	OB-5-081015				OB-4-081015				TB-05-081115			
		Lab Sample ID:	490849245				490849246				490849247			
		Sample Date:	8/10/2015				8/10/2015				8/11/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
OSW-8260C														
	1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethane	75-34-3	0.37	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,4-Dichlorobenzene	106-46-7	0.20	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
	2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Ethyl ether - TIC	60-29-7	0.95	5.0	ug/l	J								
	Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Methyl tert-butyl ether	1634-04-4	0.27	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Propene, hexafluoro- - TIC	116-15-4												
	Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
	Tetrahydrofuran - TIC	109-99-9												
	Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSIM														
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	1,4-Dioxane	123-91-1	0.35	10	ug/l	J	ND	10	ug/l	---	ND	10	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84924-1

		Sample Name:	OB-5-081015				OB-4-081015				TB-05-081115			
		Lab Sample ID:	490849245				490849246				490849247			
		Sample Date:	8/10/2015				8/10/2015				8/11/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	2,4,5-Trichlorophenol	95-95-4	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	2,4,6-Trichlorophenol	88-06-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	2,4-Dichlorophenol	120-83-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	2,4-Dimethylphenol	105-67-9	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	2,4-Dinitrophenol	51-28-5	ND	6.4	ug/l	---	ND	6.4	ug/l	---				
	2,4-Dinitrotoluene	121-14-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	2,6-Dinitrotoluene	606-20-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	2-Chloronaphthalene	91-58-7	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	2-Chlorophenol	95-57-8	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	2-Methylnaphthalene	91-57-6	ND	0.52	ug/l	---	ND	0.51	ug/l	---				
	2-Methylphenol	95-48-7	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	2-Nitroaniline	88-74-4	ND	6.4	ug/l	---	ND	6.4	ug/l	---				
	2-Nitrophenol	88-75-5	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	3 & 4 Methylphenol	65794-96-9	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	3,3'-Dichlorobenzidine	91-94-1	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	3-Nitroaniline	99-09-2	ND	6.4	ug/l	---	ND	6.4	ug/l	---				
	4,6-Dinitro-2-methylphenol	534-52-1	ND	6.4	ug/l	---	ND	6.4	ug/l	---				
	4-Bromophenyl phenyl ether	101-55-3	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	4-Chloro-3-methylphenol	59-50-7	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	4-Chloroaniline	106-47-8	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	4-Chlorophenyl phenyl ether	7005-72-3	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	4-Nitroaniline	100-01-6	ND	6.4	ug/l	---	ND	6.4	ug/l	---				
	4-Nitrophenol	100-02-7	ND	6.4	ug/l	---	ND	6.4	ug/l	---				
	Acenaphthene	83-32-9	ND	0.52	ug/l	---	ND	0.51	ug/l	---				
	Acenaphthylene	208-96-8	ND	0.52	ug/l	---	ND	0.51	ug/l	---				
	Acetophenone	98-86-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Anthracene	120-12-7	ND	0.52	ug/l	---	ND	0.51	ug/l	---				
	Atrazine	1912-24-9	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Benzaldehyde	100-52-7	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Benzo[g,h,i]perylene	191-24-2	ND	0.52	ug/l	---	ND	0.51	ug/l	---				
	Benzo[k]fluoranthene	207-08-9	ND	0.52	ug/l	---	ND	0.51	ug/l	---				
	Bis(2-chloroethoxy)methane	111-91-1	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Bis(2-chloroethyl)ether	111-44-4	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Bis(2-ethylhexyl) phthalate	117-81-7	2.2	2.6	ug/l	UB	1.7	2.6	ug/l	UB				
	Butyl benzyl phthalate	85-68-7	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Caprolactam	105-60-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Carbazole	86-74-8	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Chrysene	218-01-9	ND	0.52	ug/l	---	ND	0.51	ug/l	---				
	Di-n-butyl phthalate	84-74-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Di-n-octyl phthalate	117-84-0	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Dibenz(a,h)anthracene	53-70-3	ND	0.52	ug/l	---	ND	0.51	ug/l	---				
	Dibenzofuran	132-64-9	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Diethyl phthalate	84-66-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Diethyltoluamide - TIC	134-62-3												
	Dimethyl phthalate	131-11-3	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Diphenyl	92-52-4	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Fluoranthene	206-44-0	ND	0.52	ug/l	---	ND	0.51	ug/l	---				
	Fluorene	86-73-7	ND	0.52	ug/l	---	ND	0.51	ug/l	---				
	Hexachlorocyclopentadiene	77-47-4	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Hexachloroethane	67-72-1	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.52	ug/l	---	ND	0.51	ug/l	---				
	Isophorone	78-59-1	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	N-Nitrosodi-n-propylamine	621-64-7	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	N-Nitrosodiphenylamine	86-30-6	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Naphthalene	91-20-3	ND	0.52	ug/l	---	ND	0.51	ug/l	---				
	Nitrobenzene	98-95-3	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Phenanthrene	85-01-8	ND	0.52	ug/l	---	ND	0.51	ug/l	---				
	Phenol	108-95-2	ND	2.6	ug/l	---	ND	2.6	ug/l	---				
	Pyrene	129-00-0	ND	0.52	ug/l	---	ND	0.51	ug/l	---				
OSW-8270DSIM														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---				
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---				
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84924-1

			Sample Name:	OB-5-081015			OB-4-081015				TB-05-081115			
			Lab Sample ID:	490849245			490849246				490849247			
			Sample Date:	8/10/2015			8/10/2015				8/11/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
Metals														
	OSW-6020A													
	Aluminum	7429-90-5	ND	0.020	mg/l	---	0.0096	0.020	mg/l	J				
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	ND	0.020	mg/l	---				
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Arsenic	7440-38-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Arsenic - Dissolved	7440-38-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Barium	7440-39-3	0.026	0.0020	mg/l	---	0.090	0.0020	mg/l	---				
	Barium - Dissolved	7440-39-3	0.015	0.0020	mg/l	---	0.079	0.0020	mg/l	---				
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---				
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---				
	Calcium	7440-70-2	82.0	1.0	mg/l	---	86.7	1.0	mg/l	---				
	Calcium - Dissolved	7440-70-2	82.6	1.0	mg/l	---	86.3	1.0	mg/l	---				
	Chromium	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Cobalt	7440-48-4	0.0052	0.0020	mg/l	---	0.0011	0.0020	mg/l	J				
	Cobalt - Dissolved	7440-48-4	0.0045	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Copper	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Iron	7439-89-6	31.3	0.025	mg/l	---	13.5	0.025	mg/l	---				
	Iron - Dissolved	7439-89-6	8.4	0.025	mg/l	---	6.3	0.025	mg/l	---				
	Lead	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Magnesium	7439-95-4	39.5	1.0	mg/l	---	25.0	1.0	mg/l	---				
	Magnesium - Dissolved	7439-95-4	40.4	1.0	mg/l	---	24.9	1.0	mg/l	---				
	Manganese	7439-96-5	2.2	0.0020	mg/l	---	2.6	0.020	mg/l	---				
	Manganese - Dissolved	7439-96-5	2.3	0.0020	mg/l	---	2.7	0.020	mg/l	---				
	Nickel	7440-02-0	0.0020	0.0020	mg/l	---	0.00087	0.0020	mg/l	J				
	Nickel - Dissolved	7440-02-0	0.0015	0.0020	mg/l	J	0.0011	0.0020	mg/l	J				
	Potassium	7440-09-7	3.6	1.0	mg/l	---	3.9	1.0	mg/l	---				
	Potassium - Dissolved	7440-09-7	3.7	1.0	mg/l	---	3.8	1.0	mg/l	---				
	Selenium	7782-49-2	ND	0.0020	mg/l	UJ	ND	0.0020	mg/l	---				
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Sodium	7440-23-5	32.1	1.0	mg/l	---	109	10.0	mg/l	---				
	Sodium - Dissolved	7440-23-5	32.7	1.0	mg/l	---	97.2	10.0	mg/l	---				
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Vanadium	7440-62-2	0.0012	0.0020	mg/l	UB	0.0017	0.0020	mg/l	UB				
	Vanadium - Dissolved	7440-62-2	0.00084	0.0020	mg/l	UB	0.00096	0.0020	mg/l	UB				
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---				
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---				
	OSW-7470A													
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---				
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---				
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	UJ	0.010	0.010	mg/l	---				
	OSW-9056A													
	Chloride	16887-00-6	67.0	1.00	mg/l	---	238	1.00	mg/l	---				
	Sulfate	14808-79-8	4.49	1.00	mg/l	---	3.15	1.00	mg/l	---				
Prep														
	APHA-2320B													
	Bicarbonate Alkalinity as CaCO3	E-14508	318	10.0	mg/l	---	204	10.0	mg/l	---				
	Total Alkalinity as CaCO3	E-14506	318	10.0	mg/l	---	204	10.0	mg/l	---				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84924-1

		Sample Name:	RW-3DD (175-180)-081015				RW-4 (393-403)-081015			
		Lab Sample ID:	490849248				490849249			
		Sample Date:	8/10/2015				8/10/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC										
OSW-8260C										
	1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethane	75-34-3	1.9	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---
	1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	2-Butanone (MEK)	78-93-3	5.5	50	ug/l	J	ND	50	ug/l	---
	2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---
	Acetone	67-64-1	12	25	ug/l	J	ND	25	ug/l	---
	Benzene	71-43-2	0.44	1.0	ug/l	J	ND	1.0	ug/l	---
	Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon disulfide	75-15-0	3.7	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,2-Dichloroethene	156-59-2	0.22	1.0	ug/l	J	ND	1.0	ug/l	---
	cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Ethyl ether - TIC	60-29-7								
	Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---
	Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Propene, hexafluoro- - TIC	116-15-4					22	---	ug/l	NJ
	Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---
	Tetrahydrofuran - TIC	109-99-9	1.1	10	ug/l	J				
	Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSIM										
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	1,4-Dioxane	123-91-1	20	10	ug/l	---	ND	10	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84924-1

		Sample Name:	RW-3DD (175-180)-081015				RW-4 (393-403)-081015			
		Lab Sample ID:	490849248				490849249			
		Sample Date:	8/10/2015				8/10/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC										
OSW-8270D										
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	6.6	ug/l	---	ND	6.3	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2-Chlorophenol	95-57-8	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	0.53	ug/l	---	ND	0.50	ug/l	---
	2-Methylphenol	95-48-7	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	2-Nitroaniline	88-74-4	ND	6.6	ug/l	---	ND	6.3	ug/l	---
	2-Nitrophenol	88-75-5	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	3-Nitroaniline	99-09-2	ND	6.6	ug/l	---	ND	6.3	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	6.6	ug/l	---	ND	6.3	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	4-Chloroaniline	106-47-8	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	4-Nitroaniline	100-01-6	ND	6.6	ug/l	---	ND	6.3	ug/l	---
	4-Nitrophenol	100-02-7	ND	6.6	ug/l	---	ND	6.3	ug/l	---
	Acenaphthene	83-32-9	ND	0.53	ug/l	---	ND	0.50	ug/l	---
	Acenaphthylene	208-96-8	ND	0.53	ug/l	---	ND	0.50	ug/l	---
	Acetophenone	98-86-2	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Anthracene	120-12-7	ND	0.53	ug/l	---	ND	0.50	ug/l	---
	Atrazine	1912-24-9	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Benzaldehyde	100-52-7	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Benzo[g,h,i]perylene	191-24-2	ND	0.53	ug/l	---	ND	0.50	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	0.53	ug/l	---	ND	0.50	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	2.8	2.6	ug/l	B	2.4	2.5	ug/l	UB
	Butyl benzyl phthalate	85-68-7	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Caprolactam	105-60-2	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Carbazole	86-74-8	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Chrysene	218-01-9	ND	0.53	ug/l	---	ND	0.50	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.53	ug/l	---	ND	0.50	ug/l	---
	Dibenzofuran	132-64-9	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Diethyl phthalate	84-66-2	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Diethyltoluamide - TIC	134-62-3	14	---	ug/l	NJ				
	Dimethyl phthalate	131-11-3	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Diphenyl	92-52-4	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Fluoranthene	206-44-0	ND	0.53	ug/l	---	ND	0.50	ug/l	---
	Fluorene	86-73-7	ND	0.53	ug/l	---	ND	0.50	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Hexachloroethane	67-72-1	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.53	ug/l	---	ND	0.50	ug/l	---
	Isophorone	78-59-1	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Naphthalene	91-20-3	ND	0.53	ug/l	---	ND	0.50	ug/l	---
	Nitrobenzene	98-95-3	ND	2.6	ug/l	---	ND	2.5	ug/l	---
	Phenanthrene	85-01-8	ND	0.53	ug/l	---	ND	0.50	ug/l	---
	Phenol	108-95-2	3.6	2.6	ug/l	---	ND	2.5	ug/l	---
	Pyrene	129-00-0	ND	0.53	ug/l	---	ND	0.50	ug/l	---
OSW-8270DSIM										
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84924-1

		Sample Name:	RW-3DD (175-180)-081015				RW-4 (393-403)-081015			
		Lab Sample ID:	490849248				490849249			
		Sample Date:	8/10/2015				8/10/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other										
OSW-8082A										
	PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Metals										
OSW-6020A										
	Aluminum	7429-90-5	0.11	0.020	mg/l	---	1.6	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	0.099	0.020	mg/l	---	0.16	0.020	mg/l	---
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Arsenic	7440-38-2	0.020	0.0020	mg/l	---	0.00059	0.0020	mg/l	J
	Arsenic - Dissolved	7440-38-2	0.019	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Barium	7440-39-3	0.0064	0.0020	mg/l	---	0.023	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.0068	0.0020	mg/l	---	0.014	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	21.8	1.0	mg/l	---	23.5	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	22.5	1.0	mg/l	---	19.9	1.0	mg/l	---
	Chromium	7440-47-3	ND	0.0020	mg/l	---	0.0014	0.0020	mg/l	J
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper	7440-50-8	ND	0.0020	mg/l	---	0.0013	0.0020	mg/l	J
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Iron	7439-89-6	0.014	0.025	mg/l	J	0.90	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	0.017	0.025	mg/l	J	0.068	0.025	mg/l	---
	Lead	7439-92-1	ND	0.0020	mg/l	---	0.0018	0.0020	mg/l	J
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Magnesium	7439-95-4	0.72	1.0	mg/l	J	7.5	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	0.76	1.0	mg/l	J	6.3	1.0	mg/l	---
	Manganese	7439-96-5	0.00099	0.0020	mg/l	J	0.0084	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5	0.0015	0.0020	mg/l	J	0.00090	0.0020	mg/l	J
	Nickel	7440-02-0	0.0035	0.0020	mg/l	---	0.0031	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0	0.0022	0.0020	mg/l	---	0.00056	0.0020	mg/l	J
	Potassium	7440-09-7	12.5	1.0	mg/l	---	2.8	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	11.7	1.0	mg/l	---	2.1	1.0	mg/l	---
	Selenium	7782-49-2	ND	0.0020	mg/l	---	0.00065	0.0020	mg/l	J
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	53.7	1.0	mg/l	---	8.9	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	51.2	1.0	mg/l	---	8.0	1.0	mg/l	---
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Vanadium	7440-62-2	0.0079	0.0020	mg/l	---	0.0018	0.0020	mg/l	UB
	Vanadium - Dissolved	7440-62-2	0.0070	0.0020	mg/l	---	0.0012	0.0020	mg/l	UB
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---
OSW-7470A										
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry										
OSW-9012B										
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A										
	Chloride	16887-00-6	8.43	1.00	mg/l	---	1.41	1.00	mg/l	---
	Sulfate	14808-79-8	39.5	1.00	mg/l	---	15.5	1.00	mg/l	---
Prep										
APHA-2320B										
	Bicarbonate Alkalinity as CaCO3	E-14508	ND	10.0	mg/l	---	64.6	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	96.8	10.0	mg/l	---	64.6	10.0	mg/l	---

APPENDIX 4

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84924-1

	Sample Name:	OB-13-081015				RW-4A (62-72)-081015				FB-02-081115				OB-3-081015				Dup-02-081015			
	Lab Sample ID:	490849241				4908492410				4908492411				490849242				490849243			
	Sample Date:	8/10/2015				8/10/2015				8/11/2015				8/10/2015				8/10/2015			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC																					
OSW-8260C																					
Bromomethane	74-83-9					ND	1.0	ug/l	UJ												
Propene, hexafluoro- - TIC	116-15-4																				
Tetrahydrofuran - TIC	109-99-9																				
GC/MS SVOC																					
OSW-8260CSIM																					
1,4-Dioxane	123-91-1																				
OSW-8270D																					
Bis(2-ethylhexyl) phthalate	117-81-7	3.1	2.5	ug/l	B									6.3	2.6	ug/l	B	3.6	2.6	ug/l	B
Diethyltoluamide - TIC	134-62-3																	4.7	---	ug/l	NJ
Metals																					
OSW-6020A																					
Selenium	7782-49-2																				
Vanadium	7440-62-2	0.0014	0.0020	mg/l	UB	0.0017	0.0020	mg/l	UB	0.00093	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB	0.0015	0.0020	mg/l	UB
Vanadium - Dissolved	7440-62-2	0.0013	0.0020	mg/l	UB	0.0014	0.0020	mg/l	UB	0.00086	0.0020	mg/l	UB	0.00082	0.0020	mg/l	UB	0.0013	0.0020	mg/l	UB
General Chemistry																					
OSW-9012B																					
Cyanide, Total	57-12-5																				

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 84924-1

	Sample Name:	OB-12-081015				OB-5-081015				OB-4-081015				RW-3DD (175-180)-081015				RW-4 (393-403)-081015			
	Lab Sample ID:	490849244				490849245				490849246				490849248				490849249			
	Sample Date:	8/10/2015				8/10/2015				8/10/2015				8/10/2015				8/10/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																					
OSW-8260C																					
Bromomethane	74-83-9																				
Propene, hexafluoro- - TIC	116-15-4																	22	---	ug/l	NJ
Tetrahydrofuran - TIC	109-99-9													1.1	10	ug/l	J				
GC/MS SVOC																					
OSW-8260CSIM																					
1,4-Dioxane	123-91-1					0.35	10	ug/l	J												
OSW-8270D																					
Bis(2-ethylhexyl) phthalate	117-81-7	3.7	2.6	ug/l	B	2.2	2.6	ug/l	UB	1.7	2.6	ug/l	UB	2.8	2.6	ug/l	B	2.4	2.5	ug/l	UB
Diethyltoluamide - TIC	134-62-3													14	---	ug/l	NJ				
Metals																					
OSW-6020A																					
Selenium	7782-49-2					ND	0.0020	mg/l	UJ												
Vanadium	7440-62-2	0.0011	0.0020	mg/l	UB	0.0012	0.0020	mg/l	UB	0.0017	0.0020	mg/l	UB					0.0018	0.0020	mg/l	UB
Vanadium - Dissolved	7440-62-2	0.00096	0.0020	mg/l	UB	0.00084	0.0020	mg/l	UB	0.00096	0.0020	mg/l	UB					0.0012	0.0020	mg/l	UB
General Chemistry																					
OSW-9012B																					
Cyanide, Total	57-12-5					ND	0.010	mg/l	UJ												

APPENDIX 5

EPA Sample Holding Time and Preservation Requirements

Parameter	*Reference Method*	*Matrix*	*Preservation & Storage*	*Holding Times*
Volatile Organics by GCMS	OSW-8260C/SIM	Water	Acidify ph<2 Refrigeration 0-6oC	14 days
Semivolatile Organics by GCMS	OSW-8270D/SIM	Water	Refrigeration 0-6oC	7 days Extraction 40 days Analysis
Polychlorinated Biphenyls by GC/ECD	OSW-8082A	Water	Refrigeration 0-6oC	365 days - Extraction - Analysis
Metals by ICP/ICPMS Spectroscopy	OSW-6010B OSW-6020A	Water	Acidify pH<2 Refrigeration 0-6oC	180 days
Mercury in Aqueous Waste	OSW-7470A	Water	Acidify pH<2 Refrigeration 0-6oC	28 days
Alkalinity	EPA 2320B	Water	Refrigeration 0-6oC	14 days
Chloride and Sulfate	OSW-9056A	Water	Refrigeration 0-6oC	28 days
Total and Amenable Cyanide	OSW-9012B	Water	Test for presence of Sulfide – if unknown collect two samples and treat one with Lead Carbonate. Then adjust sample to pH of greater than or equal to 12with NaOH. Refrigeration at 0-4C –(also may require treatment for aldehydes and chlorine/hypochlorite/sulfite)	14 days if preserved. 24 hours or sooner if unpreserved

ATTACHMENT A

CHAIN OF CUSTODY DOCUMENT(S)

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
84924

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

09/17/2015

Client Information	Sampler: Robert Lowfenberg	Lab PM: Brown, Shali	Carr	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:

Address: 100 Crystal Run Road Suite 101	Due Date Requested:
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package
State, Zip: NY, 10941	
Phone: 845-695-0252(Tel)	PO #:
Email: tim.roeper@cornerstoneeg.com	WO #:
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864
Site:	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
				Preservation Code:																		
1	OB-13-081015	8/10/15	09:45	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
2	OB-3-081015	8/10/15	11:50	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
3	Dup-02-081015	8/10/15	12:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
4	OB-12-081015	8/10/15	14:45	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
5	OB-5-081015 MS/MSD	8/10/15	10:25	G	Water	N	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
6	OB-4-081015	8/10/15	14:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
7	TB-05-081115	8/11/15	-	-	Water	N	N	✓	✓													
8	RW-3DD(175-180)-081015	8/10/15	14:25	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
9	RW-4(393-403)-081015	8/10/15	09:40	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
10	RW-4A(62-72)-081015	8/10/15	12:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
11	FB-02-081115	8/11/15	09:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				8/11/15 1200	TA
Relinquished by:	Date/Time: 8/11 1350	Company TA	Received by:	Date/Time: 8-12-15 0945	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.2, 2.8, 0.7, 2.1, 1.5, 2.8, 1.0, 1.8, 0.2

E-Mail Date: 2015-10-09
E-Mail To: tim.roeper@cornerstoneeg.com
cc:

U.S. Mail: Tim Roeper
Cornerstone Environmental Group
100 Crystal Run Road, Suite 101
Middletown, NY 10941

ANALYTICAL DATA VALIDATION REPORT
Ringwood Mines/Landfill
Ford Motor Company
CLIENT PROJECT NUMBER - not available
CADENA PROJECT E203361
SAMPLES COLLECTED August 2015
SUBMITTAL #: 490-85437-1

PREPARED BY:
CADENA, INC.
1099 Highland Drive
Ann Arbor, MI 48108
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Date: 2015-10-09
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ATTACHMENT A CHAIN OF CUSTODY DOCUMENT(S)

1.0 INTRODUCTION

The following document details an assessment of the analytical data reported by TestAmerica-Nashville Laboratory the data in the submittals listed below which were collected from the Ringwood Mines/Landfill site as noted. A sampling and analysis summary that lists all sample ID's and testing as related to the laboratory submittal numbers is presented in Appendix 1. A summary of all of the analytical data is presented in Appendix 3. Copies of sample Chain of Custody (COC) documents and cooler receipt forms for samples discussed in this report are included in Attachment A.
Note: One field sample from this submittal was collected in triplicate to facilitate use of this sample as the QC batch MS/MSD for each analysis where appropriate (MS not required for alkalinity).

Table 1.1

Laboratory Submittal	***Sample Date***	***Laboratory Receipt Date***
490-85437-1	8/17-18/2015	8/19/2015

The samples noted below were validated against the associated method/parameter in order to achieve the validation requirements for this SDG:

Table 1.2

Parameter	***Reference Method***	***Analyte Listing***
Volatile Organics	OSW-8260C	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8260CSIM	1,2-Dibromo-3-Chloropropane,1,4-Dioxane,EthyleneDibromide,1,2,3-Trichloropropane
Semi-Volatile Organics	OSW-8270D	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8270DSIM	Extended list includes the following: Benzo(a)anthracene,Benzo(a)pyrene, Benzo(b)fluoranthene,Hexachlorobenzene, Hexachlorobutadiene,N-Nitrosodimethylamine,Pentachlorophenol
PCB	OSW-8082A	7 Standard Aroclors
Metals	OSW-6020A/7470A	Total and dissolved TAL Metals
Ion Chromatography	OSW-9056A	Chloride and Sulfate
Total Cyanide	OSW-9021B	Total and Amenable Cyanide
General Chemistry	APHA-2320B	Total and Bicarbonate Alkalinity

All "SW" analytical methods were referenced from "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition, November 1986 (with all subsequent revisions). The "SM" analytical method was referenced from the "Standard Methods for the Examination of Water and Waste water", latest promulgated revision. "EPA" methods were referenced from the revisions noted.

Laboratory Standard Operating Procedures (SOPs) associated with the methods utilized for this laboratory submittal were not available to CADENA for the purpose of validating this SDG.

Level IV data review provides a comprehensive or extensive review of the analytical data allowing for the complete reconstruction of the chemical analysis. A Level IV (Tier 3) data review was performed on the samples listed in Table 1.2 above by (CADENA).

All of the data that was recalculated was consistent with the reported results to within at least 2 significant figures. Final results may not recalculate exactly beyond this level of precision, in some cases, due to differences in available significant figures between the hardcopy raw data provided and the data utilized for calculations by the laboratory that came directly from the instrument. A table of the laboratory documents reviewed in preparing this report is included in Appendix 2.

The data was reviewed in accordance with the analytical methods and the documents listed below: (NOTE: laboratory criteria – control limits – were utilized to evaluate the data where available. Comparison to NFG criteria are noted when lab criteria was not available or for informational purposes when lab data exceeds NFG criteria).

i.) "Standard Operating Procedure HW-6 Rev12 March 2001: CLP Organics Data Review and Preliminary Review" USEPA Region 2 as identified in project QAPP.
ii.) "Standard Operating Procedure HW-2, Rev11, Jan 1992: Evaluation of Metals Data for the CLP Program" as identified in the project QAPP.

The Level VI review findings are presented in the following subsections.

An overview of the review findings is presented in table format. Several data qualifier flags were utilized in the review process. The definitions of these qualifier flags are as follows:

- J Indicates an estimated value.
- U Indicates the compound or analyte was analyzed for, but not detected at or above the stated limit.
- UJ The analyte/compound was not detected above the reported sample quantitation limit. However, the quantitation limit is considered to be approximate due to associated quality assurance results.
- UB The analyte was detected in the sample at a level between the MDL and RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the reporting limit.
- B The analyte was detected in the sample at a level above the RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the concentration reported.
- R The analyte/compound results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte/compound cannot be verified.

All flags have been incorporated into the data tables in this report.

1.1 VALIDATION QUALIFIER EXECUTIVE SUMMARY

VALIDATION SUMMARY

GCMS VOC and SIM
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
GCMS SVOC and SIM
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
PCB
No additional qualifications were made beyond those determined from level 2 verification review as noted below.
METALS
Sample -004 dissolved sodium result was reported from a value that exceeded the instrument linear dynamic range (LDR) so this result should be considered to be estimated and qualified with a E flag.
INORGANICS
No additional qualifications were made beyond those determined from level 2 verification review as noted below.

The following observations **DID NOT** result in qualification but were noted during the validation review:
GCMS VOC
CCV outliers were not associated with target analytes for this submittal.
GCMS VOC-SIM
Ethylene dibromide (EDB) response was an outlier in the Continuing Calibration Verification Standard (CCV) for 8/26. CCV from the re-analysis on 8/29 was acceptable for EDB so final data for this analyte was reported from that sequence.
GCMS SVOC
No additional non-conforming observations to report.
METALS
PDS and SERIAL DILUTION analytical sequence outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.
CRQL's were consistently within lab control limits with the exception of potassium which was always biased high.
PCB – internal standard technique was used for both columns. Some initial and continuing calibration outliers were observed for specific aroclor 1016/1260 peaks on the secondary columns but these outliers did not affect sample quantitation. There was no ending CCV reported for the sequences evaluated.
RAW DATA NOT INCLUDED IN ORIGINAL LAB LEVEL 4 DATA PACKAGE:
Metals – raw instrument data from 9/2 for samples 85437-1, -2, -3, -5 total copper and 9/2 raw instrument data for total mercury for samples -001 and -002.

VERIFICATION SUMMARY

The following qualifications and associated data flags were applied based on the initial level 2 review of this data package.

The following minor QC exceptions or missing information were noted:

GCMS VOC trip blank had detections below the RL for naphthalene and acetone. Client sample -001 naphthalene result and client samples -004 and -006 acetone results should be considered to be non-detect at the RL and qualified with UB flags.

GCMS-SIM VOC surrogate recoveries were outliers biased high for 1 out of 4 surrogates in client sample -002. GCMS-SIM VOC sample -002 detected results should be considered to be estimated and qualified with J flags. Non-detect results do not require qualification.

GCMS-SIM VOC LCS/LCSduplicate RPD only was an outlier for 1,4-dioxane. Qualification of client sample results was not required based on this QC outlier alone.

GCMS-SIM VOC QC batch 277393 and GCMS SVOC QC batch 275780 and PCB QC batch 277676 did not include MS recovery data due to insufficient sample volume available for spiking according to the laboratory submittal case narrative.

GCMS VOC and GCMS SVOC TIC results should be considered to be estimated and qualified with NJ flags unless the TIC analyte detected is an instrument calibrated compound that is just not part of the TAL for this submittal in which case no qualification is required other than the TIC qualification code or J flag if the result is detected below the RL.

Metals method blanks had detections below the RL in QC batch 274876 for manganese and vanadium and in QC batch 276235 for vanadium. Client samples -006 total manganese results and client samples -001, -002, -003, -005, -006 dissolved vanadium results should be considered to be non-detect at the RL and qualified with UB flags. Client samples -002, -003, -004, -005, -006 total vanadium results should be considered to be non-detect at the concentration reported and qualified with B flags.

Metals QC batch 274876, 276235, 276944 and 278307 MS recovery outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

Cyanide client sample -001 MS/MSD recoveries were outliers biased low. Client samples -001 cyanide results should be considered to be estimated and qualified with UJ flags if non-detect and J flags if detected.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

2.0 VOLATILE ORGANIC COMPOUNDS (VOCs) – METHOD SW846 8260C and SIM Analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

2.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) VOCs

2.1.1 TUNING AND MASS CALIBRATION – GC/MS VOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

2.1.2 INITIAL CALIBRATION – GC/MS VOCs

Initial calibration data for VOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS VOCs

Initial calibration verification (ICV) standards for VOC analyses were reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

2.2 CONTINUING CALIBRATION – GC/MS VOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.3 INTERNAL STANDARDS – GC/MS VOCs

Internal standard (IS) data were reviewed and met criteria without exception.

2.4 SURROGATE SPIKE RECOVERIES – GC/MS VOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

2.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS VOCs

A laboratory control sample (LCS) was prepared and analyzed for VOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

2.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS VOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

2.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS VOCs

There were no field duplicate comparisons performed as part of this validation request.

2.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS VOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

2.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS VOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable unless noted otherwise in verification/validation summary.

2.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS VOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

2.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS VOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

3.0 SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) – METHOD SW846 8270D and SIM analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

3.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) SVOCs

3.1.1 TUNING AND MASS CALIBRATION – GC/MS SVOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

3.1.2 INITIAL CALIBRATION – GC/MS SVOCs

Initial calibration data for SVOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

3.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS SVOCs

Initial calibration verification (ICV) standards for SVOC analyses were reviewed and met criteria specified by the laboratory with no exceptions.

3.2 CONTINUING CALIBRATION – GC/MS SVOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary

3.3 INTERNAL STANDARDS – GC/MS SVOCs

Internal standard (IS) data were reviewed and met criteria without exception.

3.4 SURROGATE SPIKE RECOVERIES – GC/MS SVOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

3.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS SVOCs

A laboratory control sample (LCS) was prepared and analyzed for SVOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

3.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS SVOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

3.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS SVOCs

There were no field duplicate comparisons performed as part of this validation request.

3.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS SVOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

3.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS SVOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable without exception.

3.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS SVOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

3.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS SVOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

4.0 POLYCHLORINATED BIPHENYLS (PCBs) – METHOD SW846 8082A

The target analyte list was defined by the client as the standard 7 aroclors.

4.1 CALIBRATION – GAS CHROMATOGRAPH-ECD
4.1.1 TUNING AND MASS CALIBRATION – PCB

Not applicable for this analysis.

4.1.2 INITIAL CALIBRATION – PCB

Initial calibration data for PCBs were reviewed and met the criteria for instrument sensitivity and linearity of response without exception.

4.1.3 INITIAL CALIBRATION VERIFICATION – PCB

Initial calibration verification (ICV) standards for PCB analyses were reviewed and met criteria specified by the laboratory with no exceptions.

4.2 CONTINUING CALIBRATION – PCBs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

4.3 INTERNAL STANDARDS – PCB

Internal standard (IS) data were reviewed and met criteria unless noted otherwise in verification/validation summary. (NOTE: Lab quantitation approach DID use internal standard quantitation for this submittal).

4.4 SURROGATE SPIKE RECOVERIES – PCB

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

4.5 LABORATORY CONTROL SAMPLE ANALYSES - PCB

A laboratory control sample (LCS) was prepared and analyzed for PCBs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary..

4.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - PCB

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

4.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - PCB

There were no field duplicate comparisons performed as part of this validation request.

4.8 EXTRACT CLEANUP - PCB

Extract cleanups were performed in accordance with laboratory SOP's and as noted in level 4 data package prep logs.

4.9 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - PCB

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

4.10 TENTATIVELY IDENTIFIED COMPOUNDS - PCB

Not requested for this analytical procedure.

4.11 BLANKS – METHOD/FIELD/CALIBRATION - PCB

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

5.0 HPLC/IC – METHOD SW846 9056A – CHLORIDE AND SULFATE

5.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

5.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

5.3 CONTINUTING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

5.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

5.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

5.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

5.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

5.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

6.0 METALS – ICPMS by Method 6020 TOTAL AND DISSOLVED and Mercury by Method 7470A

The following samples provided in this SDG underwent a Level IV review for either/and metals or mercury analyses:

- Method 6020A: ALL
- Method 7470A: ALL

6.1 ICP/MS TUNING AND MASS CALIBRATION

Instrument tuning data were reviewed. Tuning elements were analyzed. All tuning criteria were met for the analyses, indicating proper optimization of the instrumentation.

6.2 INITIAL CALIBRATION

Initial calibration data for metals and mercury were reviewed and met the criteria for linearity of response without exception.

6.3 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards for metals and mercury analyses were reviewed and met criteria unless otherwise noted in verification/validation summary section of this document.

An initial calibration blank (ICB) was analyzed for metals and mercury analyses. Metals and mercury were reported as non-detect in each ICB analysis unless noted otherwise in verification/validation summary.

6.4 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for metals and mercury analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

6.5 INTERFERENCE CHECK STANDARD

The interference check standard results were reviewed and found to meet criteria.

6.6 INTERNAL STANDARDS

Internal standard (IS) data were reviewed and found to meet criteria unless noted otherwise in verification/validation summary.

6.7 LABORATORY CONTROL SAMPLE ANALYSIS

A laboratory control sample (LCS) was prepared and analyzed for metals and mercury. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

6.8 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE (MS/MSD) ANALYSES

The MS/MSD recoveries and RPD's were either not performed using a client sample or were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

6.9 CONTRACT REQUIRED DETECTION LIMIT STANDARD ANALYSES

Each contract required detection limit (CRDL) standard was analyzed at the proper frequency and were within laboratory control limits unless noted otherwise in verification/validation summary.

6.10 ICP SERIAL DILUTION

Serial dilutions were analyzed at the proper frequency and were either not performed using the client sample or were within laboratory control limits unless noted otherwise in verification/validation summary.

6.11 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

6.12 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

6.13 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

7.0 GENERAL CHEMISTRY- TOTAL AND AMENABLE CYANIDE AND ALKALINITY – METHODS 9012B and 2320B

7.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

7.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

7.3 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

7.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

7.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD’s were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

7.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

7.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

7.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

8.0 REPRESENTATIVENESS EVALUATION

Representativeness is a qualitative evaluation of whether the data represents actual environmental conditions. Representativeness was evaluated using holding time criteria, which reflect the length of time after sample collection that a sample or extract remains representative of environmental conditions. Depending on the analysis, either one or two holding times were evaluated.

i.) For those analyses that do not include a sample extraction, only one holding time was evaluated: the length of time between sample collection and analysis.

ii.) For analyses that require sample extraction prior to analysis, two holding times were evaluated: the length of time from sampling until extraction and the length of time from extraction to analysis.

Holding times are compared to standard method specific holding times accepted or recommended by the United States Environmental Protection Agency (USEPA). Those holding times outside of USEPA acceptance criteria are qualitatively evaluated to determine their effect on sample representativeness.

Representativeness was also evaluated by analysis of laboratory method blanks and field equipment blanks. Laboratory method blanks and field equipment blanks are used to identify sources of contamination not associated with environmental conditions.

8.1 SAMPLE PRESERVATION AND HOLDING TIMES

Sample holding time and preservation requirements are summarized in Appendix 5.

All sample extractions and/or analyses were performed within the specified holding times unless noted otherwise in verification/validation summary.

All samples were properly preserved and cooled to 0-6°C after collection.

8.2 METHOD BLANK SUMMARY

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

Evaluation of blank contamination includes directions on the interpretation of the affected analytical results.

9.0 USABILITY AND COMPARABIILTY

Usability of data was evaluated by assuring that all the analytical requests were met, samples were received in the proper condition, and all analyses were performed within the appropriate holding times unless noted otherwise in verification/validation summary

No data evaluated within this delivery group was considered unusable (qualified with an R flag) due to sample integrity, sample matrix interference or batch quality control issues unless noted otherwise in verification/validation summary.

10.0 QC SUMMARY

All sample results meet the project specific QAPP standard for usability with exceptions defined by validation and verification qualifiers as applied. Please reference the following tables for a summary of the investigative field sample data and their valid qualifiers based on Level 4 technical review of the analytical data.

APPENDIX 1

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Nashville
Laboratory Submittal: 85437-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	Metals by ICP Mass Spectroscopy(D)	Metals by ICP Mass Spectroscopy	Mercury (Manual Cold Vapor)(D)	Mercury (Manual Cold Vapor)	TOTAL AND AMENABLE CYANIDE (AUTOMATED COLORIMETRIC, WITH OFF-LINE DISTILLATION)	Inorganic Anions by IC	Alkalinity Prep
490854371	PM Air Shaft-180-081715	8/17/2015	12:05:00	X	X	X	X	X	X	X	X	X	X	X	X
490854372	CM-100-081715	8/17/2015	3:10:00	X	X	X	X	X	X	X	X	X	X	X	X
490854373	CM-160-081715	8/17/2015	4:45:00	X	X	X	X	X	X	X	X	X	X	X	X
490854374	RW-12 (55-65)-081715	8/17/2015	11:11:00	X	X	X	X	X	X	X	X	X	X	X	X
490854375	RW-11S (236-241)-081715	8/17/2015	3:15:00	X	X	X	X	X	X	X	X	X	X	X	X
490854376	FB-03-081815	8/18/2015	8:00:00	X	X	X	X	X	X	X	X	X	X	X	X
490854377	TB-08-081815	8/18/2015	12:01:00	X	X										

APPENDIX 2

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85437-1
August 2015

Description

- Standard Report Cover page
- Table of Contents
- SDG Case Narrative
- Sample Summary
- Executive Summary detection highlights
- Method Summary
- Method/Analyst Summary
- Analytical Results
- Surrogate Summary
- Quality Control Results
- Data Qualifiers
- QC Summary Association
- Lab Chronicle
- GCMS Volatiles Data - Method 8260C and SIM
  - QC Summary Data
    - Surrogate recoveries (form II)
    - Check Sample recoveries (form III)
    - Matrix spike/Matrix spike duplicate report (form III)
    - Method blank report (form IV)
    - Tuning and mass calibrations (form V)
    - Internal Standard and RT area summary (form VIII)
  - Sample Data
    - GCMS VOA Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Total Ion Profile Chromatogram
    - Ion profiles of detected target analyte peaks
    - Manual integration if applicable
    - Tentatively Identified Compound Reports (if applicable)
  - Standards Data
    - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
    - ICAL Raw integration data from instrument
    - ICAL Total Ion Profile Chromatogram
    - ICV check standard recovery report (Form VII)
    - ICV check standard total ion profile with integration
    - GCMS VOA Continuing Calibration Data (Form VII)
    - CCV raw integration data from instrument
    - CCV Total Ion Profile Chromatogram
    - Manual integration if applicable
  - Raw QC Data
    - Tune information (not included with SIM package)
    - FORM I - QC data
    - Method Blank integration/internal standard and total ion profile raw data
    - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
    - MS and MSD integration/internal standard and total ion profile raw data
  - Miscellaneous Data
    - Run logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85437-1
August 2015

Description

GCMS Semivolatiles Data - Method 8270D and SIM

- QC Summary Data
  - Surrogate recoveries (form II)
  - Check Sample recoveries (form III)
  - Method blank report (form IV)
  - Tuning and mass calibrations (form V) (not applicable for SIM)
  - Internal Standard and RT area summary (form VIII)
- Sample Data
  - GCMS VOA Organics Analysis Data Sheet (Form I)
  - Raw integration data from instrument
  - Total Ion Profile Chromatogram
  - Ion profiles of detected target analyte peaks
  - Manual integration if applicable
  - Tentatively Identified Compound Reports (if applicable)
- Standards Data
  - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
  - ICAL Raw integration data from instrument
  - ICAL Total Ion Profile Chromatogram
  - ICV check standard recovery report
  - ICV check standard total ion profile with integration
  - GCMS VOA Continuing Calibration Data (Form VII)
  - CCV raw integration data from instrument
  - CCV Total Ion Profile Chromatogram
  - Manual integration if applicable
- Raw QC Data
  - Tune information (not applicable for SIM)
  - Method Blank integration/internal standard and total ion profile raw data
  - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
- Miscellaneous Data
  - Instrument run logs
  - Extraction bench sheets

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85437-1
August 2015

Description

- Polychlorinated Biphenyls Data (PCB)
  - QC Summary data
    - Surrogate recoveries (form II)
    - Check Sample Recovery data (form III)
    - Method Blank data (form IV)
    - Analytical sequence with RT check (Form VIII)
    - Identification Summary (Form X)
  - Sample Data
    - Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Chromatogram
  - Standards Data (both columns)
    - Initial Calibration Data External Standard RT Summary (Form VI)
    - Initial Calibration Data Summary with average RF
    - Raw integration data from instrument with manual integrations where applicable
    - ICAL chromatograms
    - Continuing Calibration Data (Form VII) with RT Summaries
    - ICV raw integration and chromatograms
    - CCV raw integration data from instrument
    - CCV chromatogram
  - Raw QC Data
    - LCS/LCSD sample data report and integration and chromatograms
    - Method blank integration and chromatograms
  - Miscellaneous Data
    - Sequence table (run log)
    - PCB Batch Worksheet
- HPLC/IC - 9056A ORGFM_28D - Anions, Ion Chromatography - Sulfate and Chloride
  - Raw Data and Data Summaries for:
    - LCS/LCSD (form III)
    - MS/MSD (form III)
    - METHOD BLANKS (Form IV)
    - SAMPLE DATA (Form I)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VI)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VII)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - QC DATA (Form I)
      - Raw instrument data and chromatography
    - Analysis Run Logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85437-1
August 2015

Description

METALS DATA (ICPMS and mercury)
- Forms Data
  - Cover Page
  - Inorganic Analysis Data Sheet - Metals Dissolved/Total Recoverable (1A-IN)
  - CCV standard report - mercury and ICPMS (2A-IN)
  - CRQL report - mercury and ICPMS (2B-IN)
  - ICB report - mercury and ICPMS (3-IN)
  - Method blank report (3-IN)
  - Interference check standard A - ICPMS (4A-IN)
  - Interference check standard AB - ICPMS (4A-IN)
  - MS/MSD Sample recovery (5A-IN)
  - PDS Summary (5B-IN)
  - LCS Recovery form (7A-IN)
  - LCS Duplicate Recover (7D-IN)
  - ICP-MS Serial Dilutions (8-IN)
  - Detection Limits Form (9-IN)
  - Linear dynamic ranges - ICPMS (11-IN)
  - Prep log - mercury and ICPMS (12-IN)
  - Run log - ICPMS and Mercury (13-IN)
  - ICP-MS TUNE (14-IN)
  - ICPMS Internal Standards Relative Intensity Summary (15-IN)
- Instrument Printouts
  - ICP-MS Raw instrument data
  - Mercury raw instrument data, run logs and calibrations
- Miscellaneous Data
  - Metals Batch Worksheet

GENERAL CHEMISTRY - Total and Amenable Cyanide and Alkalinity
- Cover Page
- Raw Data and Data Summaries for:
  - Sample Data (Form 1B-IN)
  - CCV/CCB (Form 2-IN)
  - METHOD BLANKS (Form 3-IN)
  - MATRIX SPIKES (Form 5-IN)
  - Sample DUPLICATES (Form 6-IN)
  - LCS/LCSD (Form 7-IN)
  - Detection Limits Form (9-IN)
  - Prep log (12-IN)
  - Analysis Run Logs (13-IN)
  - Raw Data - instrument sample sequence and calibration curve
  - Alkalinity Reagents
  - Alkalinity pH meter calibration
  - Alkalinity sequence log and raw data
  - General Chemistry Batch Worksheets

Shipping and Receiving Documents
- COC forms
- Cooler Receipt Form, checklist and narrative

APPENDIX 3

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85437-1

		Sample Name:	PM Air Shaft-180-081715				CM-100-081715				CM-160-081715				RW-12 (55-65)-081715			
		Lab Sample ID:	490854371				490854372				490854373				490854374			
		Sample Date:	8/17/2015				8/17/2015				8/17/2015				8/17/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																	
OSW-8260C																	
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	0.39	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trimethylbenzene - TIC	526-73-8	0.17	1.0	ug/l	J												
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	0.29	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	1.0	10	ug/l	J
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---	8.3	25	ug/l	UB
Benzene	71-43-2	4.1	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	3.4	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	0.81	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	14	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	0.27	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	0.79	5.0	ug/l	J	ND	5.0	ug/l	---	ND	5.0	ug/l	---	0.17	5.0	ug/l	J
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorofluoromethane - TIC	75-43-4	0.27	1.0	ug/l	J												
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexane - TIC	110-54-3	0.23	2.0	ug/l	J												
Indane - TIC	496-11-7	4.6	---	ug/l	NJ												
Isopropyl alcohol - TIC	67-63-0													20	50	ug/l	J
Isopropylbenzene	98-82-8	1.1	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	0.17	5.0	ug/l	J	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Naphthalene - TIC	91-20-3	0.58	5.0	ug/l	UB												
Silanol, trimethyl- - TIC	1066-40-6																
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Tetrahydrofuran - TIC	109-99-9	1.6	10	ug/l	J												
Toluene	108-88-3	0.18	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---	3.6	1.0	ug/l	---
Total Alkanes TIC - TIC	Tic1	0.23	---	ug/l	NJ												
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic2													14	---	ug/l	NJ
Vinyl chloride	75-01-4	0.25	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim																	
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	12	10	ug/l	---	0.47	10	ug/l	J	0.54	10	ug/l	J	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85437-1

		Sample Name:	PM Air Shaft-180-081715				CM-100-081715				CM-160-081715				RW-12 (55-65)-081715			
		Lab Sample ID:	490854371				490854372				490854373				490854374			
		Sample Date:	8/17/2015				8/17/2015				8/17/2015				8/17/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC																		
OSW-8270D																		
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,4-Dioxane - TIC	123-91-1	6.7	10	ug/l	J												
	1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	1740-19-8													27	---	ug/l	NJ
	2(3H)-Furanone, 5-heptyldihydro- - TIC	104-67-6													31	---	ug/l	NJ
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Mercaptobenzothiazole - TIC	149-30-4													30	---	ug/l	NJ
	2-Methyl-4-hydroxybenzoxazole - TIC	51110-60-2													27	---	ug/l	NJ
	2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitroaniline	88-74-4	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Propanone, dimethylhydrazone - TIC	13483-31-3													18	---	ug/l	NJ
	2H-Pyran-2-one, 6-heptyltetrahydro- - TIC	713-95-1													36	---	ug/l	NJ
	3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5													20	---	ug/l	NJ
	3-Nitroaniline	99-09-2	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	4-Nitrophenol	100-02-7	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3													9.0	---	ug/l	NJ
	Acenaphthene	83-32-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acenaphthylene	208-96-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Acetamide, N-(1-dimethylaminomethylene-2 - TIC	220098-91-9													29	---	ug/l	NJ
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Atrazine	1912-24-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2													18	---	ug/l	NJ
	Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	80-30-8	3.5	---	ug/l	NJ												
	Benzothiazole - TIC	95-16-9													12	---	ug/l	NJ
	Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cyclic octaatomic sulfur - TIC	10544-50-0					43	---	ug/l	NJ								
	Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7	4.0	---	ug/l	NJ												
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyltoluamide - TIC	134-62-3																
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dodecanoic acid - TIC	143-07-7																
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5													28	---	ug/l	NJ
	Fluoranthene	206-44-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Fluorene	86-73-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexaethylene glycol monododecyl ether - TIC	3055-96-7																
	Hexagol - TIC	2615-15-8																
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Nitrobenzene	98-95-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Octadecanoic acid - TIC	57-11-4													60	---	ug/l	NJ
	Octanoic acid, 8-[(tetrahydro-2H-pyran-2 - TIC	54699-43-3													13	---	ug/l	NJ
	Phenanthrene	85-01-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	3.0	10	ug/l	J
	Pyrene	129-00-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sulfur - TIC	13798-23-7					3.2	---	ug/l	NJ								
	Tetradecanoic acid - TIC	544-63-8																
	Tetraethylene glycol monododecyl ether - TIC	5274-68-0																
	Tridecanoic acid - TIC	638-53-9																

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85437-1

			Sample Name:	PM Air Shaft-180-081715				CM-100-081715				CM-160-081715				RW-12 (55-65)-081715			
			Lab Sample ID:	490854371				490854372				490854373				490854374			
			Sample Date:	8/17/2015				8/17/2015				8/17/2015				8/17/2015			
	Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim																			
	Benzo[a]anthracene	56-55-3		ND	0.050	ug/l	---	ND	0.046	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8		ND	0.050	ug/l	---	ND	0.046	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2		ND	0.050	ug/l	---	ND	0.046	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1		ND	0.020	ug/l	---	ND	0.019	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3		ND	0.40	ug/l	---	ND	0.37	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9		ND	0.80	ug/l	---	ND	0.74	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5		ND	0.30	ug/l	---	ND	0.28	ug/l	---	ND	0.30	ug/l	---	ND	0.30	ug/l	---
GC Other																			
OSW-8082A																			
	PCB-1016	12674-11-2		ND	0.50	ug/l	---	ND	0.46	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1221	11104-28-2		ND	0.50	ug/l	---	ND	0.46	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1232	11141-16-5		ND	0.50	ug/l	---	ND	0.46	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1242	53469-21-9		ND	0.50	ug/l	---	ND	0.46	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1248	12672-29-6		ND	0.50	ug/l	---	ND	0.46	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1254	11097-69-1		ND	0.50	ug/l	---	ND	0.46	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1260	11096-82-5		ND	0.50	ug/l	---	ND	0.46	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3		ND	0.50	ug/l	---	ND	0.46	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Metals																			
OSW-6020A																			
	Aluminum	7429-90-5		0.050	0.020	mg/l	---	0.014	0.020	mg/l	J	0.011	0.020	mg/l	J	0.28	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5		ND	0.020	mg/l	---	ND	0.020	mg/l	---	ND	0.020	mg/l	---	0.24	0.020	mg/l	---
	Antimony	7440-36-0		ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0		ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Arsenic	7440-38-2		0.0012	0.0020	mg/l	J	0.0016	0.0020	mg/l	J	0.0017	0.0020	mg/l	J	0.013	0.0020	mg/l	---
	Arsenic - Dissolved	7440-38-2		ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.012	0.0020	mg/l	---
	Barium	7440-39-3		0.41	0.0020	mg/l	---	0.11	0.0020	mg/l	---	0.12	0.0020	mg/l	---	0.025	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3		0.31	0.0020	mg/l	---	0.095	0.0020	mg/l	---	0.092	0.0020	mg/l	---	0.024	0.0020	mg/l	---
	Beryllium	7440-41-7		ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7		ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9		ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	0.00085	0.0010	mg/l	J	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9		ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2		44.5	1.0	mg/l	---	83.4	1.0	mg/l	---	85.0	1.0	mg/l	---	72.7	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2		42.3	1.0	mg/l	---	82.6	1.0	mg/l	---	76.8	1.0	mg/l	---	57.7	1.0	mg/l	---
	Chromium	7440-47-3		0.0025	0.0020	mg/l	---	0.0018	0.0020	mg/l	J	0.0026	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3		ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt	7440-48-4		0.00064	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4		ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper	7440-50-8		0.0017	0.0020	mg/l	J	0.0021	0.0020	mg/l	---	0.0027	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8		ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Iron	7439-89-6		79.3	0.025	mg/l	---	18.5	0.025	mg/l	---	19.0	0.025	mg/l	---	0.019	0.025	mg/l	J
	Iron - Dissolved	7439-89-6		ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---	0.011	0.025	mg/l	J
	Lead	7439-92-1		0.024	0.0020	mg/l	---	0.00029	0.0020	mg/l	J	0.0078	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Lead - Dissolved	7439-92-1		ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Magnesium	7439-95-4		4.4	1.0	mg/l	---	22.4	1.0	mg/l	---	22.7	1.0	mg/l	---	ND	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4		4.4	1.0	mg/l	---	23.3	1.0	mg/l	---	21.7	1.0	mg/l	---	ND	1.0	mg/l	---
	Manganese	7439-96-5		0.81	0.0020	mg/l	---	1.3	0.0020	mg/l	---	1.4	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5		0.75	0.0020	mg/l	---	1.2	0.0020	mg/l	---	1.2	0.0020	mg/l	---	0.00071	0.0020	mg/l	J
	Nickel	7440-02-0		0.0017	0.0020	mg/l	J	0.0025	0.0020	mg/l	---	0.0023	0.0020	mg/l	---	0.0033	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0		0.00062	0.0020	mg/l	J	0.0021	0.0020	mg/l	---	0.0012	0.0020	mg/l	J	0.0022	0.0020	mg/l	---
	Potassium	7440-09-7		2.0	1.0	mg/l	---	5.0	1.0	mg/l	---	5.1	1.0	mg/l	---	39.3	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7		1.9	1.0	mg/l	---	4.8	1.0	mg/l	---	4.5	1.0	mg/l	---	34.8	1.0	mg/l	---
	Selenium	7782-49-2		ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.0099	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2		ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.0088	0.0020	mg/l	---
	Silver	7440-22-4		ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4		ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5		4.7	1.0	mg/l	---	79.6	1.0	mg/l	---	79.8	1.0	mg/l	---	170	10.0	mg/l	---
	Sodium - Dissolved	7440-23-5		4.8	1.0	mg/l	---	83.2	1.0	mg/l	---	77.3	1.0	mg/l	---	155	1.0	mg/l	E
	Thallium	7440-28-0		ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0		0.00030	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Vanadium	7440-62-2		0.010	0.0020	mg/l	---	0.0024	0.0020	mg/l	B	0.0028	0.0020	mg/l	B	0.0068	0.0020	mg/l	B
	Vanadium - Dissolved	7440-62-2		0.00084	0.0020	mg/l	UB	0.00095	0.0020	mg/l	UB	0.00095	0.0020	mg/l	UB	0.0048	0.0020	mg/l	---
	Zinc	7440-66-6		4.0	0.13	mg/l	---	0.86	0.025	mg/l	---	2.5	0.13	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6		2.8	0.25	mg/l	---	0.15	0.025	mg/l	---	0.91	0.025	mg/l	---	ND	0.025	mg/l	---
OSW-7470A																			
	Mercury	7439-97-6		ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6		ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry																			
OSW-9012B																			
	Cyanide, Total	57-12-5		ND	0.010	mg/l	UJ	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A																			
	Chloride	16887-00-6		1.76	1.00	mg/l	---	175	1.00	mg/l	---	172	1.00	mg/l	---	47.2	1.00	mg/l	---
	Sulfate	14808-79-8		1.99	1.00	mg/l	---	3.46	1.00	mg/l	---	2.85	1.00	mg/l	---	299	5.00	mg/l	---
Prep																			
APHA-2320B																			
	Bicarbonate Alkalinity as CaCO3	E-14508		191	10.0	mg/l	---	240	10.0	mg/l	---	248	10.0	mg/l	---	ND	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506		191	10.0	mg/l	---	240	10.0	mg/l	---	248	10.0	mg/l	---	101	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85437-1

		Sample Name:	RW-11S (236-241)-081715				FB-03-081815				TB-08-081815			
		Lab Sample ID:	490854375				490854376				490854377			
		Sample Date:	8/17/2015				8/18/2015				8/18/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trimethylbenzene - TIC	526-73-8												
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	13	25	ug/l	UB	3.7	25	ug/l	J
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorofluoromethane - TIC	75-43-4												
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexane - TIC	110-54-3												
Indane - TIC	496-11-7												
Isopropyl alcohol - TIC	67-63-0												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	0.39	5.0	ug/l	J	ND	5.0	ug/l	---
Naphthalene - TIC	91-20-3									0.37	5.0	ug/l	J
Silanol, trimethyl- - TIC	1066-40-6					6.3	---	ug/l	NJ				
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Tetrahydrofuran - TIC	109-99-9												
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Total Alkanes TIC - TIC	Tic1												
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic2												
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	1.1	10	ug/l	J	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85437-1

		Sample Name:	RW-11S (236-241)-081715				FB-03-081815				TB-08-081815			
		Lab Sample ID:	490854375				490854376				490854377			
		Sample Date:	8/17/2015				8/18/2015				8/18/2015			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS SVOC													
OSW-8270D													
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---				
1,4-Dioxane - TIC	123-91-1												
1-Phenanthrenecarboxylic acid, 1,2,3,4,4 a- TIC	1740-19-8												
2(3H)-Furanone, 5-heptyldihydro- - TIC	104-67-6												
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---				
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---				
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---				
2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---	ND	25	ug/l	---				
2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---	ND	10	ug/l	---				
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---				
2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---				
2-Mercaptobenzothiazole - TIC	149-30-4												
2-Methyl-4-hydroxybenzoxazole - TIC	51110-60-2												
2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---				
2-Nitroaniline	88-74-4	ND	25	ug/l	---	ND	25	ug/l	---				
2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---				
2-Propanone, dimethylhydrazone - TIC	13483-31-3												
2H-Pyran-2-one, 6-heptyltetrahydro- - TIC	713-95-1												
3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---	ND	10	ug/l	---				
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---				
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5												
3-Nitroaniline	99-09-2	ND	25	ug/l	---	ND	25	ug/l	---				
4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---	ND	25	ug/l	---				
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---				
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---				
4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---				
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---				
4-Nitroaniline	100-01-6	ND	25	ug/l	---	ND	25	ug/l	---				
4-Nitrophenol	100-02-7	ND	25	ug/l	---	ND	25	ug/l	---				
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3												
Acenaphthene	83-32-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Acenaphthylene	208-96-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Acetamide, N-(1-dimethylaminomethylene-2 - TIC	220098-91-9												
Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---				
Anthracene	120-12-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Atrazine	1912-24-9	ND	10	ug/l	---	ND	10	ug/l	---				
Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---				
Benzenesulfonamide, N-butyl- - TIC	3622-84-2												
Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	80-30-8												
Benzothiazole - TIC	95-16-9												
Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---				
Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---	ND	10	ug/l	---				
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---	ND	10	ug/l	---				
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---				
Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---				
Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---				
Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Cyclic octaatomic sulfur - TIC	10544-50-0												
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7												
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---				
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---				
Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---				
Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---				
Diethyltoluamide - TIC	134-62-3					8.7	---	ug/l	NJ				
Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---				
Diphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---				
Dodecanoic acid - TIC	143-07-7					11	---	ug/l	NJ				
Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5												
Fluoranthene	206-44-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Fluorene	86-73-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---				
Hexachloroethane	67-72-1	ND	10	ug/l	---	ND	10	ug/l	---				
Hexaethylene glycol monododecyl ether - TIC	3055-96-7					3.2	---	ug/l	NJ				
Hexagol - TIC	2615-15-8					3.3	---	ug/l	NJ				
Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---				
N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---	ND	10	ug/l	---				
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---				
Naphthalene	91-20-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Nitrobenzene	98-95-3	ND	10	ug/l	---	ND	10	ug/l	---				
Octadecanoic acid - TIC	57-11-4					6.2	---	ug/l	NJ				
Octanoic acid, 8-[(tetrahydro-2H-pyran-2 - TIC	54699-43-3												
Phenanthrene	85-01-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---				
Pyrene	129-00-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Sulfur - TIC	13798-23-7												
Tetradecanoic acid - TIC	544-63-8					4.7	---	ug/l	NJ				
Tetraethylene glycol monododecyl ether - TIC	5274-68-0					3.6	---	ug/l	NJ				
Tridecanoic acid - TIC	638-53-9					8.1	---	ug/l	NJ				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85437-1

			Sample Name:	RW-11S (236-241)-081715			FB-03-081815				TB-08-081815			
			Lab Sample ID:	490854375			490854376				490854377			
			Sample Date:	8/17/2015			8/18/2015				8/18/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---				
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---				
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---				
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
Metals														
OSW-6020A														
	Aluminum	7429-90-5	ND	0.020	mg/l	---	ND	0.020	mg/l	---				
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	ND	0.020	mg/l	---				
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	0.00084	0.0020	mg/l	J				
	Arsenic	7440-38-2	0.0010	0.0020	mg/l	J	0.00061	0.0020	mg/l	J				
	Arsenic - Dissolved	7440-38-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Barium	7440-39-3	0.015	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Barium - Dissolved	7440-39-3	0.015	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---				
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---				
	Calcium	7440-70-2	16.1	1.0	mg/l	---	ND	1.0	mg/l	---				
	Calcium - Dissolved	7440-70-2	15.2	1.0	mg/l	---	ND	1.0	mg/l	---				
	Chromium	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	0.0036	0.0020	mg/l	---				
	Cobalt	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Copper	7440-50-8	0.0070	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Copper - Dissolved	7440-50-8	0.0041	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Iron	7439-89-6	0.057	0.025	mg/l	---	ND	0.025	mg/l	---				
	Iron - Dissolved	7439-89-6	ND	0.025	mg/l	---	0.023	0.025	mg/l	J				
	Lead	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Magnesium	7439-95-4	2.2	1.0	mg/l	---	ND	1.0	mg/l	---				
	Magnesium - Dissolved	7439-95-4	2.2	1.0	mg/l	---	ND	1.0	mg/l	---				
	Manganese	7439-96-5	0.22	0.0020	mg/l	---	0.00089	0.0020	mg/l	UB				
	Manganese - Dissolved	7439-96-5	0.20	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Nickel	7440-02-0	0.0039	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Nickel - Dissolved	7440-02-0	0.0027	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Potassium	7440-09-7	1.5	1.0	mg/l	---	ND	1.0	mg/l	---				
	Potassium - Dissolved	7440-09-7	1.4	1.0	mg/l	---	ND	1.0	mg/l	---				
	Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Sodium	7440-23-5	3.1	1.0	mg/l	---	ND	1.0	mg/l	---				
	Sodium - Dissolved	7440-23-5	3.0	1.0	mg/l	---	ND	1.0	mg/l	---				
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Vanadium	7440-62-2	0.0024	0.0020	mg/l	B	0.0022	0.0020	mg/l	B				
	Vanadium - Dissolved	7440-62-2	0.0011	0.0020	mg/l	UB	0.00090	0.0020	mg/l	UB				
	Zinc	7440-66-6	0.015	0.025	mg/l	J	ND	0.025	mg/l	---				
	Zinc - Dissolved	7440-66-6	0.013	0.025	mg/l	J	ND	0.025	mg/l	---				
OSW-7470A														
	Mercury	7439-97-6	0.00018	0.00020	mg/l	J	ND	0.00020	mg/l	---				
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---				
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---				
OSW-9056A														
	Chloride	16887-00-6	0.82	1.00	mg/l	J	ND	1.00	mg/l	---				
	Sulfate	14808-79-8	7.21	1.00	mg/l	---	ND	1.00	mg/l	---				
Prep														
APHA-2320B														
	Bicarbonate Alkalinity as CaCO3	E-14508	49.0	10.0	mg/l	---	ND	10.0	mg/l	---				
	Total Alkalinity as CaCO3	E-14506	49.0	10.0	mg/l	---	ND	10.0	mg/l	---				

APPENDIX 4

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85437-1

	Sample Name:	PM Air Shaft-180-081715				CM-100-081715				CM-160-081715				RW-12 (55-65)-081715				RW-11S (236-241)-081715				FB-03-081815				TB-08-081815							
	Lab Sample ID:	490854371				490854372				490854373				490854374				490854375				490854376				490854377							
	Sample Date:	8/17/2015				8/17/2015				8/17/2015				8/17/2015				8/17/2015				8/18/2015				8/18/2015							
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**				
GC/MS VOC																																	
OSW-8260C																																	
1,2,3-Trimethylbenzene - TIC	526-73-8	0.17	1.0	ug/l	J																												
Acetone	67-64-1													8.3	25	ug/l	UB					13	25	ug/l	UB								
Dichlorofluoromethane - TIC	75-43-4	0.27	1.0	ug/l	J																												
Hexane - TIC	110-54-3	0.23	2.0	ug/l	J																												
Indane - TIC	496-11-7	4.6	---	ug/l	NJ																												
Isopropyl alcohol - TIC	67-63-0													20	50	ug/l	J																
Naphthalene - TIC	91-20-3	0.58	5.0	ug/l	UB																					0.37	5.0	ug/l	J				
Silanol, trimethyl- - TIC	1066-40-6																					6.3	---	ug/l	NJ								
Tetrahydrofuran - TIC	109-99-9	1.6	10	ug/l	J																												
Total Alkanes TIC - TIC	Tic1	0.23	---	ug/l	NJ																												
Unknown - TIC	Tic2													14	---	ug/l	NJ																
GC/MS SVOC																																	
OSW-8260CSim																																	
1,4-Dioxane	123-91-1					0.47	10	ug/l	J																								
OSW-8270D																																	
1-Phenanthrenecarboxylic acid, 1,2,3,4,4 - TIC	1740-19-8													27	---	ug/l	NJ																
2(3H)-Furanone, 5-heptyldihydro- - TIC	104-67-6													31	---	ug/l	NJ																
2-Mercaptobenzothiazole - TIC	149-30-4													30	---	ug/l	NJ																
2-Methyl-4-hydroxybenzoxazole - TIC	51110-60-2													27	---	ug/l	NJ																
2-Propanone, dimethylhydrazone - TIC	13483-31-3													18	---	ug/l	NJ																
2H-Pyran-2-one, 6-heptyltetrahydro- - TIC	713-95-1													36	---	ug/l	NJ																
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5													20	---	ug/l	NJ																
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3													9.0	---	ug/l	NJ																
Acetamide, N-(1-dimethylaminomethylene- 2 - TIC	220098-91-9													29	---	ug/l	NJ																
Benzenesulfonamide, N-butyl- - TIC	3622-84-2													18	---	ug/l	NJ																
Benzenesulfonamide, N-cyclohexyl-4-methy - TIC	80-30-8	3.5	---	ug/l	NJ																												
Benzothiazole - TIC	95-16-9													12	---	ug/l	NJ																
Cyclic octaatomic sulfur - TIC	10544-50-0					43	---	ug/l	NJ																								
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7	4.0	---	ug/l	NJ																												
Diethyltoluamide - TIC	134-62-3																					8.7	---	ug/l	NJ								
Dodecanoic acid - TIC	143-07-7																					11	---	ug/l	NJ								
Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5													28	---	ug/l	NJ																
Hexaethylene glycol monododecyl ether - TIC	3055-96-7																					3.2	---	ug/l	NJ								
Hexagol - TIC	2615-15-8																					3.3	---	ug/l	NJ								
Octadecanoic acid - TIC	57-11-4													60	---	ug/l	NJ					6.2	---	ug/l	NJ								
Octanoic acid, 8-[(tetrahydro-2H-pyran-2 - TIC	54699-43-3													13	---	ug/l	NJ																
Sulfur - TIC	13798-23-7					3.2	---	ug/l	NJ																								
Tetradecanoic acid - TIC	544-63-8																					4.7	---	ug/l	NJ								
Tetraethylene glycol monododecyl ether - TIC	5274-68-0																					3.6	---	ug/l	NJ								
Tridecanoic acid - TIC	638-53-9																					8.1	---	ug/l	NJ								
1,4-Dioxane	123-91-1	6.7	10	ug/l	J																												
Metals																																	
OSW-6020A																																	
Manganese	7439-96-5																					0.00089	0.0020	mg/l	UB								
Sodium - Dissolved	7440-23-5													155	1.0	mg/l	E																
Vanadium	7440-62-2					0.0024	0.0020	mg/l	B	0.0028	0.0020	mg/l	B	0.0068	0.0020	mg/l	B	0.0024	0.0020	mg/l	B	0.0022	0.0020	mg/l	B								
Vanadium - Dissolved	7440-62-2	0.00084	0.0020	mg/l	UB	0.00095	0.0020	mg/l	UB	0.00095	0.0020	mg/l	UB					0.0011	0.0020	mg/l	UB	0.00090	0.0020	mg/l	UB								
General Chemistry																																	
OSW-9012B																																	
Cyanide, Total	57-12-5	ND	0.010	mg/l	UJ																												

APPENDIX 5

EPA Sample Holding Time and Preservation Requirements

Parameter	*Reference Method*	*Matrix*	*Preservation & Storage*	*Holding Times*
Volatile Organics by GCMS	OSW-8260C/SIM	Water	Acidify ph<2 Refrigeration 0-6oC	14 days
Semivolatile Organics by GCMS	OSW-8270D/SIM	Water	Refrigeration 0-6oC	7 days Extraction 40 days Analysis
Polychlorinated Biphenyls by GC/ECD	OSW-8082A	Water	Refrigeration 0-6oC	365 days - Extraction - Analysis
Metals by ICP/ICPMS Spectroscopy	OSW-6010B OSW-6020A	Water	Acidify pH<2 Refrigeration 0-6oC	180 days
Mercury in Aqueous Waste	OSW-7470A	Water	Acidify pH<2 Refrigeration 0-6oC	28 days
Alkalinity	EPA 2320B	Water	Refrigeration 0-6oC	14 days
Chloride and Sulfate	OSW-9056A	Water	Refrigeration 0-6oC	28 days
Total and Amenable Cyanide	OSW-9012B	Water	Test for presence of Sulfide – if unknown collect two samples and treat one with Lead Carbonate. Then adjust sample to pH of greater than or equal to 12with NaOH. Refrigeration at 0-4C –(also may require treatment for aldehydes and chlorine/hypochlorite/sulfite)	14 days if preserved. 24 hours or sooner if unpreserved

ATTACHMENT A

CHAIN OF CUSTODY DOCUMENT(S)

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
85437

TestAmerica

09/21/2015

Client Information	Sampler: Robert Lautenberg	Lab PM: Brown, Shali	Car	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941	PO #:			
Phone: 845-695-0252(Tel)	WO #:			
Email: tim.roeper@cornerstoneeg.com	Project #: 49008864			
Project Name: FORD Ringwood Mines SA GW/SW E203361	SSOW#:			
Site:				

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	8082A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
				Preservation Code:																		
1	PMA-Shaft-180-081715	8/17/15	12:05	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
2	CM-100-081715	8/17/15	15:10	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
3	CM-160-081715	8/17/15	16:45	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
4	RW-12 (55-65)-081715	8/17/15	11:11	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
5	RW-11S (236-244)-081715	8/17/15	15:15	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
6	FB-03-081815	8/18/15	08:00	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
7	TB-08-081815	8/18/15	—	—	Water	N	N	✓	✓													
					Water																	
					Water																	
					Water																	
					Water																	

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/18/15 845	Cornerstone		8/18/15 845	TA
2	James Thomas	8/18/15 1235	TA		8-19-15 0910	TAN
3		Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.5, 2.9, 1.0, 0.6

E-Mail Date: 2015-10-09
E-Mail To: tim.roeper@cornerstoneeg.com
cc:

U.S. Mail: Tim Roeper
Cornerstone Environmental Group
100 Crystal Run Road, Suite 101
Middletown, NY 10941

ANALYTICAL DATA VALIDATION REPORT
Ringwood Mines/Landfill
Ford Motor Company
CLIENT PROJECT NUMBER - not available
CADENA PROJECT E203361
SAMPLES COLLECTED August 2015
SUBMITTAL #: 490-85529-1

PREPARED BY:
CADENA, INC.
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ATTACHMENT A CHAIN OF CUSTODY DOCUMENT(S)

1.0 INTRODUCTION

The following document details an assessment of the analytical data reported by TestAmerica-Nashville Laboratory the data in the submittals listed below which were collected from the Ringwood Mines/Landfill site as noted. A sampling and analysis summary that lists all sample ID's and testing as related to the laboratory submittal numbers is presented in Appendix 1. A summary of all of the analytical data is presented in Appendix 3. Copies of sample Chain of Custody (COC) documents and cooler receipt forms for samples discussed in this report are included in Attachment A.
Note: One field sample from this submittal was collected in triplicate to facilitate use of this sample as the QC batch MS/MSD for each analysis where appropriate (MS not required for alkalinity).

Table 1.1

Laboratory Submittal	***Sample Date***	***Laboratory Receipt Date***
490-85529-1	8/18/2015	8/20/2015

The samples noted below were validated against the associated method/parameter in order to achieve the validation requirements for this SDG:

Table 1.2

Parameter	***Reference Method***	***Analyte Listing***
Volatile Organics	OSW-8260C	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8260CSIM	1,2-Dibromo-3-Chloropropane,1,4-Dioxane,EthyleneDibromide,1,2,3-Trichloropropane
Semi-Volatile Organics	OSW-8270D	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8270DSIM	Extended list includes the following: Benzo(a)anthracene,Benzo(a)pyrene, Benzo(b)fluoranthene,Hexachlorobenzene, Hexachlorobutadiene,N-Nitrosodimethylamine,Pentachlorophenol
PCB	OSW-8082A	7 Standard Aroclors
Metals	OSW-6020A/7470A	Total and dissolved TAL Metals
Ion Chromatography	OSW-9056A	Chloride and Sulfate
Total Cyanide	OSW-9021B	Total and Amenable Cyanide
General Chemistry	APHA-2320B	Total and Bicarbonate Alkalinity

All "SW" analytical methods were referenced from "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition, November 1986 (with all subsequent revisions). The "SM" analytical method was referenced from the "Standard Methods for the Examination of Water and Waste water", latest promulgated revision. "EPA" methods were referenced from the revisions noted.

Laboratory Standard Operating Procedures (SOPs) associated with the methods utilized for this laboratory submittal were not available to CADENA for the purpose of validating this SDG.

Level IV data review provides a comprehensive or extensive review of the analytical data allowing for the complete reconstruction of the chemical analysis. A Level IV (Tier 3) data review was performed on the samples listed in Table 1.2 above by (CADENA).

All of the data that was recalculated was consistent with the reported results to within at least 2 significant figures. Final results may not recalculate exactly beyond this level of precision, in some cases, due to differences in available significant figures between the hardcopy raw data provided and the data utilized for calculations by the laboratory that came directly from the instrument. A table of the laboratory documents reviewed in preparing this report is included in Appendix 2.

The data was reviewed in accordance with the analytical methods and the documents listed below: (NOTE: laboratory criteria – control limits – were utilized to evaluate the data where available. Comparison to NFG criteria are noted when lab criteria was not available or for informational purposes when lab data exceeds NFG criteria).

i.) "Standard Operating Procedure HW-6 Rev12 March 2001: CLP Organics Data Review and Preliminary Review" USEPA Region 2 as identified in project QAPP.
ii.) "Standard Operating Procedure HW-2, Rev11, Jan 1992: Evaluation of Metals Data for the CLP Program" as identified in the project QAPP.

The Level VI review findings are presented in the following subsections.

An overview of the review findings is presented in table format. Several data qualifier flags were utilized in the review process. The definitions of these qualifier flags are as follows:

- J Indicates an estimated value.
- U Indicates the compound or analyte was analyzed for, but not detected at or above the stated limit.
- UJ The analyte/compound was not detected above the reported sample quantitation limit. However, the quantitation limit is considered to be approximate due to associated quality assurance results.
- UB The analyte was detected in the sample at a level between the MDL and RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the reporting limit.
- B The analyte was detected in the sample at a level above the RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the concentration reported.
- R The analyte/compound results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte/compound cannot be verified.

All flags have been incorporated into the data tables in this report.

1.1 VALIDATION QUALIFIER EXECUTIVE SUMMARY

VALIDATION SUMMARY

GCMS VOC and SIM

GCMS VOC-SIM sample -004 result for 1,2,3-trichloropropane which was originally qualified as estimated with a J flag has been re-qualified as non-detect at the RL with a UB flag. Basis for qualification change was poor ion profile match between the peak in this sample and the reference ion profile and a non-detect for this analyte in the re-analysis of sample -004.

GCMS SVOC and SIM

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

PCB

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

METALS

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

INORGANICS

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

The following observations **DID NOT** result in qualification but were noted during the validation review:

GCMS VOC

No additional non-conforming observations to report.

GCMS VOC-SIM

Ethylene dibromide (EDB) response was an outlier in the Continuing Calibration Verification Standard (CCV) for 8/26 and EDB, 1,2-dibromo-3-chloropropane and 1,2,3-trichloropropane were outlier for the 8/27 CCV. CCV from the re-analysis on 8/29 was acceptable for EDB so final data for this analyte was reported from that sequence.

GCMS SVOC

No additional non-conforming observations to report.

METALS

PDS and SERIAL DILUTION analytical sequence outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

CRQL's were consistently within lab control limits with the exception of potassium which was always biased high.

PCB – internal standard technique was used for both columns. Some initial and continuing calibration outliers were observed for specific aroclor 1016/1260 peaks on the secondary columns but these outliers did not affect sample quantitation. There was no ending CCV reported for the sequences evaluated.

RAW DATA NOT INCLUDED IN ORIGINAL LAB LEVEL 4 DATA PACKAGE:

Metals – raw instrument data from 9/1 for sample 85529-1 dissolved calcium, manganese and zinc results. Raw instrument data for all sample dissolved mercury results of 8/31.

VERIFICATION SUMMARY

The following qualifications and associated data flags were applied based on the initial level 2 review of this data package.

The following minor QC exceptions or missing information were noted:

GCMS VOC trip blank was non-detect for all target analytes.

REMOVED BASED ON LEVEL 4 DATA PACKAGE REVIEW - GCMS-SIM VOC surrogate recoveries were outliers biased high for 1 out of 4 surrogates in client sample -004. GCMS-SIM VOC sample -004 detected results should be considered to be estimated and qualified with J flags. Non-detect results do not require qualification.

GCMS-SIM VOC QC batch 276290 LCS/LCSduplicate RPD only was an outlier for 1,4-dioxane. Qualification of client sample results was not required based on this QC outlier alone. QC batch 276673 LCS/LCSduplicate recovery outliers were not associated with reportable results so qualification was not required based on these QC outliers.

GCMS-SIM VOC QC batch 277393 and GCMS SVOC QC batch 275885 and 276363 and PCB QC batch 277676 and PAH QC batch 275872 did not include MS recovery data due to insufficient sample volume available for spiking according to the laboratory submittal case narrative.

GCMS VOC and GCMS SVOC TIC results should be considered to be estimated and qualified with NJ flags unless the TIC analyte detected is an instrument calibrated compound that is just not part of the TAL for this submittal in which case no qualification is required other than the TIC qualification code or J flag if the result is detected below the RL.

GCMS VOC QC batch LCS/LCSduplicate RPD was an outlier for 1,1-dichloroethylene. Qualification of client sample results was not required based on this QC outlier alone.

GCMS-SIM SVOC QC batch 275872 method blank had a detection above the RL for hexachlorobenzene. Qualification of client sample results was not required based on this method blank detection.

GCMS SVOC QC batch 275885 LCS recoveries were outliers biased high for benzaldehyde. Qualification of client sample results was not required based on this high bias QC outlier.

Metals method blanks had detections below the RL in QC batch 275634 for arsenic and vanadium and in QC batch 276235 for vanadium. Client samples -001, -002, -003, -005 dissolved vanadium results and client samples -003 and -005 total vanadium results should be considered to be non-detect at the RL and qualified with UB flags. Client samples -002 and -004 total vanadium results and client sample -004 dissolved vanadium result and client samples -001, -002, -003 and -005 total arsenic results should be considered to be non-detect at the concentration reported and qualified with B flags.

GCMS VOC QC batch 277302 and Metals QC batch 276235 and 275634 MS recovery outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

Cyanide client sample -003 MS/MSD recoveries were outliers biased low. Client samples -003 cyanide results should be considered to be estimated and qualified with UJ flags if non-detect and J flags if detected.

Chloride client sample -002 MS/MSD recoveries were outliers biased low. Client sample -002 chloride results should be considered to be estimated and qualified with a J flag.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

2.0 VOLATILE ORGANIC COMPOUNDS (VOCs) – METHOD SW846 8260C and SIM Analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

2.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) VOCs

2.1.1 TUNING AND MASS CALIBRATION – GC/MS VOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

2.1.2 INITIAL CALIBRATION – GC/MS VOCs

Initial calibration data for VOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS VOCs

Initial calibration verification (ICV) standards for VOC analyses were reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

2.2 CONTINUING CALIBRATION – GC/MS VOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.3 INTERNAL STANDARDS – GC/MS VOCs

Internal standard (IS) data were reviewed and met criteria without exception.

2.4 SURROGATE SPIKE RECOVERIES – GC/MS VOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

2.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS VOCs

A laboratory control sample (LCS) was prepared and analyzed for VOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

2.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS VOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

2.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS VOCs

There were no field duplicate comparisons performed as part of this validation request.

2.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS VOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

2.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS VOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable unless noted otherwise in verification/validation summary.

2.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS VOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

2.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS VOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

3.0 SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) – METHOD SW846 8270D and SIM analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

3.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) SVOCs

3.1.1 TUNING AND MASS CALIBRATION – GC/MS SVOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

3.1.2 INITIAL CALIBRATION – GC/MS SVOCs

Initial calibration data for SVOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

3.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS SVOCs

Initial calibration verification (ICV) standards for SVOC analyses were reviewed and met criteria specified by the laboratory with no exceptions.

3.2 CONTINUING CALIBRATION – GC/MS SVOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary

3.3 INTERNAL STANDARDS – GC/MS SVOCs

Internal standard (IS) data were reviewed and met criteria without exception.

3.4 SURROGATE SPIKE RECOVERIES – GC/MS SVOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

3.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS SVOCs

A laboratory control sample (LCS) was prepared and analyzed for SVOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

3.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS SVOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

3.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS SVOCs

There were no field duplicate comparisons performed as part of this validation request.

3.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS SVOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

3.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS SVOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable without exception.

3.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS SVOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

3.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS SVOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

4.0 POLYCHLORINATED BIPHENYLS (PCBs) – METHOD SW846 8082A

The target analyte list was defined by the client as the standard 7 aroclors.

4.1 CALIBRATION – GAS CHROMATOGRAPH-ECD
4.1.1 TUNING AND MASS CALIBRATION – PCB

Not applicable for this analysis.

4.1.2 INITIAL CALIBRATION – PCB

Initial calibration data for PCBs were reviewed and met the criteria for instrument sensitivity and linearity of response without exception.

4.1.3 INITIAL CALIBRATION VERIFICATION – PCB

Initial calibration verification (ICV) standards for PCB analyses were reviewed and met criteria specified by the laboratory with no exceptions.

4.2 CONTINUING CALIBRATION – PCBs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

4.3 INTERNAL STANDARDS – PCB

Internal standard (IS) data were reviewed and met criteria unless noted otherwise in verification/validation summary. (NOTE: Lab quantitation approach DID use internal standard quantitation for this submittal).

4.4 SURROGATE SPIKE RECOVERIES – PCB

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

4.5 LABORATORY CONTROL SAMPLE ANALYSES - PCB

A laboratory control sample (LCS) was prepared and analyzed for PCBs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary..

4.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - PCB

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

4.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - PCB

There were no field duplicate comparisons performed as part of this validation request.

4.8 EXTRACT CLEANUP - PCB

Extract cleanups were performed in accordance with laboratory SOP's and as noted in level 4 data package prep logs.

4.9 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - PCB

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

4.10 TENTATIVELY IDENTIFIED COMPOUNDS - PCB

Not requested for this analytical procedure.

4.11 BLANKS – METHOD/FIELD/CALIBRATION - PCB

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

5.0 HPLC/IC – METHOD SW846 9056A – CHLORIDE AND SULFATE

5.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

5.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

5.3 CONTINUTING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

5.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

5.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

5.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

5.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

5.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

6.0 METALS – ICPMS by Method 6020 TOTAL AND DISSOLVED and Mercury by Method 7470A

The following samples provided in this SDG underwent a Level IV review for either/and metals or mercury analyses:

- Method 6020A: ALL
- Method 7470A: ALL

6.1 ICP/MS TUNING AND MASS CALIBRATION

Instrument tuning data were reviewed. Tuning elements were analyzed. All tuning criteria were met for the analyses, indicating proper optimization of the instrumentation.

6.2 INITIAL CALIBRATION

Initial calibration data for metals and mercury were reviewed and met the criteria for linearity of response without exception.

6.3 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards for metals and mercury analyses were reviewed and met criteria unless otherwise noted in verification/validation summary section of this document.

An initial calibration blank (ICB) was analyzed for metals and mercury analyses. Metals and mercury were reported as non-detect in each ICB analysis unless noted otherwise in verification/validation summary.

6.4 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for metals and mercury analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

6.5 INTERFERENCE CHECK STANDARD

The interference check standard results were reviewed and found to meet criteria.

6.6 INTERNAL STANDARDS

Internal standard (IS) data were reviewed and found to meet criteria unless noted otherwise in verification/validation summary.

6.7 LABORATORY CONTROL SAMPLE ANALYSIS

A laboratory control sample (LCS) was prepared and analyzed for metals and mercury. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

6.8 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE (MS/MSD) ANALYSES

The MS/MSD recoveries and RPD's were either not performed using a client sample or were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

6.9 CONTRACT REQUIRED DETECTION LIMIT STANDARD ANALYSES

Each contract required detection limit (CRDL) standard was analyzed at the proper frequency and were within laboratory control limits unless noted otherwise in verification/validation summary.

6.10 ICP SERIAL DILUTION

Serial dilutions were analyzed at the proper frequency and were either not performed using the client sample or were within laboratory control limits unless noted otherwise in verification/validation summary.

6.11 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

6.12 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

6.13 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

7.0 GENERAL CHEMISTRY- TOTAL AND AMENABLE CYANIDE AND ALKALINITY – METHODS 9012B and 2320B

7.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

7.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

7.3 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

7.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

7.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD’s were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

7.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

7.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

7.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

8.0 REPRESENTATIVENESS EVALUATION

Representativeness is a qualitative evaluation of whether the data represents actual environmental conditions. Representativeness was evaluated using holding time criteria, which reflect the length of time after sample collection that a sample or extract remains representative of environmental conditions. Depending on the analysis, either one or two holding times were evaluated.

i.) For those analyses that do not include a sample extraction, only one holding time was evaluated: the length of time between sample collection and analysis.

ii.) For analyses that require sample extraction prior to analysis, two holding times were evaluated: the length of time from sampling until extraction and the length of time from extraction to analysis.

Holding times are compared to standard method specific holding times accepted or recommended by the United States Environmental Protection Agency (USEPA). Those holding times outside of USEPA acceptance criteria are qualitatively evaluated to determine their effect on sample representativeness.

Representativeness was also evaluated by analysis of laboratory method blanks and field equipment blanks. Laboratory method blanks and field equipment blanks are used to identify sources of contamination not associated with environmental conditions.

8.1 SAMPLE PRESERVATION AND HOLDING TIMES

Sample holding time and preservation requirements are summarized in Appendix 5.

All sample extractions and/or analyses were performed within the specified holding times unless noted otherwise in verification/validation summary.

All samples were properly preserved and cooled to 0-6°C after collection.

8.2 METHOD BLANK SUMMARY

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

Evaluation of blank contamination includes directions on the interpretation of the affected analytical results.

9.0 USABILITY AND COMPARABIILTY

Usability of data was evaluated by assuring that all the analytical requests were met, samples were received in the proper condition, and all analyses were performed within the appropriate holding times unless noted otherwise in verification/validation summary

No data evaluated within this delivery group was considered unusable (qualified with an R flag) due to sample integrity, sample matrix interference or batch quality control issues unless noted otherwise in verification/validation summary.

10.0 QC SUMMARY

All sample results meet the project specific QAPP standard for usability with exceptions defined by validation and verification qualifiers as applied. Please reference the following tables for a summary of the investigative field sample data and their valid qualifiers based on Level 4 technical review of the analytical data.

APPENDIX 1

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Nashville
Laboratory Submittal: 85529-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	Metals by ICP Mass Spectroscopy(D)	Metals by ICP Mass Spectroscopy	Mercury (Manual Cold Vapor)(D)	Mercury (Manual Cold Vapor)	TOTAL AND AMENABLE CYANIDE (AUTOMATED COLORIMETRIC, WITH OFF-LINE DISTILLATION)	Inorganic Anions by IC	Alkalinity Prep
490855291	PM AirShaft-230-081815	8/18/2015	10:50:00	X	X	X	X	X	X	X	X	X	X	X	X
490855292	CM-275-081815	8/18/2015	1:20:00	X	X	X	X	X	X	X	X	X	X	X	X
490855293	RW-10A (75-85)- 081815	8/18/2015	10:25:00	X	X	X	X	X	X	X	X	X	X	X	X
490855294	RW-10 (185-195)- 081815	8/18/2015	11:35:00	X	X	X	X	X	X	X	X	X	X	X	X
490855295	RW-8 (163-173)- 081815	8/18/2015	2:15:00	X	X	X	X	X	X	X	X	X	X	X	X
490855296	Trip Blank- 09-081915	8/18/2015	1:00:00	X	X										

APPENDIX 2

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85529-1
August 2015

Description

- Standard Report Cover page
- Table of Contents
- SDG Case Narrative
- Sample Summary
- Executive Summary detection highlights
- Method Summary
- Method/Analyst Summary
- Analytical Results
- Surrogate Summary
- Quality Control Results
- Data Qualifiers
- QC Summary Association
- Lab Chronicle
- GCMS Volatiles Data - Method 8260C and SIM
  - QC Summary Data
    - Surrogate recoveries (form II)
    - Check Sample recoveries (form III)
    - Matrix spike/Matrix spike duplicate report (form III)
    - Method blank report (form IV)
    - Tuning and mass calibrations (form V)
    - Internal Standard and RT area summary (form VIII)
  - Sample Data
    - GCMS VOA Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Total Ion Profile Chromatogram
    - Ion profiles of detected target analyte peaks
    - Manual integration if applicable
    - Tentatively Identified Compound Reports (if applicable)
  - Standards Data
    - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
    - ICAL Raw integration data from instrument
    - ICAL Total Ion Profile Chromatogram
    - ICV check standard recovery report (Form VII)
    - ICV check standard total ion profile with integration
    - GCMS VOA Continuing Calibration Data (Form VII)
    - CCV raw integration data from instrument
    - CCV Total Ion Profile Chromatogram
    - Manual integration if applicable
  - Raw QC Data
    - Tune information (not included with SIM package)
    - FORM I - QC data
    - Method Blank integration/internal standard and total ion profile raw data
    - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
    - MS and MSD integration/internal standard and total ion profile raw data
  - Miscellaneous Data
    - Run logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85529-1
August 2015

Description

GCMS Semivolatiles Data - Method 8270D and SIM

- QC Summary Data
  - Surrogate recoveries (form II)
  - Check Sample recoveries (form III)
  - Method blank report (form IV)
  - Tuning and mass calibrations (form V) (not applicable for SIM)
  - Internal Standard and RT area summary (form VIII)
- Sample Data
  - GCMS VOA Organics Analysis Data Sheet (Form I)
  - Raw integration data from instrument
  - Total Ion Profile Chromatogram
  - Ion profiles of detected target analyte peaks
  - Manual integration if applicable
  - Tentatively Identified Compound Reports (if applicable)
- Standards Data
  - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
  - ICAL Raw integration data from instrument
  - ICAL Total Ion Profile Chromatogram
  - ICV check standard recovery report
  - ICV check standard total ion profile with integration
  - GCMS VOA Continuing Calibration Data (Form VII)
  - CCV raw integration data from instrument
  - CCV Total Ion Profile Chromatogram
  - Manual integration if applicable
- Raw QC Data
  - Tune information (not applicable for SIM)
  - Method Blank integration/internal standard and total ion profile raw data
  - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
- Miscellaneous Data
  - Instrument run logs
  - Extraction bench sheets

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85529-1
August 2015

Description

- Polychlorinated Biphenyls Data (PCB)
  - QC Summary data
    - Surrogate recoveries (form II)
    - Check Sample Recovery data (form III)
    - Method Blank data (form IV)
    - Analytical sequence with RT check (Form VIII)
    - Identification Summary (Form X)
  - Sample Data
    - Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Chromatogram
  - Standards Data (both columns)
    - Initial Calibration Data External Standard RT Summary (Form VI)
    - Initial Calibration Data Summary with average RF
    - Raw integration data from instrument with manual integrations where applicable
    - ICAL chromatograms
    - Continuing Calibration Data (Form VII) with RT Summaries
    - ICV raw integration and chromatograms
    - CCV raw integration data from instrument
    - CCV chromatogram
  - Raw QC Data
    - LCS/LCSD sample data report and integration and chromatograms
    - Method blank integration and chromatograms
  - Miscellaneous Data
    - Sequence table (run log)
    - PCB Batch Worksheet
- HPLC/IC - 9056A ORGFM_28D - Anions, Ion Chromatography - Sulfate and Chloride
  - Raw Data and Data Summaries for:
    - LCS/LCSD (form III)
    - MS/MSD (form III)
    - METHOD BLANKS (Form IV)
    - SAMPLE DATA (Form I)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VI)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VII)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - QC DATA (Form I)
      - Raw instrument data and chromatography
    - Analysis Run Logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85529-1
August 2015

Description

METALS DATA (ICPMS and mercury)
- Forms Data
  - Cover Page
  - Inorganic Analysis Data Sheet - Metals Dissolved/Total Recoverable (1A-IN)
  - CCV standard report - mercury and ICPMS (2A-IN)
  - CRQL report - mercury and ICPMS (2B-IN)
  - ICB report - mercury and ICPMS (3-IN)
  - Method blank report (3-IN)
  - Interference check standard A - ICPMS (4A-IN)
  - Interference check standard AB - ICPMS (4A-IN)
  - MS/MSD Sample recovery (5A-IN)
  - PDS Summary (5B-IN)
  - LCS Recovery form (7A-IN)
  - LCS Duplicate Recover (7D-IN)
  - ICP-MS Serial Dilutions (8-IN)
  - Detection Limits Form (9-IN)
  - Linear dynamic ranges - ICPMS (11-IN)
  - Prep log - mercury and ICPMS (12-IN)
  - Run log - ICPMS and Mercury (13-IN)
  - ICP-MS TUNE (14-IN)
  - ICPMS Internal Standards Relative Intensity Summary (15-IN)
- Instrument Printouts
  - ICP-MS Raw instrument data
  - Mercury raw instrument data, run logs and calibrations
- Miscellaneous Data
  - Metals Batch Worksheet

GENERAL CHEMISTRY - Total and Amenable Cyanide and Alkalinity
- Cover Page
- Raw Data and Data Summaries for:
  - Sample Data (Form 1B-IN)
  - CCV/CCB (Form 2-IN)
  - METHOD BLANKS (Form 3-IN)
  - MATRIX SPIKES (Form 5-IN)
  - Sample DUPLICATES (Form 6-IN)
  - LCS/LCSD (Form 7-IN)
  - Detection Limits Form (9-IN)
  - Prep log (12-IN)
  - Analysis Run Logs (13-IN)
  - Raw Data - instrument sample sequence and calibration curve
  - Alkalinity Reagents
  - Alkalinity pH meter calibration
  - Alkalinity sequence log and raw data
  - General Chemistry Batch Worksheets

Shipping and Receiving Documents
- COC forms
- Cooler Receipt Form, checklist and narrative

APPENDIX 3

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85529-1

		Sample Name:	PM AirShaft-230-081815				CM-275-081815				RW-10A (75-85)- 081815			
		Lab Sample ID:	490855291				490855292				490855293			
		Sample Date:	8/18/2015				8/18/2015				8/18/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trimethylbenzene - TIC	526-73-8	0.41	1.0	ug/l	J								
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trimethylbenzene - TIC	95-63-6	0.20	1.0	ug/l	J								
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	0.42	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	1.4	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	3.6	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
Benzene	71-43-2	25	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6	4.6	---	ug/l	NJ								
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	15	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	7.7	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	0.40	1.0	ug/l	J	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	1.7	5.0	ug/l	J	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7	5.2	---	ug/l	NJ								
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethyl ether - TIC	60-29-7	1.0	5.0	ug/l	J								
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexane - TIC	110-54-3	0.16	2.0	ug/l	J								
Indane - TIC	496-11-7	7.3	---	ug/l	NJ								
Isopropylbenzene	98-82-8	7.4	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	0.27	5.0	ug/l	J	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
N-Propylbenzene - TIC	103-65-1	1.0	1.0	ug/l	---								
Naphthalene - TIC	91-20-3	4.6	5.0	ug/l	J								
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Tetrahydrofuran - TIC	109-99-9	4.3	10	ug/l	J								
Toluene	108-88-3	0.24	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Total Alkanes - TIC	TIC1	0.16	---	ug/l	NJ								
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	0.85	3.0	ug/l	J	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	140	100	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.30	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85529-1

		Sample Name:	PM AirShaft-230-081815				CM-275-081815				RW-10A (75-85)- 081815			
		Lab Sample ID:	490855291				490855292				490855293			
		Sample Date:	8/18/2015				8/18/2015				8/18/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	24	ug/l	---	ND	24	ug/l	---	ND	25	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	1.9	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	2-Methylphenol	95-48-7	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	2-Nitroaniline	88-74-4	ND	24	ug/l	---	ND	24	ug/l	---	ND	25	ug/l	---
	2-Nitrophenol	88-75-5	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5												
	3-Nitroaniline	99-09-2	ND	24	ug/l	---	ND	24	ug/l	---	ND	25	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	24	ug/l	---	ND	24	ug/l	---	ND	25	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	24	ug/l	---	ND	24	ug/l	---	ND	25	ug/l	---
	4-Nitrophenol	100-02-7	ND	24	ug/l	---	ND	24	ug/l	---	ND	25	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3												
	Acenaphthene	83-32-9	ND	1.9	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Acenaphthylene	208-96-8	ND	1.9	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Acetophenone	98-86-2	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	1.9	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Atrazine	1912-24-9	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Benzaldehyde	100-52-7	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2												
	Benzo[g,h,i]perylene	191-24-2	ND	1.9	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.9	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	1.9	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	1.9	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Dibenzofuran	132-64-9	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Dimethyl phthalate	131-11-3	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Diphenyl	92-52-4	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Fluoranthene	206-44-0	ND	1.9	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Fluorene	86-73-7	ND	1.9	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	1.9	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	n-Hexadecanoic acid - TIC	57-10-3												
	N-Nitrosodi-n-propylamine	621-64-7	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	1.9	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Nitrobenzene	98-95-3	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Phenanthrene	85-01-8	ND	1.9	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Phenol	108-95-2	ND	9.6	ug/l	---	ND	9.6	ug/l	---	ND	10	ug/l	---
	Pyrene	129-00-0	ND	1.9	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
OSW-8270DSIM														
	Benzo[a]anthracene	56-55-3	ND	0.046	ug/l	---	ND	0.046	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.046	ug/l	---	ND	0.046	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.046	ug/l	---	ND	0.046	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.019	ug/l	---	ND	0.019	ug/l	---	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.37	ug/l	---	ND	0.37	ug/l	---	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.74	ug/l	---	ND	0.74	ug/l	---	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.28	ug/l	---	ND	0.28	ug/l	---	ND	0.30	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
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		Sample Name:	PM AirShaft-230-081815				CM-275-081815				RW-10A (75-85)- 081815			
		Lab Sample ID:	490855291				490855292				490855293			
		Sample Date:	8/18/2015				8/18/2015				8/18/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2	ND	0.48	ug/l	---	ND	0.45	ug/l	---	ND	0.50	ug/l	---
	PCB-1221	11104-28-2	ND	0.48	ug/l	---	ND	0.45	ug/l	---	ND	0.50	ug/l	---
	PCB-1232	11141-16-5	ND	0.48	ug/l	---	ND	0.45	ug/l	---	ND	0.50	ug/l	---
	PCB-1242	53469-21-9	ND	0.48	ug/l	---	ND	0.45	ug/l	---	ND	0.50	ug/l	---
	PCB-1248	12672-29-6	ND	0.48	ug/l	---	ND	0.45	ug/l	---	ND	0.50	ug/l	---
	PCB-1254	11097-69-1	ND	0.48	ug/l	---	ND	0.45	ug/l	---	ND	0.50	ug/l	---
	PCB-1260	11096-82-5	ND	0.48	ug/l	---	ND	0.45	ug/l	---	ND	0.50	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.48	ug/l	---	ND	0.45	ug/l	---	ND	0.50	ug/l	---
Metals														
	OSW-6020A													
	Aluminum	7429-90-5	0.035	0.020	mg/l	---	0.086	0.020	mg/l	---	ND	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	ND	0.020	mg/l	---	ND	0.020	mg/l	---
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Arsenic	7440-38-2	0.0030	0.0020	mg/l	B	0.0032	0.0020	mg/l	B	0.0020	0.0020	mg/l	B
	Arsenic - Dissolved	7440-38-2	0.00058	0.0020	mg/l	J	0.00054	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Barium	7440-39-3	0.54	0.0020	mg/l	---	0.12	0.0020	mg/l	---	0.0071	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.29	0.0020	mg/l	---	0.088	0.0020	mg/l	---	0.0069	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	0.0064	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	98.9	10.0	mg/l	---	83.2	1.0	mg/l	---	51.4	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	149	50.0	mg/l	---	82.9	1.0	mg/l	---	50.2	1.0	mg/l	---
	Chromium	7440-47-3	0.0088	0.0020	mg/l	---	0.016	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt	7440-48-4	0.0016	0.0020	mg/l	J	0.00094	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	0.0010	0.0020	mg/l	J	0.00055	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Copper	7440-50-8	0.0061	0.0020	mg/l	---	0.018	0.0020	mg/l	---	0.0040	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.0019	0.0020	mg/l	J
	Iron	7439-89-6	126	0.25	mg/l	---	25.5	0.025	mg/l	---	0.029	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	ND	0.025	mg/l	---	0.014	0.025	mg/l	J	ND	0.025	mg/l	---
	Lead	7439-92-1	0.98	0.0020	mg/l	---	0.091	0.0020	mg/l	---	0.00082	0.0020	mg/l	J
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.00026	0.0020	mg/l	J
	Magnesium	7439-95-4	11.4	1.0	mg/l	---	22.8	1.0	mg/l	---	14.0	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	11.9	1.0	mg/l	---	24.0	1.0	mg/l	---	14.4	1.0	mg/l	---
	Manganese	7439-96-5	2.1	0.020	mg/l	---	1.3	0.0020	mg/l	---	0.0019	0.0020	mg/l	J
	Manganese - Dissolved	7439-96-5	2.9	0.10	mg/l	---	1.4	0.020	mg/l	---	0.00082	0.0020	mg/l	J
	Nickel	7440-02-0	0.0029	0.0020	mg/l	---	0.0060	0.0020	mg/l	---	0.0059	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0	0.0014	0.0020	mg/l	J	0.0034	0.0020	mg/l	---	0.0058	0.0020	mg/l	---
	Potassium	7440-09-7	7.9	1.0	mg/l	---	4.7	1.0	mg/l	---	2.2	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	7.9	1.0	mg/l	---	4.7	1.0	mg/l	---	2.1	1.0	mg/l	---
	Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	29.6	1.0	mg/l	---	82.7	1.0	mg/l	---	5.0	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	30.9	1.0	mg/l	---	87.2	1.0	mg/l	---	5.1	1.0	mg/l	---
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Vanadium	7440-62-2	0.0050	0.0020	mg/l	---	0.0022	0.0020	mg/l	B	0.0014	0.0020	mg/l	UB
	Vanadium - Dissolved	7440-62-2	0.00089	0.0020	mg/l	UB	0.0010	0.0020	mg/l	UB	0.0015	0.0020	mg/l	UB
	Zinc	7440-66-6	5.7	0.25	mg/l	---	8.2	0.25	mg/l	---	0.013	0.025	mg/l	J
	Zinc - Dissolved	7440-66-6	4.6	1.3	mg/l	---	2.8	0.25	mg/l	---	ND	0.025	mg/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	UJ
	OSW-9056A													
	Chloride	16887-00-6	11.2	1.00	mg/l	---	183	1.00	mg/l	J	3.02	1.00	mg/l	---
	Sulfate	14808-79-8	ND	1.00	mg/l	---	3.46	1.00	mg/l	---	34.1	1.00	mg/l	---
Prep														
	APHA-2320B													
	Bicarbonate Alkalinity as CaCO3	E-14508	506	10.0	mg/l	---	249	10.0	mg/l	---	147	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	506	10.0	mg/l	---	249	10.0	mg/l	---	147	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85529-1

		Sample Name:	RW-10 (185-195)- 081815				RW-8 (163-173)- 081815				Trip Blank- 09-081915			
		Lab Sample ID:	490855294				490855295				490855296			
		Sample Date:	8/18/2015				8/18/2015				8/18/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trimethylbenzene - TIC	526-73-8												
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trimethylbenzene - TIC	95-63-6												
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	24	25	ug/l	J	ND	25	ug/l	---	ND	25	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	0.27	1.0	ug/l	J	ND	1.0	ug/l	---
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6												
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	1.6	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7												
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethyl ether - TIC	60-29-7												
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexane - TIC	110-54-3												
Indane - TIC	496-11-7												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
N-Propylbenzene - TIC	103-65-1												
Naphthalene - TIC	91-20-3												
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Tetrahydrofuran - TIC	109-99-9												
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Total Alkanes - TIC	TIC1												
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	0.016	0.030	ug/l	UB	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85529-1

		Sample Name:	RW-10 (185-195)- 081815				RW-8 (163-173)- 081815				Trip Blank- 09-081915			
		Lab Sample ID:	490855294				490855295				490855296			
		Sample Date:	8/18/2015				8/18/2015				8/18/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC													
OSW-8270D													
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---				
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---				
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---				
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---				
2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---	ND	25	ug/l	---				
2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---	ND	10	ug/l	---				
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---				
2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---				
2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---				
2-Nitroaniline	88-74-4	ND	25	ug/l	---	ND	25	ug/l	---				
2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---				
3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---	ND	10	ug/l	---				
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---				
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5	12	---	ug/l	NJ								
3-Nitroaniline	99-09-2	ND	25	ug/l	---	ND	25	ug/l	---				
4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---	ND	25	ug/l	---				
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---				
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---				
4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---				
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---				
4-Nitroaniline	100-01-6	ND	25	ug/l	---	ND	25	ug/l	---				
4-Nitrophenol	100-02-7	ND	25	ug/l	---	ND	25	ug/l	---				
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3	3.8	---	ug/l	NJ								
Acenaphthene	83-32-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Acenaphthylene	208-96-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---				
Anthracene	120-12-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Atrazine	1912-24-9	ND	10	ug/l	---	ND	10	ug/l	---				
Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---				
Benzenesulfonamide, N-butyl- - TIC	3622-84-2					8.4	---	ug/l	NJ				
Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---				
Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---	ND	10	ug/l	---				
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---	ND	10	ug/l	---				
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---				
Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---				
Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---				
Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---				
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---				
Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---				
Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---				
Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---				
Diphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---				
Fluoranthene	206-44-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Fluorene	86-73-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---				
Hexachloroethane	67-72-1	ND	10	ug/l	---	ND	10	ug/l	---				
Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---				
n-Hexadecanoic acid - TIC	57-10-3	5.8	---	ug/l	NJ								
N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---	ND	10	ug/l	---				
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---				
Naphthalene	91-20-3	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Nitrobenzene	98-95-3	ND	10	ug/l	---	ND	10	ug/l	---				
Phenanthrene	85-01-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Phenol	108-95-2	3.3	10	ug/l	J	ND	10	ug/l	---				
Pyrene	129-00-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
OSW-8270DSIM													
Benzo[a]anthracene	56-55-3	ND	0.043	ug/l	---	ND	0.050	ug/l	---				
Benzo[a]pyrene	50-32-8	ND	0.043	ug/l	---	ND	0.050	ug/l	---				
Benzo[b]fluoranthene	205-99-2	ND	0.043	ug/l	---	ND	0.050	ug/l	---				
Hexachlorobenzene	118-74-1	ND	0.017	ug/l	---	ND	0.020	ug/l	---				
Hexachlorobutadiene	87-68-3	ND	0.34	ug/l	---	ND	0.40	ug/l	---				
N-Nitrosodimethylamine	62-75-9	ND	0.69	ug/l	---	ND	0.80	ug/l	---				
Pentachlorophenol	87-86-5	ND	0.26	ug/l	---	ND	0.30	ug/l	---				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85529-1

		Sample Name:	RW-10 (185-195)- 081815				RW-8 (163-173)- 081815				Trip Blank- 09-081915			
		Lab Sample ID:	490855294				490855295				490855296			
		Sample Date:	8/18/2015				8/18/2015				8/18/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2	ND	0.46	ug/l	---	ND	0.46	ug/l	---				
	PCB-1221	11104-28-2	ND	0.46	ug/l	---	ND	0.46	ug/l	---				
	PCB-1232	11141-16-5	ND	0.46	ug/l	---	ND	0.46	ug/l	---				
	PCB-1242	53469-21-9	ND	0.46	ug/l	---	ND	0.46	ug/l	---				
	PCB-1248	12672-29-6	ND	0.46	ug/l	---	ND	0.46	ug/l	---				
	PCB-1254	11097-69-1	ND	0.46	ug/l	---	ND	0.46	ug/l	---				
	PCB-1260	11096-82-5	ND	0.46	ug/l	---	ND	0.46	ug/l	---				
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.46	ug/l	---	ND	0.46	ug/l	---				
Metals														
	OSW-6020A													
	Aluminum	7429-90-5	0.17	0.020	mg/l	---	ND	0.020	mg/l	---				
	Aluminum - Dissolved	7429-90-5	0.18	0.020	mg/l	---	ND	0.020	mg/l	---				
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Arsenic	7440-38-2	0.0067	0.0020	mg/l	---	0.0036	0.0020	mg/l	B				
	Arsenic - Dissolved	7440-38-2	0.0052	0.0020	mg/l	---	0.0021	0.0020	mg/l	---				
	Barium	7440-39-3	0.011	0.0020	mg/l	---	0.012	0.0020	mg/l	---				
	Barium - Dissolved	7440-39-3	0.011	0.0020	mg/l	---	0.012	0.0020	mg/l	---				
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---				
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---				
	Calcium	7440-70-2	47.7	1.0	mg/l	---	37.5	1.0	mg/l	---				
	Calcium - Dissolved	7440-70-2	47.2	1.0	mg/l	---	35.0	1.0	mg/l	---				
	Chromium	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Cobalt	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Copper	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Iron	7439-89-6	0.014	0.025	mg/l	J	0.029	0.025	mg/l	---				
	Iron - Dissolved	7439-89-6	0.030	0.025	mg/l	---	0.017	0.025	mg/l	J				
	Lead	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Magnesium	7439-95-4	0.44	1.0	mg/l	J	6.2	1.0	mg/l	---				
	Magnesium - Dissolved	7439-95-4	0.43	1.0	mg/l	J	6.3	1.0	mg/l	---				
	Manganese	7439-96-5	ND	0.0020	mg/l	---	0.015	0.0020	mg/l	---				
	Manganese - Dissolved	7439-96-5	ND	0.0020	mg/l	---	0.016	0.0020	mg/l	---				
	Nickel	7440-02-0	0.0037	0.0020	mg/l	---	0.019	0.0020	mg/l	---				
	Nickel - Dissolved	7440-02-0	0.0031	0.0020	mg/l	---	0.014	0.0020	mg/l	---				
	Potassium	7440-09-7	11.7	1.0	mg/l	---	2.5	1.0	mg/l	---				
	Potassium - Dissolved	7440-09-7	11.9	1.0	mg/l	---	2.2	1.0	mg/l	---				
	Selenium	7782-49-2	0.0011	0.0020	mg/l	J	ND	0.0020	mg/l	---				
	Selenium - Dissolved	7782-49-2	0.00081	0.0020	mg/l	J	ND	0.0020	mg/l	---				
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Sodium	7440-23-5	39.0	1.0	mg/l	---	52.4	1.0	mg/l	---				
	Sodium - Dissolved	7440-23-5	41.5	1.0	mg/l	---	48.9	1.0	mg/l	---				
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Vanadium	7440-62-2	0.0024	0.0020	mg/l	B	0.0012	0.0020	mg/l	UB				
	Vanadium - Dissolved	7440-62-2	0.0028	0.0020	mg/l	B	0.0013	0.0020	mg/l	UB				
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---				
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---				
	OSW-7470A													
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---				
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---				
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---				
	OSW-9056A													
	Chloride	16887-00-6	4.61	1.00	mg/l	---	11.1	1.00	mg/l	---				
	Sulfate	14808-79-8	123	1.00	mg/l	---	162	1.00	mg/l	---				
Prep														
	APHA-2320B													
	Bicarbonate Alkalinity as CaCO3	E-14508	ND	10.0	mg/l	---	72.8	10.0	mg/l	---				
	Total Alkalinity as CaCO3	E-14506	69.5	10.0	mg/l	---	72.8	10.0	mg/l	---				

APPENDIX 4

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85529-1

		Sample Name:	PM AirShaft-230-081815				CM-275-081815				RW-10A (75-85)- 081815				RW-10 (185-195)- 081815				RW-8 (163-173)- 081815			
		Lab Sample ID:	490855291				490855292				490855293				490855294				490855295			
		Sample Date:	8/18/2015				8/18/2015				8/18/2015				8/18/2015				8/18/2015			
Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																						
OSW-8260C																						
1,2,3-Trimethylbenzene - TIC	526-73-8		0.41	1.0	ug/l	J																
1,2,4-Trimethylbenzene - TIC	95-63-6		0.20	1.0	ug/l	J																
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6		4.6	---	ug/l	NJ																
Cyclopentane, methyl- - TIC	96-37-7		5.2	---	ug/l	NJ																
Ethyl ether - TIC	60-29-7		1.0	5.0	ug/l	J																
Hexane - TIC	110-54-3		0.16	2.0	ug/l	J																
Indane - TIC	496-11-7		7.3	---	ug/l	NJ																
Naphthalene - TIC	91-20-3		4.6	5.0	ug/l	J																
Tetrahydrofuran - TIC	109-99-9		4.3	10	ug/l	J																
Total Alkanes - TIC	TIC1		0.16	---	ug/l	NJ																
GC/MS SVOC																						
OSW-8260CSIM																						
1,2,3-Trichloropropane	96-18-4														0.016	0.030	ug/l	UB				
OSW-8270D																						
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5														12	---	ug/l	NJ				
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3														3.8	---	ug/l	NJ				
Benzenesulfonamide, N-butyl- - TIC	3622-84-2																		8.4	---	ug/l	NJ
n-Hexadecanoic acid - TIC	57-10-3														5.8	---	ug/l	NJ				
Metals																						
OSW-6020A																						
Arsenic	7440-38-2		0.0030	0.0020	mg/l	B	0.0032	0.0020	mg/l	B	0.0020	0.0020	mg/l	B					0.0036	0.0020	mg/l	B
Vanadium	7440-62-2						0.0022	0.0020	mg/l	B	0.0014	0.0020	mg/l	UB	0.0024	0.0020	mg/l	B	0.0012	0.0020	mg/l	UB
Vanadium - Dissolved	7440-62-2		0.00089	0.0020	mg/l	UB	0.0010	0.0020	mg/l	UB	0.0015	0.0020	mg/l	UB	0.0028	0.0020	mg/l	B	0.0013	0.0020	mg/l	UB
General Chemistry																						
OSW-9012B																						
Cyanide, Total	57-12-5										ND	0.010	mg/l	UJ								
OSW-9056A																						
Chloride	16887-00-6						183	1.00	mg/l	J												

APPENDIX 5

EPA Sample Holding Time and Preservation Requirements

Parameter	*Reference Method*	*Matrix*	*Preservation & Storage*	*Holding Times*
Volatile Organics by GCMS	OSW-8260C/SIM	Water	Acidify ph<2 Refrigeration 0-6oC	14 days
Semivolatile Organics by GCMS	OSW-8270D/SIM	Water	Refrigeration 0-6oC	7 days Extraction 40 days Analysis
Polychlorinated Biphenyls by GC/ECD	OSW-8082A	Water	Refrigeration 0-6oC	365 days - Extraction - Analysis
Metals by ICP/ICPMS Spectroscopy	OSW-6010B OSW-6020A	Water	Acidify pH<2 Refrigeration 0-6oC	180 days
Mercury in Aqueous Waste	OSW-7470A	Water	Acidify pH<2 Refrigeration 0-6oC	28 days
Alkalinity	EPA 2320B	Water	Refrigeration 0-6oC	14 days
Chloride and Sulfate	OSW-9056A	Water	Refrigeration 0-6oC	28 days
Total and Amenable Cyanide	OSW-9012B	Water	Test for presence of Sulfide – if unknown collect two samples and treat one with Lead Carbonate. Then adjust sample to pH of greater than or equal to 12with NaOH. Refrigeration at 0-4C –(also may require treatment for aldehydes and chlorine/hypochlorite/sulfite)	14 days if preserved. 24 hours or sooner if unpreserved

ATTACHMENT A

CHAIN OF CUSTODY DOCUMENT(S)

Loc: 490
85529

Chain of Custody Record

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

09/21/2015

Client Information	Sampler: Robert Lautenberg	Lab PM: Brown, Shali	Carri	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:	Analysis Requested		
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
PMAirShaft-230-081815	8/18/15	10:50	G	Water	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
CM-275-081815	8/18/15	13:20	G	Water	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
RW-10A(75-85)-081815	8/18/15	10:25	G	Water	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
RW-10(185-195)-081815	8/18/15	11:35	G	Water	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
RW-8(163-173)-081815	8/18/15	14:15	G	Water	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
TB-09-081915	8/19/15	—	—	Water	✓	✓	✓	✓													
				Water																	
				Water																	
				Water																	
				Water																	
				Water																	

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8/19/15 900	Cornerstone	James Thoen	8/19/15 900	TA
Relinquished by: James Thoen	Date/Time: 8/19/15 1145	Company TA	Received by: Mary Hall 0.2/2.5	Date/Time: 8/20/15 0920	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

F1

E-Mail Date: 2015-10-12
E-Mail To: tim.roeper@cornerstoneeg.com
cc:

U.S. Mail: Tim Roeper
Cornerstone Environmental Group
100 Crystal Run Road, Suite 101
Middletown, NY 10941

ANALYTICAL DATA VALIDATION REPORT
Ringwood Mines/Landfill
Ford Motor Company
CLIENT PROJECT NUMBER - not available
CADENA PROJECT E203361
SAMPLES COLLECTED August 2015
SUBMITTAL #: 490-85780-1

PREPARED BY:
CADENA, INC.
1099 Highland Drive
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Date: 2015-10-12
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1.0 INTRODUCTION

The following document details an assessment of the analytical data reported by TestAmerica-Nashville Laboratory the data in the submittals listed below which were collected from the Ringwood Mines/Landfill site as noted. A sampling and analysis summary that lists all sample ID's and testing as related to the laboratory submittal numbers is presented in Appendix 1. A summary of all of the analytical data is presented in Appendix 3. Copies of sample Chain of Custody (COC) documents and cooler receipt forms for samples discussed in this report are included in Attachment A.
Note: One field sample from this submittal was collected in triplicate to facilitate use of this sample as the QC batch MS/MSD for each analysis where appropriate (MS not required for alkalinity).

Table 1.1

Laboratory Submittal	***Sample Date***	***Laboratory Receipt Date***
490-85780-1	8/21/2015	8/22/2015

The samples noted below were validated against the associated method/parameter in order to achieve the validation requirements for this SDG:

Table 1.2

Parameter	***Reference Method***	***Analyte Listing***
Volatile Organics	OSW-8260C	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8260CSIM	1,2-Dibromo-3-Chloropropane,1,4-Dioxane,EthyleneDibromide,1,2,3-Trichloropropane
Semi-Volatile Organics	OSW-8270D	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8270DSIM	Extended list includes the following: Benzo(a)anthracene,Benzo(a)pyrene, Benzo(b)fluoranthene,Hexachlorobenzene, Hexachlorobutadiene,N-Nitrosodimethylamine,Pentachlorophenol
PCB	OSW-8082A	7 Standard Aroclors
Metals	OSW-6020A/7470A	Total and dissolved TAL Metals
Ion Chromatography	OSW-9056A	Chloride and Sulfate
Total Cyanide	OSW-9021B	Total and Amenable Cyanide
General Chemistry	APHA-2320B	Total and Bicarbonate Alkalinity

All "SW" analytical methods were referenced from "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition, November 1986 (with all subsequent revisions). The "SM" analytical method was referenced from the "Standard Methods for the Examination of Water and Waste water", latest promulgated revision. "EPA" methods were referenced from the revisions noted.

Laboratory Standard Operating Procedures (SOPs) associated with the methods utilized for this laboratory submittal were not available to CADENA for the purpose of validating this SDG.

Level IV data review provides a comprehensive or extensive review of the analytical data allowing for the complete reconstruction of the chemical analysis. A Level IV (Tier 3) data review was performed on the samples listed in Table 1.2 above by (CADENA).

All of the data that was recalculated was consistent with the reported results to within at least 2 significant figures. Final results may not recalculate exactly beyond this level of precision, in some cases, due to differences in available significant figures between the hardcopy raw data provided and the data utilized for calculations by the laboratory that came directly from the instrument. A table of the laboratory documents reviewed in preparing this report is included in Appendix 2.

The data was reviewed in accordance with the analytical methods and the documents listed below: (NOTE: laboratory criteria – control limits – were utilized to evaluate the data where available. Comparison to NFG criteria are noted when lab criteria was not available or for informational purposes when lab data exceeds NFG criteria).

i.) "Standard Operating Procedure HW-6 Rev12 March 2001: CLP Organics Data Review and Preliminary Review" USEPA Region 2 as identified in project QAPP.
ii.) "Standard Operating Procedure HW-2, Rev11, Jan 1992: Evaluation of Metals Data for the CLP Program" as identified in the project QAPP.

The Level VI review findings are presented in the following subsections.

An overview of the review findings is presented in table format. Several data qualifier flags were utilized in the review process. The definitions of these qualifier flags are as follows:

- J Indicates an estimated value.
- U Indicates the compound or analyte was analyzed for, but not detected at or above the stated limit.
- UJ The analyte/compound was not detected above the reported sample quantitation limit. However, the quantitation limit is considered to be approximate due to associated quality assurance results.
- UB The analyte was detected in the sample at a level between the MDL and RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the reporting limit.
- B The analyte was detected in the sample at a level above the RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the concentration reported.
- R The analyte/compound results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte/compound cannot be verified.

All flags have been incorporated into the data tables in this report.

1.1 VALIDATION QUALIFIER EXECUTIVE SUMMARY

VALIDATION SUMMARY

GCMS VOC and SIM

GCMS VOC Continuing Calibration Verification standards 278001/3 analyzed on 9/1 and CCV 278444/2 analyzed on 9/2 had multiple responses outside of laboratory control limits. High bias outliers did not have an effect on client sample data or were not associated with target analytes for this submittal. Low bias recoveries were observed for target analytes chloromethane and methyl acetate in the CCV from 9/1 and chloromethane, bromomethane, acetone and methyl acetate from 9/2. All client sample methyl acetate, acetone, bromomethane and chloromethane results should be considered to be estimated and qualified with UJ flags if non-detect and J flags if detected based on these low bias CCV responses.

GCMS SVOC and SIM

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

PCB

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

METALS

Client sample -003 total manganese result was above the instrument linear dynamic range (LDR) so this result should be considered to be estimated and qualified with an E flag.

INORGANICS

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

The following observations **DID NOT** result in qualification but were noted during the validation review:

GCMS VOC

CCV outliers were not associated with target analytes for this submittal.

GCMS VOC-SIM

CCV for sequence 276673 on 8/27 had outliers that were not associated with reported sample results. ICV for sequence 277064 on 8/28 were reported on form VII as outliers based on known spike values reported. Verification with laboratory indicated that the known spike values should have been 10 and 0.5 (instead of 2000/100) as was historically reported for other sequences to these ICV recoveries were considered to be acceptable when compared to these historical values.

CCV 278441 had one surrogate outlier biased high – qualification of client sample results was not required based on this surrogate recovery outlier.

GCMS SVOC

Sample -010 was received with a pH of 14 according to the laboratory prep log. Sample was acidified to pH 2 prior to the initial extraction so qualification was not made based on this sample condition.

QC batch 276471 MS/MSD was not spiked during QC prep and was consequentially re-extracted outside of the referenced hold time criteria.

GCMS SVOC-SIM

Sample -008 and -011was received at a pH of 11 according to the laboratory prep log. Sample was acidified to pH 2 prior to the initial extraction so qualification was not made based on this sample condition.

METALS

No additional observations to report.

PCB – internal standard technique was used for both columns. Some initial and continuing calibration outliers were observed for specific aroclor 1016/1260 peaks on the secondary columns but these outliers did not result in qualification of final client sample results.

RAW DATA NOT INCLUDED IN ORIGINAL LAB LEVEL 4 DATA PACKAGE:

DISSOLVED MERCURY – Sample raw data was not included – duplicate of total mercury run was reported instead.

VERIFICATION SUMMARY

The following qualifications and associated data flags were applied based on the initial level 2 review of this data package.

The following minor QC exceptions or missing information were noted:

GCMS VOC trip blank was non-detect for all target analytes.

GCMS-VOC SIM QC batch 278441 CCV response outliers as noted in the laboratory submittal case narrative were not used to qualify results as part of this level 2 data package review.

GCMS-VOC SIM QC batch 278441 LCS and LCSduplicate recoveries were outliers biased low for ethylene dibromide. Qualification of client sample results was not required based on this QC outlier.

GCMS VOC and GCMS SVOC TIC results should be considered to be estimated and qualified with NJ flags unless the TIC analyte detected is an instrument calibrated compound that is just not part of the TAL for this submittal in which case no qualification is required other than the TIC qualification code or J flag if the result is detected below the RL.

GCMS VOC QC batch 278444 LCS recovery was an outlier biased high for cyclohexane. Qualification of client sample results was not required based on these high bias QC outliers.

GCMS VOC QC batch 278444 method blank had a detection below the RL for methylene chloride. Qualification of client sample results was not required based on this method blank detection.

GCMS VOC sample -005 MSD recovery only was an outlier biased high for cyclohexane. Qualification of client sample results was not required based on this QC outlier alone.

GCMS VOC SIM QC batch 277754 MS recoveries were not performed due to insufficient sample volume available for spiking according to the laboratory submittal case narrative.

GCMS SVOC and GCMS-SIM SVOC sample -005 MS recoveries were not reported in the laboratory submittal QC summary. These QC results will be evaluated as part of the level 4 data package review to follow.

GCMS SVOC-SIM sample -005 was re-analyzed outside of the referenced holding time so these re-analysis results should be considered to be estimated and qualified with J flags if detected and UJ flags if noon-detect.

GCMS SVOC QC batch 277998 LCS recoveries were outliers biased high for benzaldehyde. Qualification of client sample results was not required based on this high bias QC outlier.

Note: sample -008 preservation outlier (pH of 11) could not be evaluated based on the level 2 data package so will be addressed as part of the level 4 data package review.

PCB sample -008 was not analyzed due to insufficient sample volume available.

GCMS-SIM SVOC surrogate recoveries were outliers biased low and less than 10% for at least 1 out of 3 acid fraction surrogates in client samples -004, -005, -008 and -010. Base-neutral fraction surrogates were outliers biased low and less than 10% for at least 1 out of 3 base-neutral surrogates in client samples -005, -008 and -010 and 1 out of 3 base-neutral fraction surrogates was an outlier biased low but greater than 10% for client sample -004. Client sample -004, -005, -008 and -010 initial analysis GCMS SVOC-SIM acid fraction results and client samples -005, -008 and -010 base-neutral fraction results should be considered to be unusable and qualified with R flags if non-detect and estimated with J flags if detected. Samples -004, -005, -008 and -010 were re-analyzed outside of the referenced holding time so these re-analysis results should all be considered to be estimated and qualified with J flags if detected and UJ flags if non-detect. Surrogate recovery outliers for QC batch 277998 LCS did not require qualification of client sample results.

GCMS-SIM SVOC LCS/LCSduplicate RPD for QC batch 277972 was an outlier for pentachlorophenol. Qualification of client sample results was not required based on this QC outlier alone.

Metals method blanks had detections below the RL in QC batch 275892 and 276511 for total and dissolved vanadium. Client samples -001, -002, -003, -004, -005, -006, -007 dissolved vanadium results and client samples -001, -002, -003, -004, -005, -007, -008 total vanadium results should be considered to be non-detect at the RL and qualified with UB flags. Client samples -006 total vanadium results should be considered to be non-detect at the concentration reported and qualified with B flags.

Cyanide sample -005 MS recovery only was an outlier biased low. Qualification of client sample results is not required based on this QC outlier alone. QC batch 276133 MS recovery outliers were not determined using samples from this submittal.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

2.0 VOLATILE ORGANIC COMPOUNDS (VOCs) – METHOD SW846 8260C and SIM Analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

2.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) VOCs

2.1.1 TUNING AND MASS CALIBRATION – GC/MS VOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

2.1.2 INITIAL CALIBRATION – GC/MS VOCs

Initial calibration data for VOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS VOCs

Initial calibration verification (ICV) standards for VOC analyses were reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

2.2 CONTINUING CALIBRATION – GC/MS VOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.3 INTERNAL STANDARDS – GC/MS VOCs

Internal standard (IS) data were reviewed and met criteria without exception.

2.4 SURROGATE SPIKE RECOVERIES – GC/MS VOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.
If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.
All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

2.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS VOCs

A laboratory control sample (LCS) was prepared and analyzed for VOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

2.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS VOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.
CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

2.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS VOCs

There were no field duplicate comparisons performed as part of this validation request.

2.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS VOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

2.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS VOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable unless noted otherwise in verification/validation summary.

2.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS VOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

2.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS VOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

3.0 SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) – METHOD SW846 8270D and SIM analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

3.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) SVOCs

3.1.1 TUNING AND MASS CALIBRATION – GC/MS SVOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

3.1.2 INITIAL CALIBRATION – GC/MS SVOCs

Initial calibration data for SVOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

3.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS SVOCs

Initial calibration verification (ICV) standards for SVOC analyses were reviewed and met criteria specified by the laboratory with no exceptions.

3.2 CONTINUING CALIBRATION – GC/MS SVOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary

3.3 INTERNAL STANDARDS – GC/MS SVOCs

Internal standard (IS) data were reviewed and met criteria without exception.

3.4 SURROGATE SPIKE RECOVERIES – GC/MS SVOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

3.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS SVOCs

A laboratory control sample (LCS) was prepared and analyzed for SVOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

3.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS SVOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

3.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS SVOCs

There were no field duplicate comparisons performed as part of this validation request.

3.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS SVOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

3.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS SVOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable without exception.

3.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS SVOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

3.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS SVOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

4.0 POLYCHLORINATED BIPHENYLS (PCBs) – METHOD SW846 8082A

The target analyte list was defined by the client as the standard 7 aroclors.

4.1 CALIBRATION – GAS CHROMATOGRAPH-ECD

4.1.1 TUNING AND MASS CALIBRATION – PCB

Not applicable for this analysis.

4.1.2 INITIAL CALIBRATION – PCB

Initial calibration data for PCBs were reviewed and met the criteria for instrument sensitivity and linearity of response without exception.

4.1.3 INITIAL CALIBRATION VERIFICATION – PCB

Initial calibration verification (ICV) standards for PCB analyses were reviewed and met criteria specified by the laboratory with no exceptions.

4.2 CONTINUING CALIBRATION – PCBs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

4.3 INTERNAL STANDARDS – PCB

Internal standard (IS) data were reviewed and met criteria unless noted otherwise in verification/validation summary. (NOTE: Lab quantitation approach DID use internal standard quantitation for this submittal).

4.4 SURROGATE SPIKE RECOVERIES – PCB

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

4.5 LABORATORY CONTROL SAMPLE ANALYSES - PCB

A laboratory control sample (LCS) was prepared and analyzed for PCBs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary..

4.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - PCB

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

4.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - PCB

There were no field duplicate comparisons performed as part of this validation request.

4.8 EXTRACT CLEANUP - PCB

Extract cleanups were performed in accordance with laboratory SOP's and as noted in level 4 data package prep logs.

4.9 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - PCB

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

4.10 TENTATIVELY IDENTIFIED COMPOUNDS - PCB

Not requested for this analytical procedure.

4.11 BLANKS – METHOD/FIELD/CALIBRATION - PCB

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

5.0 HPLC/IC – METHOD SW846 9056A – CHLORIDE AND SULFATE

5.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

5.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

5.3 CONTINUTING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

5.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

5.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

5.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

5.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

5.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

6.0 METALS – ICPMS by Method 6020 TOTAL AND DISSOLVED and Mercury by Method 7470A

The following samples provided in this SDG underwent a Level IV review for either/and metals or mercury analyses:

- Method 6020A: ALL
- Method 7470A: ALL

6.1 ICP/MS TUNING AND MASS CALIBRATION

Instrument tuning data were reviewed. Tuning elements were analyzed. All tuning criteria were met for the analyses, indicating proper optimization of the instrumentation.

6.2 INITIAL CALIBRATION

Initial calibration data for metals and mercury were reviewed and met the criteria for linearity of response without exception.

6.3 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards for metals and mercury analyses were reviewed and met criteria unless otherwise noted in verification/validation summary section of this document.

An initial calibration blank (ICB) was analyzed for metals and mercury analyses. Metals and mercury were reported as non-detect in each ICB analysis unless noted otherwise in verification/validation summary.

6.4 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for metals and mercury analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

6.5 INTERFERENCE CHECK STANDARD

The interference check standard results were reviewed and found to meet criteria.

6.6 INTERNAL STANDARDS

Internal standard (IS) data were reviewed and found to meet criteria unless noted otherwise in verification/validation summary.

6.7 LABORATORY CONTROL SAMPLE ANALYSIS

A laboratory control sample (LCS) was prepared and analyzed for metals and mercury. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

6.8 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE (MS/MSD) ANALYSES

The MS/MSD recoveries and RPD’s were either not performed using a client sample or were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

6.9 CONTRACT REQUIRED DETECTION LIMIT STANDARD ANALYSES

Each contract required detection limit (CRDL) standard was analyzed at the proper frequency and were within laboratory control limits unless noted otherwise in verification/validation summary.

6.10 ICP SERIAL DILUTION

Serial dilutions were analyzed at the proper frequency and were either not performed using the client sample or were within laboratory control limits unless noted otherwise in verification/validation summary.

6.11 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

6.12 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

6.13 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

7.0 GENERAL CHEMISTRY- TOTAL AND AMENABLE CYANIDE AND ALKALINITY – METHODS 9012B and 2320B

7.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

7.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

7.3 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

7.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

7.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

7.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

7.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

7.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

8.0 REPRESENTATIVENESS EVALUATION

Representativeness is a qualitative evaluation of whether the data represents actual environmental conditions. Representativeness was evaluated using holding time criteria, which reflect the length of time after sample collection that a sample or extract remains representative of environmental conditions. Depending on the analysis, either one or two holding times were evaluated.

i.) For those analyses that do not include a sample extraction, only one holding time was evaluated: the length of time between sample collection and analysis.

ii.) For analyses that require sample extraction prior to analysis, two holding times were evaluated: the length of time from sampling until extraction and the length of time from extraction to analysis.

Holding times are compared to standard method specific holding times accepted or recommended by the United States Environmental Protection Agency (USEPA). Those holding times outside of USEPA acceptance criteria are qualitatively evaluated to determine their effect on sample representativeness.

Representativeness was also evaluated by analysis of laboratory method blanks and field equipment blanks. Laboratory method blanks and field equipment blanks are used to identify sources of contamination not associated with environmental conditions.

8.1 SAMPLE PRESERVATION AND HOLDING TIMES

Sample holding time and preservation requirements are summarized in Appendix 5.

All sample extractions and/or analyses were performed within the specified holding times unless noted otherwise in verification/validation summary.

All samples were properly preserved and cooled to 0-6°C after collection.

8.2 METHOD BLANK SUMMARY

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

Evaluation of blank contamination includes directions on the interpretation of the affected analytical results.

9.0 USABILITY AND COMPARABIILTY

Usability of data was evaluated by assuring that all the analytical requests were met, samples were received in the proper condition, and all analyses were performed within the appropriate holding times unless noted otherwise in verification/validation summary

No data evaluated within this delivery group was considered unusable (qualified with an R flag) due to sample integrity, sample matrix interference or batch quality control issues unless noted otherwise in verification/validation summary.

10.0 QC SUMMARY

All sample results meet the project specific QAPP standard for usability with exceptions defined by validation and verification qualifiers as applied. Please reference the following tables for a summary of the investigative field sample data and their valid qualifiers based on Level 4 technical review of the analytical data.

APPENDIX 1

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Nashville
Laboratory Submittal: 85780-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	Metals by ICP Mass Spectroscopy(D)	Metals by ICP Mass Spectroscopy	Mercury (Manual Cold Vapor)(D)	Mercury (Manual Cold Vapor)	TOTAL AND AMENABLE CYANIDE (AUTOMATED COLORIMETRIC, WITH OFF-LINE DISTILLATION)	Inorganic Anions by IC	Alkalinity Prep
490857801	SW-PAB-03-082115	8/21/2015	10:30:00	X	X	X	X	X	X	X	X	X	X	X	X
4908578010	RW-2 (279-289)-082115	8/21/2015	1:45:00	X	X	X	X	X	X	X	X	X	X	X	X
490857802	SW-PAB-02-082115	8/21/2015	11:25:00	X	X	X	X	X	X	X	X	X	X	X	X
490857803	SW-PAB-01A-082115	8/21/2015	12:20:00	X	X	X	X	X	X	X	X	X	X	X	X
490857804	SW-PAB-01-082115	8/21/2015	12:45:00	X	X	X	X	X	X	X	X	X	X	X	X
490857805	SW-11-082115	8/21/2015	1:10:00	X	X	X	X	X	X	X	X	X	X	X	X
490857806	SW-PAB-00-082115	8/21/2015	1:50:00	X	X	X	X	X	X	X	X	X	X	X	X
490857807	RW-9A (85-95)-082115	8/21/2015	10:45:00	X	X	X	X	X	X	X	X	X	X	X	X
490857808	RW-9 (206-216)-082115	8/21/2015	9:25:00	X	X	X	X			X		X	X		
490857809	TB-12-082115	8/21/2015	1:00:00	X	X										

APPENDIX 2

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85780-1
August 2015

Description

- Standard Report Cover page
- Table of Contents
- SDG Case Narrative
- Sample Summary
- Executive Summary detection highlights
- Method Summary
- Method/Analyst Summary
- Analytical Results
- Surrogate Summary
- Quality Control Results
- Data Qualifiers
- QC Summary Association
- Lab Chronicle
- GCMS Volatiles Data - Method 8260C and SIM
  - QC Summary Data
    - Surrogate recoveries (form II)
    - Check Sample recoveries (form III)
    - Matrix spike/Matrix spike duplicate report (form III)
    - Method blank report (form IV)
    - Tuning and mass calibrations (form V)
    - Internal Standard and RT area summary (form VIII)
  - Sample Data
    - GCMS VOA Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Total Ion Profile Chromatogram
    - Ion profiles of detected target analyte peaks
    - Manual integration if applicable
    - Tentatively Identified Compound Reports (if applicable)
  - Standards Data
    - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
    - ICAL Raw integration data from instrument
    - ICAL Total Ion Profile Chromatogram
    - ICV check standard recovery report (Form VII)
    - ICV check standard total ion profile with integration
    - GCMS VOA Continuing Calibration Data (Form VII)
    - CCV raw integration data from instrument
    - CCV Total Ion Profile Chromatogram
    - Manual integration if applicable
  - Raw QC Data
    - Tune information (not included with SIM package)
    - FORM I - QC data
    - Method Blank integration/internal standard and total ion profile raw data
    - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
    - MS and MSD integration/internal standard and total ion profile raw data
  - Miscellaneous Data
    - Run logs

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E203361 - 490-85780-1
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Description

GCMS Semivolatiles Data - Method 8270D and SIM

- QC Summary Data
  - Surrogate recoveries (form II)
  - Check Sample recoveries (form III)
  - Method blank report (form IV)
  - Tuning and mass calibrations (form V) (not applicable for SIM)
  - Internal Standard and RT area summary (form VIII)
- Sample Data
  - GCMS VOA Organics Analysis Data Sheet (Form I)
  - Raw integration data from instrument
  - Total Ion Profile Chromatogram
  - Ion profiles of detected target analyte peaks
  - Manual integration if applicable
  - Tentatively Identified Compound Reports (if applicable)
- Standards Data
  - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
  - ICAL Raw integration data from instrument
  - ICAL Total Ion Profile Chromatogram
  - ICV check standard recovery report
  - ICV check standard total ion profile with integration
  - GCMS VOA Continuing Calibration Data (Form VII)
  - CCV raw integration data from instrument
  - CCV Total Ion Profile Chromatogram
  - Manual integration if applicable
- Raw QC Data
  - Tune information (not applicable for SIM)
  - Method Blank integration/internal standard and total ion profile raw data
  - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
- Miscellaneous Data
  - Instrument run logs
  - Extraction bench sheets

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
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Description

- Polychlorinated Biphenyls Data (PCB)
  - QC Summary data
    - Surrogate recoveries (form II)
    - Check Sample Recovery data (form III)
    - Method Blank data (form IV)
    - Analytical sequence with RT check (Form VIII)
    - Identification Summary (Form X)
  - Sample Data
    - Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Chromatogram
  - Standards Data (both columns)
    - Initial Calibration Data External Standard RT Summary (Form VI)
    - Initial Calibration Data Summary with average RF
    - Raw integration data from instrument with manual integrations where applicable
    - ICAL chromatograms
    - Continuing Calibration Data (Form VII) with RT Summaries
    - ICV raw integration and chromatograms
    - CCV raw integration data from instrument
    - CCV chromatogram
  - Raw QC Data
    - LCS/LCSD sample data report and integration and chromatograms
    - Method blank integration and chromatograms
  - Miscellaneous Data
    - Sequence table (run log)
    - PCB Batch Worksheet
- HPLC/IC - 9056A ORGFM_28D - Anions, Ion Chromatography - Sulfate and Chloride
  - Raw Data and Data Summaries for:
    - LCS/LCSD (form III)
    - MS/MSD (form III)
    - METHOD BLANKS (Form IV)
    - SAMPLE DATA (Form I)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VI)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VII)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - QC DATA (Form I)
      - Raw instrument data and chromatography
    - Analysis Run Logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
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NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85780-1
August 2015

Description

METALS DATA (ICPMS and mercury)
- Forms Data
  - Cover Page
  - Inorganic Analysis Data Sheet - Metals Dissolved/Total Recoverable (1A-IN)
  - CCV standard report - mercury and ICPMS (2A-IN)
  - CRQL report - mercury and ICPMS (2B-IN)
  - ICB report - mercury and ICPMS (3-IN)
  - Method blank report (3-IN)
  - Interference check standard A - ICPMS (4A-IN)
  - Interference check standard AB - ICPMS (4A-IN)
  - MS/MSD Sample recovery (5A-IN)
  - PDS Summary (5B-IN)
  - LCS Recovery form (7A-IN)
  - LCS Duplicate Recover (7D-IN)
  - ICP-MS Serial Dilutions (8-IN)
  - Detection Limits Form (9-IN)
  - Linear dynamic ranges - ICPMS (11-IN)
  - Prep log - mercury and ICPMS (12-IN)
  - Run log - ICPMS and Mercury (13-IN)
  - ICP-MS TUNE (14-IN)
  - ICPMS Internal Standards Relative Intensity Summary (15-IN)
- Instrument Printouts
  - ICP-MS Raw instrument data
  - Mercury raw instrument data, run logs and calibrations
- Miscellaneous Data
  - Metals Batch Worksheet

GENERAL CHEMISTRY - Total and Amenable Cyanide and Alkalinity
- Cover Page
- Raw Data and Data Summaries for:
  - Sample Data (Form 1B-IN)
  - CCV/CCB (Form 2-IN)
  - METHOD BLANKS (Form 3-IN)
  - MATRIX SPIKES (Form 5-IN)
  - Sample DUPLICATES (Form 6-IN)
  - LCS/LCSD (Form 7-IN)
  - Detection Limits Form (9-IN)
  - Prep log (12-IN)
  - Analysis Run Logs (13-IN)
  - Raw Data - instrument sample sequence and calibration curve
  - Alkalinity Reagents
  - Alkalinity pH meter calibration
  - Alkalinity sequence log and raw data
  - General Chemistry Batch Worksheets

Shipping and Receiving Documents
- COC forms
- Cooler Receipt Form, checklist and narrative

APPENDIX 3

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85780-1

		Sample Name:	SW-PAB-03-082115				RW-2 (279-289)-082115				SW-PAB-02-082115			
		Lab Sample ID:	490857801				4908578010				490857802			
		Sample Date:	8/21/2015				8/21/2015				8/21/2015			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	0.24	1.0	ug/l	J	ND	1.0	ug/l	---
1-Propene, 2-methyl- - TIC	115-11-7					3.0	---	ug/l	NJ				
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	3.2	50	ug/l	J	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	UJ	12	25	ug/l	J	ND	25	ug/l	UJ
Benzene	71-43-2	ND	1.0	ug/l	---	0.22	1.0	ug/l	J	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	2.3	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethyl ether - TIC	60-29-7					1.5	5.0	ug/l	J				
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	0.25	1.0	ug/l	J	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Tetrahydrofuran - TIC	109-99-9					3.3	10	ug/l	J				
Toluene	108-88-3	ND	1.0	ug/l	---	0.83	1.0	ug/l	J	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic2					62	---	ug/l	NJ				
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	0.29	10	ug/l	J	10	10	ug/l	---	0.79	10	ug/l	J
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85780-1

		Sample Name:	SW-PAB-03-082115				RW-2 (279-289)-082115				SW-PAB-02-082115			
		Lab Sample ID:	490857801				4908578010				490857802			
		Sample Date:	8/21/2015				8/21/2015				8/21/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	1,2-Benzenedicarboxylic acid, diisooctyl - TIC	27554-26-3												
	1,4-Benzenediamine, N-(1-methylethyl)-N' - TIC	101-72-4					5.9	---	ug/l	NJ				
	2(3H)-Benzothiazolone - TIC	934-34-9					3.8	---	ug/l	NJ				
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	22	ug/l	---	ND	25	ug/l	---	ND	23	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	2,6,10,14,18,22-Tetracosahexaene, 2,6,10 - TIC	111-02-4									3.2	---	ug/l	NJ
	2,6-Dinitrotoluene	606-20-2	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	2-Chlorophenol	95-57-8	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	1.8	ug/l	---	ND	2.0	ug/l	---	ND	1.8	ug/l	---
	2-Methylphenol	95-48-7	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	2-Nitroaniline	88-74-4	ND	22	ug/l	---	ND	25	ug/l	---	ND	23	ug/l	---
	2-Nitrophenol	88-75-5	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5					33	---	ug/l	NJ				
	3-Nitroaniline	99-09-2	ND	22	ug/l	---	ND	25	ug/l	---	ND	23	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	22	ug/l	---	ND	25	ug/l	---	ND	23	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	4-Chloroaniline	106-47-8	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	4-Nitroaniline	100-01-6	ND	22	ug/l	---	ND	25	ug/l	---	ND	23	ug/l	---
	4-Nitrophenol	100-02-7	ND	22	ug/l	---	ND	25	ug/l	---	ND	23	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3					17	---	ug/l	NJ				
	9-Octadecenoic acid, (E)- - TIC	112-79-8												
	Acenaphthene	83-32-9	ND	1.8	ug/l	---	ND	2.0	ug/l	---	ND	1.8	ug/l	---
	Acenaphthylene	208-96-8	ND	1.8	ug/l	---	ND	2.0	ug/l	---	ND	1.8	ug/l	---
	Acetic acid, chloro-, octadecyl ester - TIC	5348-82-3									4.1	---	ug/l	NJ
	Acetophenone	98-86-2	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Anthracene	120-12-7	ND	1.8	ug/l	---	ND	2.0	ug/l	---	ND	1.8	ug/l	---
	Atrazine	1912-24-9	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Benzaldehyde	100-52-7	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Benzenesulfonamide, 2-methyl- - TIC	88-19-7					9.6	---	ug/l	NJ				
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2												
	Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	1421-49-4												
	Benzo[g,h,i]perylene	191-24-2	ND	1.8	ug/l	---	ND	2.0	ug/l	---	ND	1.8	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.8	ug/l	---	ND	2.0	ug/l	---	ND	1.8	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Caprolactam	105-60-2	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Carbazole	86-74-8	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Chrysene	218-01-9	ND	1.8	ug/l	---	ND	2.0	ug/l	---	ND	1.8	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	1.8	ug/l	---	ND	2.0	ug/l	---	ND	1.8	ug/l	---
	Dibenzofuran	132-64-9	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Diethyl phthalate	84-66-2	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Diethylene glycol dibenzoate - TIC	120-55-8												
	Dimethyl phthalate	131-11-3	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Diphenyl	92-52-4	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Fluoranthene	206-44-0	ND	1.8	ug/l	---	ND	2.0	ug/l	---	ND	1.8	ug/l	---
	Fluorene	86-73-7	ND	1.8	ug/l	---	ND	2.0	ug/l	---	ND	1.8	ug/l	---
	Heptadecane - TIC	629-78-7												
	Hexachlorocyclopentadiene	77-47-4	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Hexachloroethane	67-72-1	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	1.8	ug/l	---	ND	2.0	ug/l	---	ND	1.8	ug/l	---
	Isophorone	78-59-1	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Naphthalene	91-20-3	ND	1.8	ug/l	---	ND	2.0	ug/l	---	ND	1.8	ug/l	---
	Nitrobenzene	98-95-3	ND	8.9	ug/l	---	ND	9.8	ug/l	---	ND	9.1	ug/l	---
	Octadecanoic acid - TIC	57-11-4	3.8	---	ug/l	NJ	4.9	---	ug/l	NJ				
	Octaethylene glycol monododecyl ether - TIC	3055-98-9												
	Oleic Acid - TIC	112-80-1					11	---	ug/l	NJ	14	---	ug/l	NJ
	Oxirane, heptadecyl- - TIC	67860-04-2									3.2	---	ug/l	NJ
	Phenanthrene	85-01-8	ND	1.8	ug/l	---	ND	2.0	ug/l	---	ND	1.8	ug/l	---
	Phenol	108-95-2	ND	8.9	ug/l	---	1.7	9.8	ug/l	J	ND	9.1	ug/l	---
	Pyrene	129-00-0	ND	1.8	ug/l	---	ND	2.0	ug/l	---	ND	1.8	ug/l	---
	Tetraethyleneglycol monomethylether - TIC	23783-42-8					3.5	---	ug/l	NJ				
	Tridecanoic acid - TIC	638-53-9												
	[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	366-29-0									4.6	---	ug/l	NJ

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85780-1

		Sample Name:	SW-PAB-03-082115				RW-2 (279-289)-082115				SW-PAB-02-082115			
		Lab Sample ID:	490857801				4908578010				490857802			
		Sample Date:	8/21/2015				8/21/2015				8/21/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	R	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	R	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	R	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	R	ND	0.020	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	R	ND	0.40	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	R	ND	0.80	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	R	ND	0.30	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.46	ug/l	---	ND	0.50	ug/l	---	ND	0.45	ug/l	---
	PCB-1221	11104-28-2	ND	0.46	ug/l	---	ND	0.50	ug/l	---	ND	0.45	ug/l	---
	PCB-1232	11141-16-5	ND	0.46	ug/l	---	ND	0.50	ug/l	---	ND	0.45	ug/l	---
	PCB-1242	53469-21-9	ND	0.46	ug/l	---	ND	0.50	ug/l	---	ND	0.45	ug/l	---
	PCB-1248	12672-29-6	ND	0.46	ug/l	---	ND	0.50	ug/l	---	ND	0.45	ug/l	---
	PCB-1254	11097-69-1	ND	0.46	ug/l	---	ND	0.50	ug/l	---	ND	0.45	ug/l	---
	PCB-1260	11096-82-5	ND	0.46	ug/l	---	ND	0.50	ug/l	---	ND	0.45	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.46	ug/l	---	ND	0.50	ug/l	---	ND	0.45	ug/l	---
Metals														
OSW-6020A														
	Aluminum	7429-90-5	ND	0.020	mg/l	---	0.25	0.020	mg/l	---	0.010	0.020	mg/l	J
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	0.25	0.020	mg/l	---	ND	0.020	mg/l	---
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	0.00098	0.0020	mg/l	J	0.00069	0.0020	mg/l	J	0.0010	0.0020	mg/l	J
	Arsenic	7440-38-2	0.00054	0.0020	mg/l	J	0.0019	0.0020	mg/l	J	0.00056	0.0020	mg/l	J
	Arsenic - Dissolved	7440-38-2	ND	0.0020	mg/l	---	0.0021	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Barium	7440-39-3	0.062	0.0020	mg/l	---	0.032	0.0020	mg/l	---	0.073	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.060	0.0020	mg/l	---	0.038	0.0020	mg/l	---	0.067	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	25.3	1.0	mg/l	---	132	20.0	mg/l	---	29.4	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	22.1	1.0	mg/l	---	134	5.0	mg/l	---	27.3	1.0	mg/l	---
	Chromium	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.0030	0.0020	mg/l	---
	Cobalt	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	0.00055	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Iron	7439-89-6	3.7	0.025	mg/l	---	0.015	0.025	mg/l	J	2.8	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	0.073	0.025	mg/l	---	ND	0.025	mg/l	---	0.082	0.025	mg/l	---
	Lead	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Magnesium	7439-95-4	4.1	1.0	mg/l	---	ND	1.0	mg/l	---	5.0	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	3.8	1.0	mg/l	---	ND	1.0	mg/l	---	4.9	1.0	mg/l	---
	Manganese	7439-96-5	0.76	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.98	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5	0.69	0.0020	mg/l	---	0.00050	0.0020	mg/l	J	0.60	0.0020	mg/l	---
	Nickel	7440-02-0	ND	0.0020	mg/l	---	0.0029	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0	ND	0.0020	mg/l	---	0.0032	0.0020	mg/l	---	0.00053	0.0020	mg/l	J
	Potassium	7440-09-7	0.58	1.0	mg/l	J	23.6	1.0	mg/l	---	1.4	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	0.52	1.0	mg/l	J	25.1	1.0	mg/l	---	1.4	1.0	mg/l	---
	Selenium	7782-49-2	ND	0.0020	mg/l	---	0.00086	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	0.00069	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	7.1	1.0	mg/l	---	134	20.0	mg/l	---	5.4	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	6.4	1.0	mg/l	---	125	5.0	mg/l	---	5.3	1.0	mg/l	---
	Thallium	7440-28-0	0.0011	0.0020	mg/l	J	ND	0.0020	mg/l	---	0.00033	0.0020	mg/l	J
	Thallium - Dissolved	7440-28-0	0.00088	0.0020	mg/l	J	ND	0.0020	mg/l	---	0.00040	0.0020	mg/l	J
	Vanadium	7440-62-2	0.0014	0.0020	mg/l	UB	0.018	0.0020	mg/l	---	0.0014	0.0020	mg/l	UB
	Vanadium - Dissolved	7440-62-2	0.00078	0.0020	mg/l	UB	0.017	0.0020	mg/l	---	0.00079	0.0020	mg/l	UB
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	0.023	0.025	mg/l	J
OSW-7470A														
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A														
	Chloride	16887-00-6	8.42	1.00	mg/l	---	194	1.00	mg/l	---	3.88	1.00	mg/l	---
	Sulfate	14808-79-8	5.04	1.00	mg/l	---	176	5.00	mg/l	---	0.78	1.00	mg/l	J
Prep														
APHA-2320B														
	Bicarbonate Alkalinity as CaCO3	E-14508	65.6	10.0	mg/l	---	ND	10.0	mg/l	---	88.4	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	65.6	10.0	mg/l	---	104	10.0	mg/l	---	88.4	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85780-1

		Sample Name:	SW-PAB-01A-082115				SW-PAB-01-082115				SW-11-082115			
		Lab Sample ID:	490857803				490857804				490857805			
		Sample Date:	8/21/2015				8/21/2015				8/21/2015			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Propene, 2-methyl- - TIC	115-11-7												
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	UJ	ND	25	ug/l	UJ	ND	25	ug/l	UJ
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethyl ether - TIC	60-29-7												
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Tetrahydrofuran - TIC	109-99-9												
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic2												
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	2.1	10	ug/l	J	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85780-1

		Sample Name:	SW-PAB-01A-082115				SW-PAB-01-082115				SW-11-082115			
		Lab Sample ID:	490857803				490857804				490857805			
		Sample Date:	8/21/2015				8/21/2015				8/21/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	1,2-Benzenedicarboxylic acid, diisooctyl - TIC	27554-26-3	3.3	---	ug/l	NJ								
	1,4-Benzenediamine, N-(1-methylethyl)-N' - TIC	101-72-4												
	2(3H)-Benzothiazolone - TIC	934-34-9												
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	23	ug/l	---	ND	22	ug/l	---	ND	23	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	2,6,10,14,18,22-Tetracosahexaene, 2,6,10 - TIC	111-02-4												
	2,6-Dinitrotoluene	606-20-2	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	2-Chlorophenol	95-57-8	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	2-Methylphenol	95-48-7	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	2-Nitroaniline	88-74-4	ND	23	ug/l	---	ND	22	ug/l	---	ND	23	ug/l	---
	2-Nitrophenol	88-75-5	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5												
	3-Nitroaniline	99-09-2	ND	23	ug/l	---	ND	22	ug/l	---	ND	23	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	23	ug/l	---	ND	22	ug/l	---	ND	23	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	4-Chloroaniline	106-47-8	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	4-Nitroaniline	100-01-6	ND	23	ug/l	---	ND	22	ug/l	---	ND	23	ug/l	---
	4-Nitrophenol	100-02-7	ND	23	ug/l	---	ND	22	ug/l	---	ND	23	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3												
	9-Octadecenoic acid, (E)- - TIC	112-79-8	6.5	---	ug/l	NJ								
	Acenaphthene	83-32-9	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Acenaphthylene	208-96-8	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Acetic acid, chloro-, octadecyl ester - TIC	5348-82-3												
	Acetophenone	98-86-2	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Anthracene	120-12-7	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Atrazine	1912-24-9	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Benzaldehyde	100-52-7	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Benzenesulfonamide, 2-methyl- - TIC	88-19-7												
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2												
	Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	1421-49-4												
	Benzo[g,h,i]perylene	191-24-2	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Caprolactam	105-60-2	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Carbazole	86-74-8	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Chrysene	218-01-9	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Dibenzofuran	132-64-9	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Diethyl phthalate	84-66-2	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Diethylene glycol dibenzoate - TIC	120-55-8									8.1	---	ug/l	NJ
	Dimethyl phthalate	131-11-3	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Diphenyl	92-52-4	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Fluoranthene	206-44-0	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Fluorene	86-73-7	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Heptadecane - TIC	629-78-7					4.2	---	ug/l	NJ				
	Hexachlorocyclopentadiene	77-47-4	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Hexachloroethane	67-72-1	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Isophorone	78-59-1	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Naphthalene	91-20-3	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Nitrobenzene	98-95-3	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Octadecanoic acid - TIC	57-11-4	3.2	---	ug/l	NJ								
	Octaethylene glycol monododecyl ether - TIC	3055-98-9	3.1	---	ug/l	NJ								
	Oleic Acid - TIC	112-80-1									6.9	---	ug/l	NJ
	Oxirane, heptadecyl- - TIC	67860-04-2												
	Phenanthrene	85-01-8	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Phenol	108-95-2	ND	9.1	ug/l	---	ND	8.8	ug/l	---	ND	9.1	ug/l	---
	Pyrene	129-00-0	ND	1.8	ug/l	---	ND	1.8	ug/l	---	ND	1.8	ug/l	---
	Tetraethyleneglycol monomethylether - TIC	23783-42-8												
	Tridecanoic acid - TIC	638-53-9	4.9	---	ug/l	NJ								
	[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	366-29-0												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85780-1

			Sample Name:	SW-PAB-01A-082115			SW-PAB-01-082115				SW-11-082115			
			Lab Sample ID:	490857803			490857804				490857805			
			Sample Date:	8/21/2015			8/21/2015				8/21/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
	OSW-8270DSim													
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	R
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	R
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	R
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	R
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	R
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	R
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	R	0.11	0.30	ug/l	J
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2	ND	0.45	ug/l	---	ND	0.43	ug/l	---	ND	0.43	ug/l	---
	PCB-1221	11104-28-2	ND	0.45	ug/l	---	ND	0.43	ug/l	---	ND	0.43	ug/l	---
	PCB-1232	11141-16-5	ND	0.45	ug/l	---	ND	0.43	ug/l	---	ND	0.43	ug/l	---
	PCB-1242	53469-21-9	ND	0.45	ug/l	---	ND	0.43	ug/l	---	ND	0.43	ug/l	---
	PCB-1248	12672-29-6	ND	0.45	ug/l	---	ND	0.43	ug/l	---	ND	0.43	ug/l	---
	PCB-1254	11097-69-1	ND	0.45	ug/l	---	ND	0.43	ug/l	---	ND	0.43	ug/l	---
	PCB-1260	11096-82-5	ND	0.45	ug/l	---	ND	0.43	ug/l	---	ND	0.43	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.45	ug/l	---	ND	0.43	ug/l	---	ND	0.43	ug/l	---
Metals														
	OSW-6020A													
	Aluminum	7429-90-5	0.051	0.020	mg/l	---	0.033	0.020	mg/l	---	0.065	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	ND	0.020	mg/l	---	0.016	0.020	mg/l	J
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	0.00084	0.0020	mg/l	J	0.0010	0.0020	mg/l	J	0.0011	0.0020	mg/l	J
	Arsenic	7440-38-2	0.0013	0.0020	mg/l	J	0.00052	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Arsenic - Dissolved	7440-38-2	0.00062	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Barium	7440-39-3	0.065	0.0020	mg/l	---	0.044	0.0020	mg/l	---	0.0081	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.050	0.0020	mg/l	---	0.047	0.0020	mg/l	---	0.0079	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	28.8	1.0	mg/l	---	9.8	1.0	mg/l	---	10.2	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	27.0	1.0	mg/l	---	8.8	1.0	mg/l	---	9.8	1.0	mg/l	---
	Chromium	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt	7440-48-4	0.00070	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper	7440-50-8	ND	0.0020	mg/l	---	0.00056	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	0.00053	0.0020	mg/l	J	0.00073	0.0020	mg/l	J	0.00077	0.0020	mg/l	J
	Iron	7439-89-6	7.3	0.025	mg/l	---	3.1	0.025	mg/l	---	0.17	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	0.81	0.025	mg/l	---	0.34	0.025	mg/l	---	0.063	0.025	mg/l	---
	Lead	7439-92-1	0.00028	0.0020	mg/l	J	0.00061	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Magnesium	7439-95-4	5.0	1.0	mg/l	---	2.2	1.0	mg/l	---	2.8	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	5.1	1.0	mg/l	---	2.1	1.0	mg/l	---	2.9	1.0	mg/l	---
	Manganese	7439-96-5	2.0	0.0020	mg/l	E	0.30	0.0020	mg/l	---	0.022	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5	1.5	0.0020	mg/l	---	0.30	0.0020	mg/l	---	0.015	0.0020	mg/l	---
	Nickel	7440-02-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0	0.00052	0.0020	mg/l	J	ND	0.0020	mg/l	---	0.00052	0.0020	mg/l	J
	Potassium	7440-09-7	1.7	1.0	mg/l	---	0.74	1.0	mg/l	J	0.58	1.0	mg/l	J
	Potassium - Dissolved	7440-09-7	1.7	1.0	mg/l	---	0.68	1.0	mg/l	J	0.58	1.0	mg/l	J
	Selenium	7782-49-2	0.00063	0.0020	mg/l	J	0.00074	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	4.5	1.0	mg/l	---	3.5	1.0	mg/l	---	3.6	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	3.6	1.0	mg/l	---	3.2	1.0	mg/l	---	3.6	1.0	mg/l	---
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	0.00079	0.0020	mg/l	J
	Thallium - Dissolved	7440-28-0	0.00020	0.0020	mg/l	J	ND	0.0020	mg/l	---	0.00068	0.0020	mg/l	J
	Vanadium	7440-62-2	0.0017	0.0020	mg/l	UB	0.0016	0.0020	mg/l	UB	0.0018	0.0020	mg/l	UB
	Vanadium - Dissolved	7440-62-2	0.00079	0.0020	mg/l	UB	0.00090	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	1.75	1.00	mg/l	---	1.07	1.00	mg/l	---	1.08	1.00	mg/l	---
	Sulfate	14808-79-8	1.74	1.00	mg/l	---	4.78	1.00	mg/l	---	7.00	1.00	mg/l	---
Prep														
	APHA-2320B													
	Bicarbonate Alkalinity as CaCO3	E-14508	92.1	10.0	mg/l	---	32.4	10.0	mg/l	---	30.6	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	92.1	10.0	mg/l	---	32.4	10.0	mg/l	---	30.6	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85780-1

		Sample Name:	SW-PAB-00-082115				RW-9A (85-95)-082115				RW-9 (206-216)-082115			
		Lab Sample ID:	490857806				490857807				490857808			
		Sample Date:	8/21/2015				8/21/2015				8/21/2015			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Propene, 2-methyl- - TIC	115-11-7												
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	11	50	ug/l	J	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	UJ	3.9	25	ug/l	J	5.6	25	ug/l	J
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethyl ether - TIC	60-29-7												
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Tetrahydrofuran - TIC	109-99-9												
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.20	1.0	ug/l	J
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic2												
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

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Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85780-1

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		Lab Sample ID:	490857806				490857807				490857808			
		Sample Date:	8/21/2015				8/21/2015				8/21/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	1,2-Benzenedicarboxylic acid, diisooctyl - TIC	27554-26-3												
	1,4-Benzenediamine, N-(1-methylethyl)-N' - TIC	101-72-4												
	2(3H)-Benzothiazolone - TIC	934-34-9												
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	22	ug/l	---	ND	23	ug/l	---	ND	25	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2,6,10,14,18,22-Tetracosahexaene, 2,6,10 - TIC	111-02-4												
	2,6-Dinitrotoluene	606-20-2	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	1.8	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	2-Methylphenol	95-48-7	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2-Nitroaniline	88-74-4	ND	22	ug/l	---	ND	23	ug/l	---	ND	25	ug/l	---
	2-Nitrophenol	88-75-5	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5									22	---	ug/l	NJ
	3-Nitroaniline	99-09-2	ND	22	ug/l	---	ND	23	ug/l	---	ND	25	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	22	ug/l	---	ND	23	ug/l	---	ND	25	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	22	ug/l	---	ND	23	ug/l	---	ND	25	ug/l	---
	4-Nitrophenol	100-02-7	ND	22	ug/l	---	ND	23	ug/l	---	ND	25	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3									6.0	---	ug/l	NJ
	9-Octadecenoic acid, (E)- - TIC	112-79-8					14	---	ug/l	NJ				
	Acenaphthene	83-32-9	ND	1.8	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Acenaphthylene	208-96-8	ND	1.8	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Acetic acid, chloro-, octadecyl ester - TIC	5348-82-3												
	Acetophenone	98-86-2	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	1.8	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Atrazine	1912-24-9	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Benzaldehyde	100-52-7	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Benzenesulfonamide, 2-methyl- - TIC	88-19-7												
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2									15	---	ug/l	NJ
	Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	1421-49-4									4.8	---	ug/l	NJ
	Benzo[g,h,i]perylene	191-24-2	ND	1.8	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.8	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	1.8	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	1.8	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Dibenzofuran	132-64-9	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Diethylene glycol dibenzoate - TIC	120-55-8												
	Dimethyl phthalate	131-11-3	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Diphenyl	92-52-4	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Fluoranthene	206-44-0	ND	1.8	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Fluorene	86-73-7	ND	1.8	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Heptadecane - TIC	629-78-7												
	Hexachlorocyclopentadiene	77-47-4	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	1.8	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	1.8	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Nitrobenzene	98-95-3	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Octadecanoic acid - TIC	57-11-4												
	Octaethylene glycol monododecyl ether - TIC	3055-98-9												
	Oleic Acid - TIC	112-80-1	5.7	---	ug/l	NJ					17	---	ug/l	NJ
	Oxirane, heptadecyl- - TIC	67860-04-2												
	Phenanthrene	85-01-8	ND	1.8	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Phenol	108-95-2	ND	8.8	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Pyrene	129-00-0	ND	1.8	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Tetraethyleneglycol monomethylether - TIC	23783-42-8												
	Tridecanoic acid - TIC	638-53-9									5.6	---	ug/l	NJ
	[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	366-29-0												

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			Lab Sample ID:	490857806			490857807				490857808			
			Sample Date:	8/21/2015			8/21/2015				8/21/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	R
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	R
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	R
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	R
	Hexachlorobutadiene	87-68-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	R
	N-Nitrosodimethylamine	62-75-9	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	R
	Pentachlorophenol	87-86-5	ND	0.30	ug/l	---	ND	0.30	ug/l	---	ND	0.30	ug/l	R
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1254	11097-69-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---				
Metals														
OSW-6020A														
	Aluminum	7429-90-5	0.18	0.020	mg/l	---	0.059	0.020	mg/l	---	0.10	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	0.016	0.020	mg/l	J	ND	0.020	mg/l	---				
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	0.00050	0.0020	mg/l	J	ND	0.0020	mg/l	---				
	Arsenic	7440-38-2	ND	0.0020	mg/l	---	0.0032	0.0020	mg/l	---	0.0030	0.0020	mg/l	---
	Arsenic - Dissolved	7440-38-2	ND	0.0020	mg/l	---	0.0034	0.0020	mg/l	---				
	Barium	7440-39-3	0.0098	0.0020	mg/l	---	0.012	0.0020	mg/l	---	0.035	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.0086	0.0020	mg/l	---	0.012	0.0020	mg/l	---				
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---				
	Calcium	7440-70-2	10.8	1.0	mg/l	---	26.5	1.0	mg/l	---	27.6	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	10.2	1.0	mg/l	---	23.2	1.0	mg/l	---				
	Chromium	7440-47-3	0.00057	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Cobalt	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Copper	7440-50-8	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	0.00074	0.0020	mg/l	J	ND	0.0020	mg/l	---				
	Iron	7439-89-6	0.23	0.025	mg/l	---	0.34	0.025	mg/l	---	0.092	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	0.035	0.025	mg/l	---	0.060	0.025	mg/l	---				
	Lead	7439-92-1	0.00036	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Magnesium	7439-95-4	3.0	1.0	mg/l	---	5.6	1.0	mg/l	---	17.6	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	2.9	1.0	mg/l	---	5.1	1.0	mg/l	---				
	Manganese	7439-96-5	0.028	0.0020	mg/l	---	0.046	0.0020	mg/l	---	0.0046	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5	0.0026	0.0020	mg/l	---	0.038	0.0020	mg/l	---				
	Nickel	7440-02-0	ND	0.0020	mg/l	---	0.0049	0.0020	mg/l	---	0.00057	0.0020	mg/l	J
	Nickel - Dissolved	7440-02-0	ND	0.0020	mg/l	---	0.00096	0.0020	mg/l	J				
	Potassium	7440-09-7	0.64	1.0	mg/l	J	2.7	1.0	mg/l	---	50.9	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	0.59	1.0	mg/l	J	2.2	1.0	mg/l	---				
	Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Sodium	7440-23-5	4.5	1.0	mg/l	---	5.9	1.0	mg/l	---	162	20.0	mg/l	---
	Sodium - Dissolved	7440-23-5	4.2	1.0	mg/l	---	6.4	1.0	mg/l	---				
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---				
	Vanadium	7440-62-2	0.0020	0.0020	mg/l	B	0.0014	0.0020	mg/l	UB	0.0015	0.0020	mg/l	UB
	Vanadium - Dissolved	7440-62-2	0.0013	0.0020	mg/l	UB	0.00098	0.0020	mg/l	UB				
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---				
OSW-7470A														
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---				
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A														
	Chloride	16887-00-6	1.01	1.00	mg/l	---	1.52	1.00	mg/l	---				
	Sulfate	14808-79-8	8.15	1.00	mg/l	---	14.2	1.00	mg/l	---				
Prep														
APHA-2320B														
	Bicarbonate Alkalinity as CaCO3	E-14508	31.4	10.0	mg/l	---	76.6	10.0	mg/l	---				
	Total Alkalinity as CaCO3	E-14506	31.4	10.0	mg/l	---	76.6	10.0	mg/l	---				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85780-1

Sample Name: TB-12-082115
Lab Sample ID: 490857809
Sample Date: 8/21/2015

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC					
OSW-8260C					
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---
1-Propene, 2-methyl- - TIC	115-11-7				
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	UJ
Benzene	71-43-2	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	UJ
Carbon disulfide	75-15-0	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	UJ
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---
Ethyl ether - TIC	60-29-7				
Ethylbenzene	100-41-4	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	UJ
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---
Tetrahydrofuran - TIC	109-99-9				
Toluene	108-88-3	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---
Unknown - TIC	Tic2				
Vinyl chloride	75-01-4	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---
OSW-8260CSim					
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85780-1

Sample Name: TB-12-082115
Lab Sample ID: 490857809
Sample Date: 8/21/2015

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC					
OSW-8270D					
1,2,4,5-Tetrachlorobenzene	95-94-3				
1,2-Benzenedicarboxylic acid, diisooctyl - TIC	27554-26-3				
1,4-Benzenediamine, N-(1-methylethyl)-N' - TIC	101-72-4				
2(3H)-Benzothiazolone - TIC	934-34-9				
2,2'-oxybis[1-chloropropane]	108-60-1				
2,3,4,6-Tetrachlorophenol	58-90-2				
2,4,5-Trichlorophenol	95-95-4				
2,4,6-Trichlorophenol	88-06-2				
2,4-Dichlorophenol	120-83-2				
2,4-Dimethylphenol	105-67-9				
2,4-Dinitrophenol	51-28-5				
2,4-Dinitrotoluene	121-14-2				
2,6,10,14,18,22-Tetracosahexaene, 2,6,10 - TIC	111-02-4				
2,6-Dinitrotoluene	606-20-2				
2-Chloronaphthalene	91-58-7				
2-Chlorophenol	95-57-8				
2-Methylnaphthalene	91-57-6				
2-Methylphenol	95-48-7				
2-Nitroaniline	88-74-4				
2-Nitrophenol	88-75-5				
3 & 4 Methylphenol	65794-96-9				
3,3'-Dichlorobenzidine	91-94-1				
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5				
3-Nitroaniline	99-09-2				
4,6-Dinitro-2-methylphenol	534-52-1				
4-Bromophenyl phenyl ether	101-55-3				
4-Chloro-3-methylphenol	59-50-7				
4-Chloroaniline	106-47-8				
4-Chlorophenyl phenyl ether	7005-72-3				
4-Nitroaniline	100-01-6				
4-Nitrophenol	100-02-7				
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3				
9-Octadecenoic acid, (E)- - TIC	112-79-8				
Acenaphthene	83-32-9				
Acenaphthylene	208-96-8				
Acetic acid, chloro-, octadecyl ester - TIC	5348-82-3				
Acetophenone	98-86-2				
Anthracene	120-12-7				
Atrazine	1912-24-9				
Benzaldehyde	100-52-7				
Benzenesulfonamide, 2-methyl- - TIC	88-19-7				
Benzenesulfonamide, N-butyl- - TIC	3622-84-2				
Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	1421-49-4				
Benzo[g,h,i]perylene	191-24-2				
Benzo[k]fluoranthene	207-08-9				
Bis(2-chloroethoxy)methane	111-91-1				
Bis(2-chloroethyl)ether	111-44-4				
Bis(2-ethylhexyl) phthalate	117-81-7				
Butyl benzyl phthalate	85-68-7				
Caprolactam	105-60-2				
Carbazole	86-74-8				
Chrysene	218-01-9				
Di-n-butyl phthalate	84-74-2				
Di-n-octyl phthalate	117-84-0				
Dibenz(a,h)anthracene	53-70-3				
Dibenzofuran	132-64-9				
Diethyl phthalate	84-66-2				
Diethylene glycol dibenzoate - TIC	120-55-8				
Dimethyl phthalate	131-11-3				
Diphenyl	92-52-4				
Fluoranthene	206-44-0				
Fluorene	86-73-7				
Heptadecane - TIC	629-78-7				
Hexachlorocyclopentadiene	77-47-4				
Hexachloroethane	67-72-1				
Indeno[1,2,3-cd]pyrene	193-39-5				
Isophorone	78-59-1				
N-Nitrosodi-n-propylamine	621-64-7				
N-Nitrosodiphenylamine	86-30-6				
Naphthalene	91-20-3				
Nitrobenzene	98-95-3				
Octadecanoic acid - TIC	57-11-4				
Octaethylene glycol monododecyl ether - TIC	3055-98-9				
Oleic Acid - TIC	112-80-1				
Oxirane, heptadecyl- - TIC	67860-04-2				
Phenanthrene	85-01-8				
Phenol	108-95-2				
Pyrene	129-00-0				
Tetraethyleneglycol monomethylether - TIC	23783-42-8				
Tridecanoic acid - TIC	638-53-9				
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	366-29-0				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85780-1

Sample Name: TB-12-082115
Lab Sample ID: 490857809
Sample Date: 8/21/2015

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSim					
Benzo[a]anthracene	56-55-3				
Benzo[a]pyrene	50-32-8				
Benzo[b]fluoranthene	205-99-2				
Hexachlorobenzene	118-74-1				
Hexachlorobutadiene	87-68-3				
N-Nitrosodimethylamine	62-75-9				
Pentachlorophenol	87-86-5				
GC Other					
OSW-8082A					
PCB-1016	12674-11-2				
PCB-1221	11104-28-2				
PCB-1232	11141-16-5				
PCB-1242	53469-21-9				
PCB-1248	12672-29-6				
PCB-1254	11097-69-1				
PCB-1260	11096-82-5				
Polychlorinated biphenyls, Total	1336-36-3				
Metals					
OSW-6020A					
Aluminum	7429-90-5				
Aluminum - Dissolved	7429-90-5				
Antimony	7440-36-0				
Antimony - Dissolved	7440-36-0				
Arsenic	7440-38-2				
Arsenic - Dissolved	7440-38-2				
Barium	7440-39-3				
Barium - Dissolved	7440-39-3				
Beryllium	7440-41-7				
Beryllium - Dissolved	7440-41-7				
Cadmium	7440-43-9				
Cadmium - Dissolved	7440-43-9				
Calcium	7440-70-2				
Calcium - Dissolved	7440-70-2				
Chromium	7440-47-3				
Chromium - Dissolved	7440-47-3				
Cobalt	7440-48-4				
Cobalt - Dissolved	7440-48-4				
Copper	7440-50-8				
Copper - Dissolved	7440-50-8				
Iron	7439-89-6				
Iron - Dissolved	7439-89-6				
Lead	7439-92-1				
Lead - Dissolved	7439-92-1				
Magnesium	7439-95-4				
Magnesium - Dissolved	7439-95-4				
Manganese	7439-96-5				
Manganese - Dissolved	7439-96-5				
Nickel	7440-02-0				
Nickel - Dissolved	7440-02-0				
Potassium	7440-09-7				
Potassium - Dissolved	7440-09-7				
Selenium	7782-49-2				
Selenium - Dissolved	7782-49-2				
Silver	7440-22-4				
Silver - Dissolved	7440-22-4				
Sodium	7440-23-5				
Sodium - Dissolved	7440-23-5				
Thallium	7440-28-0				
Thallium - Dissolved	7440-28-0				
Vanadium	7440-62-2				
Vanadium - Dissolved	7440-62-2				
Zinc	7440-66-6				
Zinc - Dissolved	7440-66-6				
OSW-7470A					
Mercury	7439-97-6				
Mercury - Dissolved	7439-97-6				
General Chemistry					
OSW-9012B					
Cyanide, Total	57-12-5				
OSW-9056A					
Chloride	16887-00-6				
Sulfate	14808-79-8				
Prep					
APHA-2320B					
Bicarbonate Alkalinity as CaCO3	E-14508				
Total Alkalinity as CaCO3	E-14506				

APPENDIX 4

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85780-1

		Sample Name:	SW-PAB-03-082115				RW-2 (279-289)-082115				SW-PAB-02-082115				SW-PAB-01A-082115				SW-PAB-01-082115				SW-11-082115			
		Lab Sample ID:	490857801				4908578010				490857802				490857803				490857804				490857805			
		Sample Date:	8/21/2015				8/21/2015				8/21/2015				8/21/2015				8/21/2015				8/21/2015			
Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																										
OSW-8260C																										
1-Propene, 2-methyl- - TIC	115-11-7						3.0	---	ug/l	NJ																
Acetone	67-64-1		ND	25	ug/l	UJ					ND	25	ug/l	UJ	ND	25	ug/l	UJ	ND	25	ug/l	UJ	ND	25	ug/l	UJ
Bromomethane	74-83-9		ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Chloromethane	74-87-3		ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Ethyl ether - TIC	60-29-7						1.5	5.0	ug/l	J																
Methyl acetate	79-20-9		ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Tetrahydrofuran - TIC	109-99-9						3.3	10	ug/l	J																
Unknown - TIC	Tic2						62	---	ug/l	NJ																
GC/MS SVOC																										
OSW-8270D																										
1,2-Benzenedicarboxylic acid, diisooctyl - TIC	27554-26-3														3.3	---	ug/l	NJ								
1,4-Benzenediamine, N-(1-methylethyl)-N' - TIC	101-72-4						5.9	---	ug/l	NJ																
2(3H)-Benzothiazolone - TIC	934-34-9						3.8	---	ug/l	NJ																
2,6,10,14,18,22-Tetracosahexaene, 2,6,10 - TIC	111-02-4										3.2	---	ug/l	NJ												
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5						33	---	ug/l	NJ																
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3						17	---	ug/l	NJ																
9-Octadecenoic acid, (E)- - TIC	112-79-8														6.5	---	ug/l	NJ								
Acetic acid, chloro-, octadecyl ester - TIC	5348-82-3										4.1	---	ug/l	NJ												
Benzenesulfonamide, 2-methyl- - TIC	88-19-7						9.6	---	ug/l	NJ																
Benzenesulfonamide, N-butyl- - TIC	3622-84-2																									
Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	1421-49-4																									
Diethylene glycol dibenzoate - TIC	120-55-8																						8.1	---	ug/l	NJ
Heptadecane - TIC	629-78-7																		4.2	---	ug/l	NJ				
Octadecanoic acid - TIC	57-11-4		3.8	---	ug/l	NJ	4.9	---	ug/l	NJ					3.2	---	ug/l	NJ								
Octaethylene glycol monododecyl ether - TIC	3055-98-9														3.1	---	ug/l	NJ								
Oleic Acid - TIC	112-80-1						11	---	ug/l	NJ	14	---	ug/l	NJ									6.9	---	ug/l	NJ
Oxirane, heptadecyl- - TIC	67860-04-2										3.2	---	ug/l	NJ												
Tetraethyleneglycol monomethylether - TIC	23783-42-8						3.5	---	ug/l	NJ																
Tridecanoic acid - TIC	638-53-9														4.9	---	ug/l	NJ								
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	366-29-0										4.6	---	ug/l	NJ												
OSW-8270DSim																										
Benzo[a]anthracene	56-55-3						ND	0.050	ug/l	R													ND	0.050	ug/l	R
Benzo[a]pyrene	50-32-8						ND	0.050	ug/l	R													ND	0.050	ug/l	R
Benzo[b]fluoranthene	205-99-2						ND	0.050	ug/l	R													ND	0.050	ug/l	R
Hexachlorobenzene	118-74-1						ND	0.020	ug/l	R													ND	0.020	ug/l	R
Hexachlorobutadiene	87-68-3						ND	0.40	ug/l	R													ND	0.40	ug/l	R
N-Nitrosodimethylamine	62-75-9						ND	0.80	ug/l	R													ND	0.80	ug/l	R
Pentachlorophenol	87-86-5						ND	0.30	ug/l	R									ND	0.30	ug/l	R	0.11	0.30	ug/l	J
Metals																										
OSW-6020A																										
Manganese	7439-96-5														2.0	0.0020	mg/l	E								
Vanadium	7440-62-2		0.0014	0.0020	mg/l	UB					0.0014	0.0020	mg/l	UB	0.0017	0.0020	mg/l	UB	0.0016	0.0020	mg/l	UB	0.0018	0.0020	mg/l	UB
Vanadium - Dissolved	7440-62-2		0.00078	0.0020	mg/l	UB					0.00079	0.0020	mg/l	UB	0.00079	0.0020	mg/l	UB	0.00090	0.0020	mg/l	UB	0.0011	0.0020	mg/l	UB

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85780-1

		Sample Name:	SW-PAB-00-082115				RW-9A (85-95)-082115				RW-9 (206-216)-082115				TB-12-082115			
		Lab Sample ID:	490857806				490857807				490857808				490857809			
		Sample Date:	8/21/2015				8/21/2015				8/21/2015				8/21/2015			
				Report		Valid		Report		Valid		Report		Valid		Report		Valid
Analyte	Cas No.		Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
GC/MS VOC																		
OSW-8260C																		
1-Propene, 2-methyl- - TIC	115-11-7																	
Acetone	67-64-1		ND	25	ug/l	UJ									ND	25	ug/l	UJ
Bromomethane	74-83-9		ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Chloromethane	74-87-3		ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Ethyl ether - TIC	60-29-7																	
Methyl acetate	79-20-9		ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Tetrahydrofuran - TIC	109-99-9																	
Unknown - TIC	Tic2																	
GC/MS SVOC																		
OSW-8270D																		
1,2-Benzenedicarboxylic acid, diisooctyl - TIC	27554-26-3																	
1,4-Benzenediamine, N-(1-methylethyl)-N' - TIC	101-72-4																	
2(3H)-Benzothiazolone - TIC	934-34-9																	
2,6,10,14,18,22-Tetracosahexaene, 2,6,10 - TIC	111-02-4																	
3,5-di-tert-Butyl-4-hydroxyphenylpropion - TIC	20170-32-5										22	---	ug/l	NJ				
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6, - TIC	82304-66-3										6.0	---	ug/l	NJ				
9-Octadecenoic acid, (E)- - TIC	112-79-8						14	---	ug/l	NJ								
Acetic acid, chloro-, octadecyl ester - TIC	5348-82-3																	
Benzenesulfonamide, 2-methyl- - TIC	88-19-7																	
Benzenesulfonamide, N-butyl- - TIC	3622-84-2										15	---	ug/l	NJ				
Benzoic acid, 3,5-bis(1,1-dimethylethyl) - TIC	1421-49-4										4.8	---	ug/l	NJ				
Diethylene glycol dibenzoate - TIC	120-55-8																	
Heptadecane - TIC	629-78-7																	
Octadecanoic acid - TIC	57-11-4																	
Octaethylene glycol monododecyl ether - TIC	3055-98-9																	
Oleic Acid - TIC	112-80-1		5.7	---	ug/l	NJ					17	---	ug/l	NJ				
Oxirane, heptadecyl- - TIC	67860-04-2																	
Tetraethyleneglycol monomethylether - TIC	23783-42-8																	
Tridecanoic acid - TIC	638-53-9										5.6	---	ug/l	NJ				
[1,1'-Biphenyl]-4,4'-diamine, N,N,N',N'- - TIC	366-29-0																	
OSW-8270DSim																		
Benzo[a]anthracene	56-55-3										ND	0.050	ug/l	R				
Benzo[a]pyrene	50-32-8										ND	0.050	ug/l	R				
Benzo[b]fluoranthene	205-99-2										ND	0.050	ug/l	R				
Hexachlorobenzene	118-74-1										ND	0.020	ug/l	R				
Hexachlorobutadiene	87-68-3										ND	0.40	ug/l	R				
N-Nitrosodimethylamine	62-75-9										ND	0.80	ug/l	R				
Pentachlorophenol	87-86-5										ND	0.30	ug/l	R				
Metals																		
OSW-6020A																		
Manganese	7439-96-5																	
Vanadium	7440-62-2		0.0020	0.0020	mg/l	B	0.0014	0.0020	mg/l	UB	0.0015	0.0020	mg/l	UB				
Vanadium - Dissolved	7440-62-2		0.0013	0.0020	mg/l	UB	0.00098	0.0020	mg/l	UB								

APPENDIX 5

EPA Sample Holding Time and Preservation Requirements

Parameter	*Reference Method*	*Matrix*	*Preservation & Storage*	*Holding Times*
Volatile Organics by GCMS	OSW-8260C/SIM	Water	Acidify ph<2 Refrigeration 0-6oC	14 days
Semivolatile Organics by GCMS	OSW-8270D/SIM	Water	Refrigeration 0-6oC	7 days Extraction 40 days Analysis
Polychlorinated Biphenyls by GC/ECD	OSW-8082A	Water	Refrigeration 0-6oC	365 days - Extraction - Analysis
Metals by ICP/ICPMS Spectroscopy	OSW-6010B OSW-6020A	Water	Acidify pH<2 Refrigeration 0-6oC	180 days
Mercury in Aqueous Waste	OSW-7470A	Water	Acidify pH<2 Refrigeration 0-6oC	28 days
Alkalinity	EPA 2320B	Water	Refrigeration 0-6oC	14 days
Chloride and Sulfate	OSW-9056A	Water	Refrigeration 0-6oC	28 days
Total and Amenable Cyanide	OSW-9012B	Water	Test for presence of Sulfide – if unknown collect two samples and treat one with Lead Carbonate. Then adjust sample to pH of greater than or equal to 12with NaOH. Refrigeration at 0-4C –(also may require treatment for aldehydes and chlorine/hypochlorite/sulfite)	14 days if preserved. 24 hours or sooner if unpreserved

ATTACHMENT A

CHAIN OF CUSTODY DOCUMENT(S)

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
85780
#1
B

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

09/21/2015

Client Information	Sampler: Robert Lautenberg	Lab PM: Brown, Shali	Carr	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filter)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
				Preservation Code:																		
1	SW-PAB-03-082115	8/21/15	10:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
2	SW-PAB-02-082115	8/21/15	11:25	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
3	SW-PAB-01A-082115	8/21/15	12:20	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
4	SW-PAB-01-082115	8/21/15	12:45	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
5	SW-11-082115 MS/MSD	8/21/15	13:10	G	Water	N	Y	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
6	SW-PAB-00-082115	8/21/15	13:50	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
7	RW-9A (85-95)-082115	8/21/15	10:45	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
8	RW-9 (206-216)-082115	8/21/15	09:25	G	Water	N	N	✓	✓	✓	✓	H	✓	H	✓	H	H					Limited sample volume, please analyze if volume adequate
9	TB-12-082115	8/21/15	—	—	Water	N	N	✓	✓													
10	RW-2 (279-289)-082115	8/21/15	13:45	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
					Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/21/15 1440			8/21/15 1440	TA
2		8/21/15 1800	TA		8/21/15	TA
3		8/21/15	TA	5.9/2.5/5.8	8/22/15 0945	TAN

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.: 3 cooler.
Cooler Temperature(s) °C and Other Remarks:

E-Mail Date: 2015-10-13
E-Mail To: tim.roeper@cornerstoneeg.com
cc:

U.S. Mail: Tim Roeper
Cornerstone Environmental Group
100 Crystal Run Road, Suite 101
Middletown, NY 10941

ANALYTICAL DATA VALIDATION REPORT
Ringwood Mines/Landfill
Ford Motor Company
CLIENT PROJECT NUMBER - not available
CADENA PROJECT E203361
SAMPLES COLLECTED August 2015
SUBMITTAL #: 490-85948-1

PREPARED BY:
CADENA, INC.
1099 Highland Drive
Ann Arbor, MI 48108
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Date: 2015-10-13
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APPENDIX 3 ANALYTICAL RESULTS SUMMARY

APPENDIX 4 QUALFIED RESULTS SUMMARY

APPENDIX 5 SAMPLE HOLDING TIME AND PRESERVATION REQUIREMENTS

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ATTACHMENT A CHAIN OF CUSTODY DOCUMENT(S)

1.0 INTRODUCTION

The following document details an assessment of the analytical data reported by TestAmerica-Nashville Laboratory the data in the submittals listed below which were collected from the Ringwood Mines/Landfill site as noted. A sampling and analysis summary that lists all sample ID's and testing as related to the laboratory submittal numbers is presented in Appendix 1. A summary of all of the analytical data is presented in Appendix 3. Copies of sample Chain of Custody (COC) documents and cooler receipt forms for samples discussed in this report are included in Attachment A.
Note: One field sample from this submittal was collected in triplicate to facilitate use of this sample as the QC batch MS/MSD for each analysis where appropriate (MS not required for alkalinity).

Table 1.1

Laboratory Submittal	***Sample Date***	***Laboratory Receipt Date***
490-85948-1	8/24-25/2015	8/26/2015

The samples noted below were validated against the associated method/parameter in order to achieve the validation requirements for this SDG:

Table 1.2

Parameter	***Reference Method***	***Analyte Listing***
Volatile Organics	OSW-8260C	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8260CSIM	1,2-Dibromo-3-Chloropropane,1,4-Dioxane,EthyleneDibromide,1,2,3-Trichloropropane
Semi-Volatile Organics	OSW-8270D	TCL List OLM4.2 plus 15 TIC's
Custom Short List	OSW-8270DSIM	Extended list includes the following: Benzo(a)anthracene,Benzo(a)pyrene, Benzo(b)fluoranthene,Hexachlorobenzene, Hexachlorobutadiene,N-Nitrosodimethylamine,Pentachlorophenol
PCB	OSW-8082A	7 Standard Aroclors
Metals	OSW-6020A/7470A	Total and dissolved TAL Metals
Ion Chromatography	OSW-9056A	Chloride and Sulfate
Total Cyanide	OSW-9021B	Total and Amenable Cyanide
General Chemistry	APHA-2320B	Total and Bicarbonate Alkalinity

All "SW" analytical methods were referenced from "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition, November 1986 (with all subsequent revisions). The "SM" analytical method was referenced from the "Standard Methods for the Examination of Water and Waste water", latest promulgated revision. "EPA" methods were referenced from the revisions noted.

Laboratory Standard Operating Procedures (SOPs) associated with the methods utilized for this laboratory submittal were not available to CADENA for the purpose of validating this SDG.

Level IV data review provides a comprehensive or extensive review of the analytical data allowing for the complete reconstruction of the chemical analysis. A Level IV (Tier 3) data review was performed on the samples listed in Table 1.2 above by (CADENA).

All of the data that was recalculated was consistent with the reported results to within at least 2 significant figures. Final results may not recalculate exactly beyond this level of precision, in some cases, due to differences in available significant figures between the hardcopy raw data provided and the data utilized for calculations by the laboratory that came directly from the instrument. A table of the laboratory documents reviewed in preparing this report is included in Appendix 2.

The data was reviewed in accordance with the analytical methods and the documents listed below: (NOTE: laboratory criteria – control limits – were utilized to evaluate the data where available. Comparison to NFG criteria are noted when lab criteria was not available or for informational purposes when lab data exceeds NFG criteria).

i.) "Standard Operating Procedure HW-6 Rev12 March 2001: CLP Organics Data Review and Preliminary Review" USEPA Region 2 as identified in project QAPP.
ii.) "Standard Operating Procedure HW-2, Rev11, Jan 1992: Evaluation of Metals Data for the CLP Program" as identified in the project QAPP.

The Level VI review findings are presented in the following subsections.

An overview of the review findings is presented in table format. Several data qualifier flags were utilized in the review process. The definitions of these qualifier flags are as follows:

- J Indicates an estimated value.
- U Indicates the compound or analyte was analyzed for, but not detected at or above the stated limit.
- UJ The analyte/compound was not detected above the reported sample quantitation limit. However, the quantitation limit is considered to be approximate due to associated quality assurance results.
- UB The analyte was detected in the sample at a level between the MDL and RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the reporting limit.
- B The analyte was detected in the sample at a level above the RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the concentration reported.
- R The analyte/compound results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte/compound cannot be verified.

All flags have been incorporated into the data tables in this report.

1.1 VALIDATION QUALIFIER EXECUTIVE SUMMARY

VALIDATION SUMMARY

GCMS VOC and SIM

GCMS VOC Continuing Calibration Verification standards CCV 278804/2 analyzed on 9/3 had multiple responses outside of laboratory control limits. High bias outliers did not have an effect on client sample data or were not associated with target analytes for this submittal. Low bias recoveries were observed for target analytes chloromethane and methyl acetate in the CCV from 9/3. All client sample methyl acetate and methyl acetate results should be considered to be estimated and qualified with UJ flags if non-detect and J flags if detected based on these low bias CCV responses.

GCMS SVOC and SIM

GCMS SVOC Continuing Calibration Verification (CCV) standard 277755/3 had multiple response outliers biased high and target analyte 2,2'-oxybis(1-chloropropane) response biased low. This analyte reporting limit and result should be considered to be estimated and qualified with UJ flags for all samples. Target analyte high bias outliers did not result in qualification of client data since associated sample results were all non-detect.

PCB

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

METALS

Client sample -005 dissolved manganese result was above the instrument linear dynamic range (LDR) so this result should be considered to be estimated and qualified with an E flag (total manganese for sample -004 was marginally over the LDR (less than 10%) so the associated result was not qualified.

Dissolved selenium result for sample -002 was qualified with a B flag due to detections in associated calibration blank CCB 490-278732/125. Total thallium and total lead in client sample -001 were qualified with UB flags due to detections in associated calibration blank CCB 490-277352/18.

INORGANICS

No additional qualifications were made beyond those determined from level 2 verification review as noted below.

The following observations **DID NOT** result in qualification but were noted during the validation review:

GCMS VOC

No additional observations to report.

GCMS VOC-SIM

CCV for sequence 278757 on 9/3 had an outlier biased high for 1,4-dioxane and one surrogate. Since all associated client sample 1,4-dioxane results were non-detect qualifications were not applied based on this high bias calibration response outlier. ICV for sequence 277064 on 8/28 were reported on form VII as outliers based on known spike values reported. Verification with laboratory indicated that the known spike values should have been 10 and 0.5 (instead of 2000/100) as was historically reported for other sequences to these ICV recoveries were considered to be acceptable when compared to these historical values.

GCMS SVOC
No additional observations to report.
GCMS SVOC-SIM
No additional observations to report.
METALS
No additional observations to report.
PCB – internal standard technique was used for both columns. Some initial and continuing calibration outliers were observed for specific aroclor 1016/1260 peaks on the secondary columns but these outliers did not result in qualification of final client sample results.
Sample -007 was received at a pH of 10 according to the laboratory submittal prep log. This is outside of recommended preservation range for this analysis but sample pH was adjusted prior to sample prep so qualifications were not applied based on this preservation non-conformance.
RAW DATA NOT INCLUDED IN ORIGINAL LAB LEVEL 4 DATA PACKAGE:
TOTAL MERCURY – Sample raw data was not included – duplicate of total mercury run was reported instead. (Received from lab 2015-10-27)
CYANIDE – raw data from sequence analyzed on 8/27. (Received from lab 2015-10-27)

VERIFICATION SUMMARY

The following qualifications and associated data flags were applied based on the initial level 2 review of this data package.

The following minor QC exceptions or missing information were noted:

GCMS VOC trip blank was non-detect for all target analytes.

GCMS-SIM VOC QC batch 278757 and GCMS SVOC QC batch 277755 CCV response outliers as noted in the laboratory submittal case narrative were not used to qualify results as part of this level 2 data package review.

GCMS VOC and GCMS SVOC TIC results should be considered to be estimated and qualified with NJ flags unless the TIC analyte detected is an instrument calibrated compound that is just not part of the TAL for this submittal in which case no qualification is required other than the TIC qualification code or J flag if the result is detected below the RL.

GCMS VOC QC batch 278804 LCS recovery was an outlier biased high for cyclohexane. Qualification of client sample results was not required based on these high bias QC outliers.

GCMS VOC QC batch 278804 method blank had a detection below the RL for methylene chloride. Client sample -003 result for this analyte should be considered to be non-detect at the RL and qualified with a UB flag.

GCMS VOC sample -001 MS recovery only was an outlier biased low for 1,1-dichloroethylene. Qualification of client sample results was not required based on this QC outlier alone.

PAH QC batch 277571 MS recoveries were not performed due to insufficient sample volume available for spiking according to the laboratory submittal case narrative.

GCMS SVOC QC batch 277572 MS recovery outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

GCMS SVOC QC batch 277572 LCS recoveries were outliers biased high for benzaldehyde. Qualification of

client sample results was not required based on this high bias QC outlier.

GCMS SVOC surrogate recoveries were outliers biased high for only 1 out of 3 acid fraction surrogates in QC batch 277572 method blank and LCS. Qualification based on these surrogate recovery outliers was not required.

Metals method blanks had detections below the RL in QC batch 276608 for total silver and total vanadium and in QC batch 277682 for dissolved vanadium and in QC batch 277068 for dissolved vanadium and dissolved manganese. Client samples -003, -004, -005 dissolved vanadium results and client samples -003.-005, -006 total vanadium results and client sample -003 dissolved manganese results should be considered to be non-detect at the RL and qualified with UB flags. Client samples -006 total vanadium results and client samples -001, -002, -006 dissolved vanadium results and client sample -004 dissolved manganese results should be considered to be non-detect at the concentration reported and qualified with B flags.

Metals sample -001 MS/MSD recoveries were not considered to be statistically reliable due to elevated levels of target analyte in the original sample matrix relative to the amount spiked (4X rule) so were not used to qualify results for manganese.

Cyanide sample -004 MSD recovery only was an outlier biased low. Qualification of client sample results is not required based on this QC outlier alone. QC batch sample duplicate RPD outlier was not performed using a sample from this submittal so qualification was not required based on this sample-specific QC outlier.

Note: Field blank data, if available, was not utilized to qualify client sample results as part of this level 2 data package verification review.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

2.0 VOLATILE ORGANIC COMPOUNDS (VOCs) – METHOD SW846 8260C and SIM Analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

2.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) VOCs

2.1.1 TUNING AND MASS CALIBRATION – GC/MS VOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

2.1.2 INITIAL CALIBRATION – GC/MS VOCs

Initial calibration data for VOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS VOCs

Initial calibration verification (ICV) standards for VOC analyses were reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

2.2 CONTINUING CALIBRATION – GC/MS VOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

2.3 INTERNAL STANDARDS – GC/MS VOCs

Internal standard (IS) data were reviewed and met criteria without exception.

2.4 SURROGATE SPIKE RECOVERIES – GC/MS VOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.
If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.
All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

2.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS VOCs

A laboratory control sample (LCS) was prepared and analyzed for VOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

2.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS VOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.
CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

2.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS VOCs

There were no field duplicate comparisons performed as part of this validation request.

2.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS VOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

2.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS VOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable unless noted otherwise in verification/validation summary.

2.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS VOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

2.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS VOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

3.0 SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) – METHOD SW846 8270D and SIM analysis

The target analyte list was defined by the client-project as TCL List OLM4.2.

3.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) SVOCs

3.1.1 TUNING AND MASS CALIBRATION – GC/MS SVOCs

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

3.1.2 INITIAL CALIBRATION – GC/MS SVOCs

Initial calibration data for SVOCs were reviewed and met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

3.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS SVOCs

Initial calibration verification (ICV) standards for SVOC analyses were reviewed and met criteria specified by the laboratory with no exceptions.

3.2 CONTINUING CALIBRATION – GC/MS SVOCs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary

3.3 INTERNAL STANDARDS – GC/MS SVOCs

Internal standard (IS) data were reviewed and met criteria without exception.

3.4 SURROGATE SPIKE RECOVERIES – GC/MS SVOCs

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

3.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS SVOCs

A laboratory control sample (LCS) was prepared and analyzed for SVOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

3.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS SVOCs

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

3.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS SVOCs

There were no field duplicate comparisons performed as part of this validation request.

3.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS SVOCs

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

3.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS SVOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable without exception.

3.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS SVOCs

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

3.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS SVOCs

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

4.0 POLYCHLORINATED BIPHENYLS (PCBs) – METHOD SW846 8082A

The target analyte list was defined by the client as the standard 7 aroclors.

4.1 CALIBRATION – GAS CHROMATOGRAPH-ECD

4.1.1 TUNING AND MASS CALIBRATION – PCB

Not applicable for this analysis.

4.1.2 INITIAL CALIBRATION – PCB

Initial calibration data for PCBs were reviewed and met the criteria for instrument sensitivity and linearity of response without exception.

4.1.3 INITIAL CALIBRATION VERIFICATION – PCB

Initial calibration verification (ICV) standards for PCB analyses were reviewed and met criteria specified by the laboratory with no exceptions.

4.2 CONTINUING CALIBRATION – PCBs

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response unless noted otherwise in verification/validation summary.

4.3 INTERNAL STANDARDS – PCB

Internal standard (IS) data were reviewed and met criteria unless noted otherwise in verification/validation summary. (NOTE: Lab quantitation approach DID use internal standard quantitation for this submittal).

4.4 SURROGATE SPIKE RECOVERIES – PCB

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits unless noted otherwise in verification/validation summary.

4.5 LABORATORY CONTROL SAMPLE ANALYSES - PCB

A laboratory control sample (LCS) was prepared and analyzed for PCBs. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary..

4.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - PCB

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

4.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - PCB

There were no field duplicate comparisons performed as part of this validation request.

4.8 EXTRACT CLEANUP - PCB

Extract cleanups were performed in accordance with laboratory SOP's and as noted in level 4 data package prep logs.

4.9 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - PCB

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

4.10 TENTATIVELY IDENTIFIED COMPOUNDS - PCB

Not requested for this analytical procedure.

4.11 BLANKS – METHOD/FIELD/CALIBRATION - PCB

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

5.0 HPLC/IC – METHOD SW846 9056A – CHLORIDE AND SULFATE

5.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

5.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

5.3 CONTINUTING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

5.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

5.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

5.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

5.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

5.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

6.0 METALS – ICPMS by Method 6020 TOTAL AND DISSOLVED and Mercury by Method 7470A

The following samples provided in this SDG underwent a Level IV review for either/and metals or mercury analyses:

- Method 6020A: ALL
- Method 7470A: ALL

6.1 ICP/MS TUNING AND MASS CALIBRATION

Instrument tuning data were reviewed. Tuning elements were analyzed. All tuning criteria were met for the analyses, indicating proper optimization of the instrumentation.

6.2 INITIAL CALIBRATION

Initial calibration data for metals and mercury were reviewed and met the criteria for linearity of response without exception.

6.3 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards for metals and mercury analyses were reviewed and met criteria unless otherwise noted in verification/validation summary section of this document.

An initial calibration blank (ICB) was analyzed for metals and mercury analyses. Metals and mercury were reported as non-detect in each ICB analysis unless noted otherwise in verification/validation summary.

6.4 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for metals and mercury analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

6.5 INTERFERENCE CHECK STANDARD

The interference check standard results were reviewed and found to meet criteria.

6.6 INTERNAL STANDARDS

Internal standard (IS) data were reviewed and found to meet criteria unless noted otherwise in verification/validation summary.

6.7 LABORATORY CONTROL SAMPLE ANALYSIS

A laboratory control sample (LCS) was prepared and analyzed for metals and mercury. The LCS recoveries were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

6.8 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE (MS/MSD) ANALYSES

The MS/MSD recoveries and RPD's were either not performed using a client sample or were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

6.9 CONTRACT REQUIRED DETECTION LIMIT STANDARD ANALYSES

Each contract required detection limit (CRDL) standard was analyzed at the proper frequency and were within laboratory control limits unless noted otherwise in verification/validation summary.

6.10 ICP SERIAL DILUTION

Serial dilutions were analyzed at the proper frequency and were either not performed using the client sample or were within laboratory control limits unless noted otherwise in verification/validation summary.

6.11 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

6.12 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

6.13 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

7.0 GENERAL CHEMISTRY- TOTAL AND AMENABLE CYANIDE AND ALKALINITY – METHODS 9012B and 2320B

7.1 INITIAL CALIBRATION

Initial calibration data were reviewed and met the criteria for linearity of response unless noted otherwise in verification/validation summary.

7.2 INITIAL CALIBRATION VERIFICATION

Initial calibration verification (ICV) standards reviewed and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

7.3 CONTINUING CALIBRATION

Continuing calibration verification (CCV) standards for these analyses were analyzed at the required frequency and met criteria specified by the laboratory unless noted otherwise in verification/validation summary.

The continuing calibration blanks (CCB) were analyzed at the proper frequency and were reported as non-detect unless noted otherwise in verification/validation summary.

7.4 LABORTORY CONTROL SAMPLE ANALYSES

A laboratory control sample (LCS) was prepared and analyzed for these analyses. The LCS recoveries were within the laboratory control limits unless noted otherwise in verification/validation summary.

7.5 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES

The MS/MSD recoveries and RPD's were within the laboratory control limits for all compounds of interest unless noted otherwise in verification/validation summary.

Cadena does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

7.6 FIELD QA/QC – FIELD DUPLICATE ANALYSES

There were no field duplicate comparisons performed as part of this validation request.

7.7 TARGET ANALYTES AND REQUIRED LIMITS OF DETECTION

Target analyte lists were based on project specific requirements. Limits of detection were not specifically provided for water matrices. Analyte lists reported by laboratory were in compliance with available reference documents (COC).

7.8 BLANKS – METHOD/FIELD/CALIBRATION

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

8.0 REPRESENTATIVENESS EVALUATION

Representativeness is a qualitative evaluation of whether the data represents actual environmental conditions. Representativeness was evaluated using holding time criteria, which reflect the length of time after sample collection that a sample or extract remains representative of environmental conditions. Depending on the analysis, either one or two holding times were evaluated.

i.) For those analyses that do not include a sample extraction, only one holding time was evaluated: the length of time between sample collection and analysis.

ii.) For analyses that require sample extraction prior to analysis, two holding times were evaluated: the length of time from sampling until extraction and the length of time from extraction to analysis.

Holding times are compared to standard method specific holding times accepted or recommended by the United States Environmental Protection Agency (USEPA). Those holding times outside of USEPA acceptance criteria are qualitatively evaluated to determine their effect on sample representativeness.

Representativeness was also evaluated by analysis of laboratory method blanks and field equipment blanks. Laboratory method blanks and field equipment blanks are used to identify sources of contamination not associated with environmental conditions.

8.1 SAMPLE PRESERVATION AND HOLDING TIMES

Sample holding time and preservation requirements are summarized in Appendix 5.

All sample extractions and/or analyses were performed within the specified holding times unless noted otherwise in verification/validation summary.

All samples were properly preserved and cooled to 0-6°C after collection.

8.2 METHOD BLANK SUMMARY

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit unless noted otherwise in verification/validation summary.

Evaluation of blank contamination includes directions on the interpretation of the affected analytical results.

9.0 USABILITY AND COMPARABIILTY

Usability of data was evaluated by assuring that all the analytical requests were met, samples were received in the proper condition, and all analyses were performed within the appropriate holding times unless noted otherwise in verification/validation summary

No data evaluated within this delivery group was considered unusable (qualified with an R flag) due to sample integrity, sample matrix interference or batch quality control issues unless noted otherwise in verification/validation summary.

10.0 QC SUMMARY

All sample results meet the project specific QAPP standard for usability with exceptions defined by validation and verification qualifiers as applied. Please reference the following tables for a summary of the investigative field sample data and their valid qualifiers based on Level 4 technical review of the analytical data.

APPENDIX 1

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Nashville
Laboratory Submittal: 85948-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	Metals by ICP Mass Spectroscopy(D)	Metals by ICP Mass Spectroscopy	Mercury (Manual Cold Vapor)(D)	Mercury (Manual Cold Vapor)	TOTAL AND AMENABLE CYANIDE (AUTOMATED COLORIMETRIC, WITH OFF-LINE DISTILLATION)	Inorganic Anions by IC	Alkalinity Prep
490859481	OB-15B-082415	8/24/2015	11:15:00	X	X	X	X	X	X	X	X	X	X	X	X
490859482	RW-13 (71-91)-082415	8/24/2015	1:35:00	X	X	X	X	X	X	X	X	X	X	X	X
490859483	FB-01-082415	8/24/2015	7:30:00	X	X	X	X	X	X	X	X	X	X	X	X
490859484	RW-5A-082415	8/24/2015	10:25:00	X	X	X	X	X	X	X	X	X	X	X	X
490859485	OB-7-082415	8/24/2015	12:50:00	X	X	X	X	X	X	X	X	X	X	X	X
490859486	RW-4A (113-123)-082415	8/24/2015	9:35:00	X	X	X	X	X	X	X	X	X	X	X	X
490859487	RW-4 (333-343)-082415	8/24/2015	11:25:00	X	X	X	X	X	X	X	X	X	X	X	X
490859488	TB-13-082515	8/25/2015	1:00:00	X	X										

APPENDIX 2

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85948-1
August 2015

Description

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    - ICV check standard recovery report (Form VII)
    - ICV check standard total ion profile with integration
    - GCMS VOA Continuing Calibration Data (Form VII)
    - CCV raw integration data from instrument
    - CCV Total Ion Profile Chromatogram
    - Manual integration if applicable
  - Raw QC Data
    - Tune information (not included with SIM package)
    - FORM I - QC data
    - Method Blank integration/internal standard and total ion profile raw data
    - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
    - MS and MSD integration/internal standard and total ion profile raw data
  - Miscellaneous Data
    - Run logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85948-1
August 2015

Description

GCMS Semivolatiles Data - Method 8270D and SIM

- QC Summary Data
  - Surrogate recoveries (form II)
  - Check Sample recoveries (form III)
  - Method blank report (form IV)
  - Tuning and mass calibrations (form V) (not applicable for SIM)
  - Internal Standard and RT area summary (form VIII)
- Sample Data
  - GCMS VOA Organics Analysis Data Sheet (Form I)
  - Raw integration data from instrument
  - Total Ion Profile Chromatogram
  - Ion profiles of detected target analyte peaks
  - Manual integration if applicable
  - Tentatively Identified Compound Reports (if applicable)
- Standards Data
  - GCMS VOA Initial Calibration Data Internal Standard Curve Evaluation (Form VI)
  - ICAL Raw integration data from instrument
  - ICAL Total Ion Profile Chromatogram
  - ICV check standard recovery report
  - ICV check standard total ion profile with integration
  - GCMS VOA Continuing Calibration Data (Form VII)
  - CCV raw integration data from instrument
  - CCV Total Ion Profile Chromatogram
  - Manual integration if applicable
- Raw QC Data
  - Tune information (not applicable for SIM)
  - Method Blank integration/internal standard and total ion profile raw data
  - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
- Miscellaneous Data
  - Instrument run logs
  - Extraction bench sheets

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LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85948-1
August 2015

Description

- Polychlorinated Biphenyls Data (PCB)
  - QC Summary data
    - Surrogate recoveries (form II)
    - Check Sample Recovery data (form III)
    - Method Blank data (form IV)
    - Analytical sequence with RT check (Form VIII)
    - Identification Summary (Form X)
  - Sample Data
    - Organics Analysis Data Sheet (Form I)
    - Raw integration data from instrument
    - Chromatogram
  - Standards Data (both columns)
    - Initial Calibration Data External Standard RT Summary (Form VI)
    - Initial Calibration Data Summary with average RF
    - Raw integration data from instrument with manual integrations where applicable
    - ICAL chromatograms
    - Continuing Calibration Data (Form VII) with RT Summaries
    - ICV raw integration and chromatograms
    - CCV raw integration data from instrument
    - CCV chromatogram
  - Raw QC Data
    - LCS/LCSD sample data report and integration and chromatograms
    - Method blank integration and chromatograms
  - Miscellaneous Data
    - Sequence table (run log)
    - PCB Batch Worksheet
- HPLC/IC - 9056A ORGFM_28D - Anions, Ion Chromatography - Sulfate and Chloride
  - Raw Data and Data Summaries for:
    - LCS/LCSD (form III)
    - MS/MSD (form III)
    - METHOD BLANKS (Form IV)
    - SAMPLE DATA (Form I)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VI)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - ICAL (Form VII)
      - Raw instrument data and chromatography
      - Manual Integration (if applicable)
    - QC DATA (Form I)
      - Raw instrument data and chromatography
    - Analysis Run Logs

APPENDIX 2
LABORATORY DOCUMENTS SUBMITTED FOR REVIEW
FORD RINGWOOD MINES PROJECT
NEW JERSEY FULL PACKAGE MINI FINAL REPORT - LEVEL 4
E203361 - 490-85948-1
August 2015

Description

METALS DATA (ICPMS and mercury)
- Forms Data
  - Cover Page
  - Inorganic Analysis Data Sheet - Metals Dissolved/Total Recoverable (1A-IN)
  - CCV standard report - mercury and ICPMS (2A-IN)
  - CRQL report - mercury and ICPMS (2B-IN)
  - ICB report - mercury and ICPMS (3-IN)
  - Method blank report (3-IN)
  - Interference check standard A - ICPMS (4A-IN)
  - Interference check standard AB - ICPMS (4A-IN)
  - MS/MSD Sample recovery (5A-IN)
  - PDS Summary (5B-IN)
  - LCS Recovery form (7A-IN)
  - LCS Duplicate Recover (7D-IN)
  - ICP-MS Serial Dilutions (8-IN)
  - Detection Limits Form (9-IN)
  - Linear dynamic ranges - ICPMS (11-IN)
  - Prep log - mercury and ICPMS (12-IN)
  - Run log - ICPMS and Mercury (13-IN)
  - ICP-MS TUNE (14-IN)
  - ICPMS Internal Standards Relative Intensity Summary (15-IN)
- Instrument Printouts
  - ICP-MS Raw instrument data
  - Mercury raw instrument data, run logs and calibrations
- Miscellaneous Data
  - Metals Batch Worksheet

GENERAL CHEMISTRY - Total and Amenable Cyanide and Alkalinity
- Cover Page
- Raw Data and Data Summaries for:
  - Sample Data (Form 1B-IN)
  - CCV/CCB (Form 2-IN)
  - METHOD BLANKS (Form 3-IN)
  - MATRIX SPIKES (Form 5-IN)
  - Sample DUPLICATES (Form 6-IN)
  - LCS/LCSD (Form 7-IN)
  - Detection Limits Form (9-IN)
  - Prep log (12-IN)
  - Analysis Run Logs (13-IN)
  - Raw Data - instrument sample sequence and calibration curve
  - Alkalinity Reagents
  - Alkalinity pH meter calibration
  - Alkalinity sequence log and raw data
  - General Chemistry Batch Worksheets

Shipping and Receiving Documents
- COC forms
- Cooler Receipt Form, checklist and narrative

APPENDIX 3

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85948-1

		Sample Name:	OB-15B-082415				RW-13 (71-91)-082415				FB-01-082415			
		Lab Sample ID:	490859481				490859482				490859483			
		Sample Date:	8/24/2015				8/24/2015				8/24/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	35	25	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethyl ether - TIC	60-29-7												
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	0.53	5.0	ug/l	UB
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
tert-Butyldimethylsilanol - TIC	18173-64-3												
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Tetrahydrofuran - TIC	109-99-9					0.98	10	ug/l	J				
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85948-1

		Sample Name:	OB-15B-082415				RW-13 (71-91)-082415				FB-01-082415			
		Lab Sample ID:	490859481				490859482				490859483			
		Sample Date:	8/24/2015				8/24/2015				8/24/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	8.6	ug/l	UJ	ND	9.3	ug/l	UJ	ND	8.6	ug/l	UJ
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	22	ug/l	---	ND	23	ug/l	---	ND	22	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	2-Chlorophenol	95-57-8	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	1.7	ug/l	---
	2-Methylphenol	95-48-7	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	2-Nitroaniline	88-74-4	ND	22	ug/l	---	ND	23	ug/l	---	ND	22	ug/l	---
	2-Nitrophenol	88-75-5	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	3-Nitroaniline	99-09-2	ND	22	ug/l	---	ND	23	ug/l	---	ND	22	ug/l	---
	3H-Benz[e]indene, 2-methyl- - TIC	150096-60-9					4.6	---	ug/l	NJ				
	4,6-Dinitro-2-methylphenol	534-52-1	ND	22	ug/l	---	ND	23	ug/l	---	ND	22	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	4-Chloroaniline	106-47-8	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	4-Nitroaniline	100-01-6	ND	22	ug/l	---	ND	23	ug/l	---	ND	22	ug/l	---
	4-Nitrophenol	100-02-7	ND	22	ug/l	---	ND	23	ug/l	---	ND	22	ug/l	---
	Acenaphthene	83-32-9	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	1.7	ug/l	---
	Acenaphthylene	208-96-8	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	1.7	ug/l	---
	Acetophenone	98-86-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Anthracene	120-12-7	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	1.7	ug/l	---
	Atrazine	1912-24-9	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Benzaldehyde	100-52-7	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Benzenamine, N,N-dimethyl-4-nitro- - TIC	100-23-2					7.5	---	ug/l	NJ				
	Benzo[g,h,i]perylene	191-24-2	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	1.7	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	1.7	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Caprolactam	105-60-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Carbazole	86-74-8	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Chrysene	218-01-9	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	1.7	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	1.7	ug/l	---
	Dibenzofuran	132-64-9	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Diethyl phthalate	84-66-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Diethyltoluamide - TIC	134-62-3									11	---	ug/l	NJ
	Dimethyl phthalate	131-11-3	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Diphenyl	92-52-4	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Fluoranthene	206-44-0	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	1.7	ug/l	---
	Fluorene	86-73-7	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	1.7	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Hexachloroethane	67-72-1	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	1.7	ug/l	---
	Isophorone	78-59-1	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	n-Hexadecanoic acid - TIC	57-10-3					3.4	---	ug/l	NJ				
	N-Nitrosodi-n-propylamine	621-64-7	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Naphthalene	91-20-3	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	1.7	ug/l	---
	Nitrobenzene	98-95-3	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Oleic Acid - TIC	112-80-1	3.1	---	ug/l	NJ	5.7	---	ug/l	NJ				
	p-Benzoquinone - TIC	106-51-4	7.0	---	ug/l	NJ								
	Phenanthrene	85-01-8	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	1.7	ug/l	---
	Phenol	108-95-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	8.6	ug/l	---
	Pyrene	129-00-0	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	1.7	ug/l	---
	Tetradecane - TIC	629-59-4					3.0	---	ug/l	NJ				
	Tridecanoic acid - TIC	638-53-9												
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.046	ug/l	---	ND	0.043	ug/l	---	ND	0.046	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.046	ug/l	---	ND	0.043	ug/l	---	ND	0.046	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.046	ug/l	---	ND	0.043	ug/l	---	ND	0.046	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.019	ug/l	---	ND	0.017	ug/l	---	ND	0.019	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.37	ug/l	---	ND	0.34	ug/l	---	ND	0.37	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.74	ug/l	---	ND	0.69	ug/l	---	ND	0.74	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.28	ug/l	---	ND	0.26	ug/l	---	ND	0.28	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85948-1

			Sample Name:	OB-15B-082415				RW-13 (71-91)-082415				FB-01-082415			
			Lab Sample ID:	490859481				490859482				490859483			
			Sample Date:	8/24/2015				8/24/2015				8/24/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2	ND	0.43	ug/l	---	ND	0.48	ug/l	---	ND	0.50	ug/l	---
	PCB-1221	11104-28-2	ND	0.43	ug/l	---	ND	0.48	ug/l	---	ND	0.50	ug/l	---
	PCB-1232	11141-16-5	ND	0.43	ug/l	---	ND	0.48	ug/l	---	ND	0.50	ug/l	---
	PCB-1242	53469-21-9	ND	0.43	ug/l	---	ND	0.48	ug/l	---	ND	0.50	ug/l	---
	PCB-1248	12672-29-6	ND	0.43	ug/l	---	ND	0.48	ug/l	---	ND	0.50	ug/l	---
	PCB-1254	11097-69-1	ND	0.43	ug/l	---	ND	0.48	ug/l	---	ND	0.50	ug/l	---
	PCB-1260	11096-82-5	ND	0.43	ug/l	---	ND	0.48	ug/l	---	ND	0.50	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.43	ug/l	---	ND	0.48	ug/l	---	ND	0.50	ug/l	---
Metals														
	OSW-6020A													
	Aluminum	7429-90-5	0.89	0.020	mg/l	---	1.7	0.020	mg/l	---	ND	0.020	mg/l	---
	Aluminum - Dissolved	7429-90-5	0.17	0.020	mg/l	---	0.038	0.020	mg/l	---	ND	0.020	mg/l	---
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	0.00075	0.0020	mg/l	J	0.0011	0.0020	mg/l	J
	Arsenic	7440-38-2	0.0014	0.0020	mg/l	J	0.0029	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Arsenic - Dissolved	7440-38-2	0.0011	0.0020	mg/l	J	0.0020	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Barium	7440-39-3	0.041	0.0020	mg/l	---	0.059	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.0016	0.0020	mg/l	J	0.046	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	23.0	1.0	mg/l	---	49.6	1.0	mg/l	---	ND	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	21.7	1.0	mg/l	---	47.9	1.0	mg/l	---	ND	1.0	mg/l	---
	Chromium	7440-47-3	0.0022	0.0020	mg/l	---	0.0080	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	0.00052	0.0020	mg/l	J	0.0013	0.0020	mg/l	J
	Cobalt	7440-48-4	0.00082	0.0020	mg/l	J	0.00059	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper	7440-50-8	0.0019	0.0020	mg/l	J	0.0048	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	0.0011	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Iron	7439-89-6	1.6	0.025	mg/l	---	4.3	0.025	mg/l	---	ND	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	0.21	0.025	mg/l	---	0.041	0.025	mg/l	---	ND	0.025	mg/l	---
	Lead	7439-92-1	0.00063	0.0020	mg/l	UB	0.0023	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Magnesium	7439-95-4	5.8	1.0	mg/l	---	14.8	1.0	mg/l	---	ND	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	5.7	1.0	mg/l	---	15.3	1.0	mg/l	---	ND	1.0	mg/l	---
	Manganese	7439-96-5	4.0	0.020	mg/l	---	0.056	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Manganese - Dissolved	7439-96-5	0.42	0.0020	mg/l	---	0.036	0.0020	mg/l	---	0.00059	0.0020	mg/l	UB
	Nickel	7440-02-0	0.015	0.0020	mg/l	---	0.0030	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0	0.0012	0.0020	mg/l	J	0.0011	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Potassium	7440-09-7	0.90	1.0	mg/l	J	47.5	1.0	mg/l	---	ND	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	0.74	1.0	mg/l	J	48.6	1.0	mg/l	---	ND	1.0	mg/l	---
	Selenium	7782-49-2	ND	0.0020	mg/l	---	0.0031	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	0.0030	0.0020	mg/l	B	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	4.0	1.0	mg/l	---	19.4	1.0	mg/l	---	ND	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	3.9	1.0	mg/l	---	20.3	1.0	mg/l	---	ND	1.0	mg/l	---
	Thallium	7440-28-0	0.0011	0.0020	mg/l	UB	0.00020	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Vanadium	7440-62-2	0.0054	0.0020	mg/l	---	0.0067	0.0020	mg/l	---	0.0013	0.0020	mg/l	UB
	Vanadium - Dissolved	7440-62-2	0.0024	0.0020	mg/l	B	0.0022	0.0020	mg/l	B	0.00095	0.0020	mg/l	UB
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	0.0098	0.010	mg/l	J	0.0072	0.010	mg/l	J	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	1.53	1.00	mg/l	---	37.7	1.00	mg/l	---	ND	1.00	mg/l	---
	Sulfate	14808-79-8	10.8	1.00	mg/l	---	63.0	1.00	mg/l	---	ND	1.00	mg/l	---
Prep														
	APHA-2320B													
	Bicarbonate Alkalinity as CaCO3	E-14508	66.9	10.0	mg/l	---	146	10.0	mg/l	---	ND	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	66.9	10.0	mg/l	---	146	10.0	mg/l	---	ND	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85948-1

		Sample Name:	RW-5A-082415				OB-7-082415				RW-4A (113-123)-082415			
		Lab Sample ID:	490859484				490859485				490859486			
		Sample Date:	8/24/2015				8/24/2015				8/24/2015			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	0.18	1.0	ug/l	J	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---	ND	25	ug/l	---
Benzene	71-43-2	0.22	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethyl ether - TIC	60-29-7					0.28	5.0	ug/l	J				
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
tert-Butyldimethylsilanol - TIC	18173-64-3									3.1	---	ug/l	NJ
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Tetrahydrofuran - TIC	109-99-9												
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85948-1

		Sample Name:	RW-5A-082415				OB-7-082415				RW-4A (113-123)-082415			
		Lab Sample ID:	490859484				490859485				490859486			
		Sample Date:	8/24/2015				8/24/2015				8/24/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	8.6	ug/l	UJ	ND	9.3	ug/l	UJ	ND	10	ug/l	UJ
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	22	ug/l	---	ND	23	ug/l	---	ND	25	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	2-Methylphenol	95-48-7	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	2-Nitroaniline	88-74-4	ND	22	ug/l	---	ND	23	ug/l	---	ND	25	ug/l	---
	2-Nitrophenol	88-75-5	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	3 & 4 Methylphenol	65794-96-9	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	22	ug/l	---	ND	23	ug/l	---	ND	25	ug/l	---
	3H-Benz[e]indene, 2-methyl- - TIC	150096-60-9												
	4,6-Dinitro-2-methylphenol	534-52-1	ND	22	ug/l	---	ND	23	ug/l	---	ND	25	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	22	ug/l	---	ND	23	ug/l	---	ND	25	ug/l	---
	4-Nitrophenol	100-02-7	ND	22	ug/l	---	ND	23	ug/l	---	ND	25	ug/l	---
	Acenaphthene	83-32-9	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Acenaphthylene	208-96-8	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Acetophenone	98-86-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Atrazine	1912-24-9	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Benzaldehyde	100-52-7	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Benzenamine, N,N-dimethyl-4-nitro- - TIC	100-23-2												
	Benzo[g,h,i]perylene	191-24-2	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Dibenzofuran	132-64-9	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Diethyltoluamide - TIC	134-62-3	5.4	---	ug/l	NJ								
	Dimethyl phthalate	131-11-3	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Diphenyl	92-52-4	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Fluoranthene	206-44-0	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Fluorene	86-73-7	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	n-Hexadecanoic acid - TIC	57-10-3									4.8	---	ug/l	NJ
	N-Nitrosodi-n-propylamine	621-64-7	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Nitrobenzene	98-95-3	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Oleic Acid - TIC	112-80-1	6.6	---	ug/l	NJ	17	---	ug/l	NJ	15	---	ug/l	NJ
	p-Benzoquinone - TIC	106-51-4												
	Phenanthrene	85-01-8	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Phenol	108-95-2	ND	8.6	ug/l	---	ND	9.3	ug/l	---	ND	10	ug/l	---
	Pyrene	129-00-0	ND	1.7	ug/l	---	ND	1.9	ug/l	---	ND	2.0	ug/l	---
	Tetradecane - TIC	629-59-4												
	Tridecanoic acid - TIC	638-53-9					3.5	---	ug/l	NJ				
OSW-8270DSim														
	Benzo[a]anthracene	56-55-3	ND	0.045	ug/l	---	ND	0.046	ug/l	---	ND	0.046	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.045	ug/l	---	ND	0.046	ug/l	---	ND	0.046	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.045	ug/l	---	ND	0.046	ug/l	---	ND	0.046	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.018	ug/l	---	ND	0.019	ug/l	---	ND	0.019	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	0.36	ug/l	---	ND	0.37	ug/l	---	ND	0.37	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.71	ug/l	---	ND	0.74	ug/l	---	ND	0.74	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.27	ug/l	---	ND	0.28	ug/l	---	ND	0.28	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85948-1

			Sample Name:	RW-5A-082415			OB-7-082415				RW-4A (113-123)-082415			
			Lab Sample ID:	490859484			490859485				490859486			
			Sample Date:	8/24/2015			8/24/2015				8/24/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1221	11104-28-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1232	11141-16-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1242	53469-21-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1248	12672-29-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	PCB-1254	11097-69-1	0.18	0.50	ug/l	J	ND	0.50	ug/l	---	1.3	0.50	ug/l	---
	PCB-1260	11096-82-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	1.3	0.50	ug/l	---
Metals														
	OSW-6020A													
	Aluminum	7429-90-5	0.055	0.020	mg/l	---	ND	0.020	mg/l	---	0.016	0.020	mg/l	J
	Aluminum - Dissolved	7429-90-5	ND	0.020	mg/l	---	ND	0.020	mg/l	---	ND	0.020	mg/l	---
	Antimony	7440-36-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Antimony - Dissolved	7440-36-0	ND	0.0020	mg/l	---	0.00050	0.0020	mg/l	J	0.00063	0.0020	mg/l	J
	Arsenic	7440-38-2	0.0033	0.0020	mg/l	---	0.00057	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Arsenic - Dissolved	7440-38-2	0.0011	0.0020	mg/l	J	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Barium	7440-39-3	0.025	0.0020	mg/l	---	0.018	0.0020	mg/l	---	0.014	0.0020	mg/l	---
	Barium - Dissolved	7440-39-3	0.025	0.0020	mg/l	---	0.017	0.0020	mg/l	---	0.015	0.0020	mg/l	---
	Beryllium	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cadmium	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---	ND	0.0010	mg/l	---
	Calcium	7440-70-2	76.3	1.0	mg/l	---	76.5	1.0	mg/l	---	12.9	1.0	mg/l	---
	Calcium - Dissolved	7440-70-2	69.7	1.0	mg/l	---	78.1	1.0	mg/l	---	13.4	1.0	mg/l	---
	Chromium	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Chromium - Dissolved	7440-47-3	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt	7440-48-4	0.0012	0.0020	mg/l	J	0.0032	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Cobalt - Dissolved	7440-48-4	0.0011	0.0020	mg/l	J	0.0033	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper	7440-50-8	0.00050	0.0020	mg/l	J	0.0030	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Copper - Dissolved	7440-50-8	ND	0.0020	mg/l	---	0.0012	0.0020	mg/l	J	ND	0.0020	mg/l	---
	Iron	7439-89-6	4.3	0.025	mg/l	---	1.7	0.025	mg/l	---	0.028	0.025	mg/l	---
	Iron - Dissolved	7439-89-6	0.14	0.025	mg/l	---	0.013	0.025	mg/l	J	ND	0.025	mg/l	---
	Lead	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Magnesium	7439-95-4	8.4	1.0	mg/l	---	28.0	1.0	mg/l	---	4.7	1.0	mg/l	---
	Magnesium - Dissolved	7439-95-4	8.3	1.0	mg/l	---	30.7	1.0	mg/l	---	5.1	1.0	mg/l	---
	Manganese	7439-96-5	1.0	0.0020	mg/l	---	2.7	0.020	mg/l	---	0.0016	0.0020	mg/l	J
	Manganese - Dissolved	7439-96-5	1.0	0.0020	mg/l	B	2.7	0.0020	mg/l	E	0.0013	0.0020	mg/l	J
	Nickel	7440-02-0	0.00085	0.0020	mg/l	J	0.0019	0.0020	mg/l	J	0.015	0.0020	mg/l	---
	Nickel - Dissolved	7440-02-0	0.0012	0.0020	mg/l	J	0.0022	0.0020	mg/l	---	0.017	0.0020	mg/l	---
	Potassium	7440-09-7	10.9	1.0	mg/l	---	2.8	1.0	mg/l	---	1.4	1.0	mg/l	---
	Potassium - Dissolved	7440-09-7	10.3	1.0	mg/l	---	2.9	1.0	mg/l	---	1.5	1.0	mg/l	---
	Selenium	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Sodium	7440-23-5	7.7	1.0	mg/l	---	10.2	1.0	mg/l	---	5.7	1.0	mg/l	---
	Sodium - Dissolved	7440-23-5	7.3	1.0	mg/l	---	11.1	1.0	mg/l	---	6.4	1.0	mg/l	---
	Thallium	7440-28-0	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---	ND	0.0020	mg/l	---
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---	0.00059	0.0020	mg/l	J	0.00037	0.0020	mg/l	J
	Vanadium	7440-62-2	0.0022	0.0020	mg/l	B	0.0017	0.0020	mg/l	UB	0.0019	0.0020	mg/l	UB
	Vanadium - Dissolved	7440-62-2	0.00087	0.0020	mg/l	UB	0.0019	0.0020	mg/l	UB	0.0025	0.0020	mg/l	B
	Zinc	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---	ND	0.025	mg/l	---	ND	0.025	mg/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---	ND	0.00020	mg/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	0.0095	0.010	mg/l	J	0.016	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	1.53	1.00	mg/l	---	8.06	1.00	mg/l	---	1.54	1.00	mg/l	---
	Sulfate	14808-79-8	9.23	1.00	mg/l	---	7.39	1.00	mg/l	---	14.7	1.00	mg/l	---
Prep														
	APHA-2320B													
	Bicarbonate Alkalinity as CaCO3	E-14508	221	10.0	mg/l	---	297	10.0	mg/l	---	44.4	10.0	mg/l	---
	Total Alkalinity as CaCO3	E-14506	221	10.0	mg/l	---	297	10.0	mg/l	---	44.4	10.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85948-1

		Sample Name:	RW-4 (333-343)-082415				TB-13-082515			
		Lab Sample ID:	490859487				490859488			
		Sample Date:	8/24/2015				8/25/2015			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC									
OSW-8260C									
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	10	ug/l	---	ND	10	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---
2-Hexanone	591-78-6	ND	10	ug/l	---	ND	10	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	10	ug/l	---	ND	10	ug/l	---
Acetone	67-64-1	ND	25	ug/l	---	ND	25	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethyl ether - TIC	60-29-7								
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methylene Chloride	75-09-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
tert-Butyldimethylsilanol - TIC	18173-64-3								
Tetrachloroethene	127-18-4	ND	6.0	ug/l	---	ND	6.0	ug/l	---
Tetrahydrofuran - TIC	109-99-9								
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	3.0	ug/l	---	ND	3.0	ug/l	---
OSW-8260CSim									
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---
1,4-Dioxane	123-91-1	ND	10	ug/l	---	ND	10	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85948-1

		Sample Name:	RW-4 (333-343)-082415				TB-13-082515			
		Lab Sample ID:	490859487				490859488			
		Sample Date:	8/24/2015				8/25/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC										
OSW-8270D										
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---				
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	UJ				
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---				
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---				
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---				
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---				
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---				
	2,4-Dinitrophenol	51-28-5	ND	25	ug/l	---				
	2,4-Dinitrotoluene	121-14-2	ND	10	ug/l	---				
	2,6-Dinitrotoluene	606-20-2	ND	10	ug/l	---				
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---				
	2-Chlorophenol	95-57-8	ND	10	ug/l	---				
	2-Methylnaphthalene	91-57-6	ND	2.0	ug/l	---				
	2-Methylphenol	95-48-7	ND	10	ug/l	---				
	2-Nitroaniline	88-74-4	ND	25	ug/l	---				
	2-Nitrophenol	88-75-5	ND	10	ug/l	---				
	3 & 4 Methylphenol	65794-96-9	ND	10	ug/l	---				
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---				
	3-Nitroaniline	99-09-2	ND	25	ug/l	---				
	3H-Benz[e]indene, 2-methyl- - TIC	150096-60-9								
	4,6-Dinitro-2-methylphenol	534-52-1	ND	25	ug/l	---				
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---				
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---				
	4-Chloroaniline	106-47-8	ND	10	ug/l	---				
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---				
	4-Nitroaniline	100-01-6	ND	25	ug/l	---				
	4-Nitrophenol	100-02-7	ND	25	ug/l	---				
	Acenaphthene	83-32-9	ND	2.0	ug/l	---				
	Acenaphthylene	208-96-8	ND	2.0	ug/l	---				
	Acetophenone	98-86-2	ND	10	ug/l	---				
	Anthracene	120-12-7	ND	2.0	ug/l	---				
	Atrazine	1912-24-9	ND	10	ug/l	---				
	Benzaldehyde	100-52-7	ND	10	ug/l	---				
	Benzenamine, N,N-dimethyl-4-nitro- - TIC	100-23-2								
	Benzo[g,h,i]perylene	191-24-2	ND	2.0	ug/l	---				
	Benzo[k]fluoranthene	207-08-9	ND	2.0	ug/l	---				
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---				
	Bis(2-chloroethyl)ether	111-44-4	ND	10	ug/l	---				
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	10	ug/l	---				
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---				
	Caprolactam	105-60-2	ND	10	ug/l	---				
	Carbazole	86-74-8	ND	10	ug/l	---				
	Chrysene	218-01-9	ND	2.0	ug/l	---				
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---				
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---				
	Dibenz(a,h)anthracene	53-70-3	ND	2.0	ug/l	---				
	Dibenzofuran	132-64-9	ND	10	ug/l	---				
	Diethyl phthalate	84-66-2	ND	10	ug/l	---				
	Diethyltoluamide - TIC	134-62-3								
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---				
	Diphenyl	92-52-4	ND	10	ug/l	---				
	Fluoranthene	206-44-0	ND	2.0	ug/l	---				
	Fluorene	86-73-7	ND	2.0	ug/l	---				
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---				
	Hexachloroethane	67-72-1	ND	10	ug/l	---				
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	2.0	ug/l	---				
	Isophorone	78-59-1	ND	10	ug/l	---				
	n-Hexadecanoic acid - TIC	57-10-3	5.4	---	ug/l	NJ				
	N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/l	---				
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---				
	Naphthalene	91-20-3	ND	2.0	ug/l	---				
	Nitrobenzene	98-95-3	ND	10	ug/l	---				
	Oleic Acid - TIC	112-80-1	5.5	---	ug/l	NJ				
	p-Benzoquinone - TIC	106-51-4								
	Phenanthrene	85-01-8	ND	2.0	ug/l	---				
	Phenol	108-95-2	ND	10	ug/l	---				
	Pyrene	129-00-0	ND	2.0	ug/l	---				
	Tetradecane - TIC	629-59-4								
	Tridecanoic acid - TIC	638-53-9								
OSW-8270DSim										
	Benzo[a]anthracene	56-55-3	ND	0.046	ug/l	---				
	Benzo[a]pyrene	50-32-8	ND	0.046	ug/l	---				
	Benzo[b]fluoranthene	205-99-2	ND	0.046	ug/l	---				
	Hexachlorobenzene	118-74-1	ND	0.019	ug/l	---				
	Hexachlorobutadiene	87-68-3	ND	0.37	ug/l	---				
	N-Nitrosodimethylamine	62-75-9	ND	0.74	ug/l	---				
	Pentachlorophenol	87-86-5	ND	0.28	ug/l	---				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85948-1

			Sample Name:	RW-4 (333-343)-082415			TB-13-082515			
			Lab Sample ID:	490859487			490859488			
			Sample Date:	8/24/2015			8/25/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other										
	OSW-8082A									
	PCB-1016	12674-11-2	ND	0.50	ug/l	---				
	PCB-1221	11104-28-2	ND	0.50	ug/l	---				
	PCB-1232	11141-16-5	ND	0.50	ug/l	---				
	PCB-1242	53469-21-9	ND	0.50	ug/l	---				
	PCB-1248	12672-29-6	ND	0.50	ug/l	---				
	PCB-1254	11097-69-1	ND	0.50	ug/l	---				
	PCB-1260	11096-82-5	ND	0.50	ug/l	---				
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.50	ug/l	---				
Metals										
	OSW-6020A									
	Aluminum	7429-90-5	0.86	0.020	mg/l	---				
	Aluminum - Dissolved	7429-90-5	1.0	0.020	mg/l	---				
	Antimony	7440-36-0	ND	0.0020	mg/l	---				
	Antimony - Dissolved	7440-36-0	0.00055	0.0020	mg/l	J				
	Arsenic	7440-38-2	0.00090	0.0020	mg/l	J				
	Arsenic - Dissolved	7440-38-2	0.0011	0.0020	mg/l	J				
	Barium	7440-39-3	0.019	0.0020	mg/l	---				
	Barium - Dissolved	7440-39-3	0.022	0.0020	mg/l	---				
	Beryllium	7440-41-7	ND	0.0020	mg/l	---				
	Beryllium - Dissolved	7440-41-7	ND	0.0020	mg/l	---				
	Cadmium	7440-43-9	ND	0.0010	mg/l	---				
	Cadmium - Dissolved	7440-43-9	ND	0.0010	mg/l	---				
	Calcium	7440-70-2	51.4	1.0	mg/l	---				
	Calcium - Dissolved	7440-70-2	59.8	1.0	mg/l	---				
	Chromium	7440-47-3	0.036	0.0020	mg/l	---				
	Chromium - Dissolved	7440-47-3	0.043	0.0020	mg/l	---				
	Cobalt	7440-48-4	ND	0.0020	mg/l	---				
	Cobalt - Dissolved	7440-48-4	ND	0.0020	mg/l	---				
	Copper	7440-50-8	0.0011	0.0020	mg/l	J				
	Copper - Dissolved	7440-50-8	0.0015	0.0020	mg/l	J				
	Iron	7439-89-6	ND	0.025	mg/l	---				
	Iron - Dissolved	7439-89-6	ND	0.025	mg/l	---				
	Lead	7439-92-1	ND	0.0020	mg/l	---				
	Lead - Dissolved	7439-92-1	ND	0.0020	mg/l	---				
	Magnesium	7439-95-4	ND	1.0	mg/l	---				
	Magnesium - Dissolved	7439-95-4	ND	1.0	mg/l	---				
	Manganese	7439-96-5	ND	0.0020	mg/l	---				
	Manganese - Dissolved	7439-96-5	0.00052	0.0020	mg/l	J				
	Nickel	7440-02-0	ND	0.0020	mg/l	---				
	Nickel - Dissolved	7440-02-0	ND	0.0020	mg/l	---				
	Potassium	7440-09-7	4.5	1.0	mg/l	---				
	Potassium - Dissolved	7440-09-7	5.4	1.0	mg/l	---				
	Selenium	7782-49-2	0.00080	0.0020	mg/l	J				
	Selenium - Dissolved	7782-49-2	ND	0.0020	mg/l	---				
	Silver	7440-22-4	ND	0.0020	mg/l	---				
	Silver - Dissolved	7440-22-4	ND	0.0020	mg/l	---				
	Sodium	7440-23-5	15.8	1.0	mg/l	---				
	Sodium - Dissolved	7440-23-5	18.8	1.0	mg/l	---				
	Thallium	7440-28-0	ND	0.0020	mg/l	---				
	Thallium - Dissolved	7440-28-0	ND	0.0020	mg/l	---				
	Vanadium	7440-62-2	0.012	0.0020	mg/l	---				
	Vanadium - Dissolved	7440-62-2	0.013	0.0020	mg/l	---				
	Zinc	7440-66-6	ND	0.025	mg/l	---				
	Zinc - Dissolved	7440-66-6	ND	0.025	mg/l	---				
	OSW-7470A									
	Mercury	7439-97-6	ND	0.00020	mg/l	---				
	Mercury - Dissolved	7439-97-6	ND	0.00020	mg/l	---				
General Chemistry										
	OSW-9012B									
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---				
	OSW-9056A									
	Chloride	16887-00-6	3.76	1.00	mg/l	---				
	Sulfate	14808-79-8	21.2	1.00	mg/l	---				
Prep										
	APHA-2320B									
	Bicarbonate Alkalinity as CaCO3	E-14508	ND	10.0	mg/l	---				
	Total Alkalinity as CaCO3	E-14506	128	10.0	mg/l	---				

APPENDIX 4

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85948-1

		Sample Name:	OB-15B-082415				RW-13 (71-91)-082415				FB-01-082415				RW-5A-082415				OB-7-082415				RW-4A (113-123)-082415				RW-4 (333-343)-082415				TB-13-082515			
		Lab Sample ID:	490859481				490859482				490859483				490859484				490859485				490859486				490859487				490859488			
		Sample Date:	8/24/2015				8/24/2015				8/24/2015				8/24/2015				8/24/2015				8/24/2015				8/24/2015				8/25/2015			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																																		
	OSW-8260C																																	
	Chloromethane	74-87-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
	Ethyl ether - TIC	60-29-7																	0.28	5.0	ug/l	J												
	Methyl acetate	79-20-9	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
	Methylene Chloride	75-09-2									0.53	5.0	ug/l	UB																				
	tert-Butyldimethylsilanol - TIC	18173-64-3																					3.1	---	ug/l	NJ								
	Tetrahydrofuran - TIC	109-99-9					0.98	10	ug/l	J																								
GC/MS SVOC																																		
	OSW-8270D																																	
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	8.6	ug/l	UJ	ND	9.3	ug/l	UJ	ND	8.6	ug/l	UJ	ND	8.6	ug/l	UJ	ND	9.3	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ				
	3H-Benz[e]indene, 2-methyl- - TIC	150096-60-9					4.6	---	ug/l	NJ																								
	Benzenamine, N,N-dimethyl-4-nitro- - TIC	100-23-2					7.5	---	ug/l	NJ																								
	Diethyltoluamide - TIC	134-62-3									11	---	ug/l	NJ	5.4	---	ug/l	NJ																
	n-Hexadecanoic acid - TIC	57-10-3					3.4	---	ug/l	NJ													4.8	---	ug/l	NJ	5.4	---	ug/l	NJ				
	Oleic Acid - TIC	112-80-1	3.1	---	ug/l	NJ	5.7	---	ug/l	NJ					6.6	---	ug/l	NJ	17	---	ug/l	NJ	15	---	ug/l	NJ	5.5	---	ug/l	NJ				
	p-Benzoquinone - TIC	106-51-4	7.0	---	ug/l	NJ																												
	Tetradecane - TIC	629-59-4					3.0	---	ug/l	NJ																								
	Tridecanoic acid - TIC	638-53-9																	3.5	---	ug/l	NJ												
Metals																																		
	OSW-6020A																																	
	Lead	7439-92-1	0.00063	0.0020	mg/l	UB																												
	Manganese - Dissolved	7439-96-5									0.00059	0.0020	mg/l	UB	1.0	0.0020	mg/l	B	2.7	0.0020	mg/l	E												
	Selenium - Dissolved	7782-49-2					0.0030	0.0020	mg/l	B																								
	Thallium	7440-28-0	0.0011	0.0020	mg/l	UB																												
	Vanadium	7440-62-2									0.0013	0.0020	mg/l	UB	0.0022	0.0020	mg/l	B	0.0017	0.0020	mg/l	UB	0.0019	0.0020	mg/l	UB								
	Vanadium - Dissolved	7440-62-2	0.0024	0.0020	mg/l	B	0.0022	0.0020	mg/l	B	0.00095	0.0020	mg/l	UB	0.00087	0.0020	mg/l	UB	0.0019	0.0020	mg/l	UB	0.0025	0.0020	mg/l	B								

APPENDIX 5

EPA Sample Holding Time and Preservation Requirements

Parameter	*Reference Method*	*Matrix*	*Preservation & Storage*	*Holding Times*
Volatile Organics by GCMS	OSW-8260C/SIM	Water	Acidify ph<2 Refrigeration 0-6oC	14 days
Semivolatile Organics by GCMS	OSW-8270D/SIM	Water	Refrigeration 0-6oC	7 days Extraction 40 days Analysis
Polychlorinated Biphenyls by GC/ECD	OSW-8082A	Water	Refrigeration 0-6oC	365 days - Extraction - Analysis
Metals by ICP/ICPMS Spectroscopy	OSW-6010B OSW-6020A	Water	Acidify pH<2 Refrigeration 0-6oC	180 days
Mercury in Aqueous Waste	OSW-7470A	Water	Acidify pH<2 Refrigeration 0-6oC	28 days
Alkalinity	EPA 2320B	Water	Refrigeration 0-6oC	14 days
Chloride and Sulfate	OSW-9056A	Water	Refrigeration 0-6oC	28 days
Total and Amenable Cyanide	OSW-9012B	Water	Test for presence of Sulfide – if unknown collect two samples and treat one with Lead Carbonate. Then adjust sample to pH of greater than or equal to 12with NaOH. Refrigeration at 0-4C –(also may require treatment for aldehydes and chlorine/hypochlorite/sulfite)	14 days if preserved. 24 hours or sooner if unpreserved

ATTACHMENT A

CHAIN OF CUSTODY DOCUMENT(S)

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

Loc: 490
85948
#1
L

TestAmerica

09/21/2015

Client Information	Sampler: Robert Lauferberg	Lab PM: Brown, Shali	Carrier Tr	COC No: 490-41539-14078.2
Client Contact: Tim Roeper	Phone: 845 695 0200	E-Mail: shali.brown@testamericainc.com		Page:
Company: Cornerstone Environmental Group, LLC/ FORD				Job #:
Address: 100 Crystal Run Road Suite 101	Due Date Requested:			
City: Middletown	TAT Requested (days): Standard TAT -Levl IV data package			
State, Zip: NY, 10941				
Phone: 845-695-0252(Tel)	PO #:			
Email: tim.roeper@cornerstoneeg.com	WO #:			
Project Name: FORD Ringwood Mines SA GW/SW E203361	Project #: 49008864			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C TCL + Total Alkanes and 15 TICs	8260B_SIM Custom Short List	8270D TCL plus 15 TICs	8270D_SIM Custom List	80822A Standard PCB's (7)	6020A, 7470A - TAL Metals (Total)	6020A, 7470A - TAL Metals (Dissolved, lab filterf)	9012B - Cyanide, Total	2320B Total and Bicarbonate Alkalinity	9056A_ORGFM_28D Chloride and Sulfate				Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
OB-15B-082415	8/24/15	1115	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
RW-13(71-91)-082415	8/24/15	13:35	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
FB-01-082415	8/24/15	07:30	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
RW-5A-082415	8/24/15	10:25	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
OB-7-082415	8/24/15	12:50	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
RW-4A(113-123)-082415	8/24/15	09:35	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
RW-4(333-343)-082415	8/24/15	11:25	G	Water	N	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
TB-13-082515	8/25/15	—	—	Water	N	N	✓	✓													
				Water																	
				Water																	
				Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	8/25/15 0800	Cornerstone	[signature]	8/25/15 0800	TA
Relinquished by: James Thuesen	Date/Time: 8-25-15 1140	Company TA	Received by: [signature] 1510 5/1.2	Date/Time: 8/26/15 915	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

November 20, 2015

Tim Roeper
Cornerstone EG
100 Crystal Run Road
Suite 101
Middletown, NY 10941

CADENA project ID: E203361
Project: Ford Ringwood Mines Project
Project number:
Laboratory: TestAmerica - Nashville
Laboratory submittal: 85948-2
Sample date: 2015-08-24
Report received by CADENA: 2015-11-20
Initial Data Verification completed by CADENA: 2015-11-20

There were no significant QC anomalies or exceptions to report.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

2 Water sample(s) were analyzed for PCB parameter(s).

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Nashville
Laboratory Submittal: 85948-2

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	OSW-8082A
490859484	RW-5A-082415	8/24/2015	10:25:00	X
490859486	RW-4A (113-123)-082415	8/24/2015	9:35:00	X

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Nashville
Laboratory Submittal: 85948-2

		Sample Name:	RW-5A-082415				RW-4A (113-123)-082415			
		Lab Sample ID:	490859484				490859486			
		Sample Date:	8/24/2015				8/24/2015			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC Other										
OSW-8082A										
PCB-1016	12674-11-2	ND	0.45	ug/l	---	ND	0.50	ug/l	---
PCB-1221	11104-28-2	ND	0.45	ug/l	---	ND	0.50	ug/l	---
PCB-1232	11141-16-5	ND	0.45	ug/l	---	ND	0.50	ug/l	---
PCB-1242	53469-21-9	ND	0.45	ug/l	---	ND	0.50	ug/l	---
PCB-1248	12672-29-6	ND	0.45	ug/l	---	ND	0.50	ug/l	---
PCB-1254	11097-69-1	ND	0.45	ug/l	---	ND	0.50	ug/l	---
PCB-1260	11096-82-5	ND	0.45	ug/l	---	ND	0.50	ug/l	---
Polychlorinated biphenyls, Total	1336-36-3	ND	0.45	ug/l	---	ND	0.50	ug/l	---

ATTACHMENT E

USEPA SPLIT SAMPLE DATA REPORT (ON COMPACT DISC)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory
2890 Woodbridge Avenue
Edison , New Jersey 08837
732-906-6886 Phone
732-906-6165 Fax

September 03, 2015

Amelia Jackson
Hazardous Waste Support Branch
DESA/HWSB
Edison, NJ 08837

RE: Ringwood Mines - 1508008

Enclosed are the results of analyses for samples received by the laboratory on 08/06/2015. The signature below reflects the laboratory's approval of the reported results. If you have any questions concerning this report, please refer to Project Number 1508008 and contact John Birri by phone at 732-906-6886, or via Email at birri.john@epa.gov.

Sincerely,

John R. Bourbon
Chief, DESA/LB

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Final Report

Project: Ringwood Mines - 1508008

Project Number: 1508008

Project Narrative:

The National Environmental Laboratory Accreditation Conference Institute (TNI) is a voluntary environmental laboratory accreditation association of State and Federal agencies. TNI established and promoted a National Environmental Laboratory Accreditation Program (NELAP) that provides a uniform set of standards for the generation of environmental data that are of known and defensible quality. The EPA Region 2 Laboratory is NELAP accredited. The Laboratory tests that are accredited have met all the requirements established under the TNI Standards.

Condition Comments

PCB Aroclors - The Surrogate recoveries in either columns and in some instances both columns were very low on samples 1508008-02, 1508008-03, 1508008-04, 1508008-06 and 1508008-07, thus the Aroclors results on these samples were qualified with "L".

Comment(s):

The "Sample Analysis Date and Time" is included in the results section for any analyte with a prescribed holding time of 72 hours or less.

Data Qualifier(s):

U- The analyte was not detected at or above the Reporting Limit.
J- The identification of the analyte is acceptable; the reported value is an estimate.
K- The identification of the analyte is acceptable; the reported value may be biased high.
L- The identification of the analyte is acceptable; the reported value may be biased low.
NJ- There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification. The reported value is an estimate.

Reporting Limit(s):The Laboratory was able to achieve the appropriate limits for each analyte requested, except for the following:

Semi-Volatile Organic Compounds: The CRQL for 2,4-Dinitrophenol and 4,6-Dinitro-2-Methylphenol in water is 5.0 ug/L. The Laboratory Reporting Limits is raised due to problems associated with the initial calibration curve for all samples.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Final Report

Project: Ringwood Mines - 1508008

Project Number: 1508008

SUMMARY REPORT FOR SAMPLES

Field ID	Laboratory ID	Matrix	Date Sampled	Date Received
OB-19	1508008-01	Aqueous	08/05/2015 10:40	08/06/2015 14:00
OB-20A	1508008-02	Aqueous	08/05/2015 10:35	08/06/2015 14:00
OB-06	1508008-03	Aqueous	08/06/2015 10:05	08/06/2015 14:00
RW-06	1508008-04	Aqueous	08/05/2015 10:30	08/06/2015 14:00
RW-6A	1508008-05	Aqueous	08/04/2015 14:15	08/06/2015 14:00
SC-01	1508008-06	Aqueous	08/04/2015 10:40	08/06/2015 14:00
SC-11	1508008-07	Aqueous	08/04/2015 10:40	08/06/2015 14:00
TB-01	1508008-08	Aqueous	08/04/2015 09:45	08/06/2015 14:00

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Final Report

Project: Ringwood Mines - 1508008

Project Number: 1508008

SUMMARY REPORT FOR METHODS

Analysis	Method	Certification	Matrix
Mercury	EPA 245.1 SOP C-110 Rev2.4	NELAP	Aqueous
E-Metals ICP TAL	EPA 200.7 SOP C-109 Rev3.3	NELAP	Aqueous
E-Metals ICPMS TAL	EPA 200.8 SOP C-112 Rev 3.3	NELAP	Aqueous
E-PCB Aroclors	EPA 608 SOP C-91 Rev4.0		Aqueous
E-SVOA TCL	EPA 625 SOP C-90 Rev3.4		Aqueous
VOA 524.2 Trace-SF	EPA 524.2 SOP DW-1 Rev2.4	NELAP	Aqueous

Final Report

Project: Ringwood Mines - 1508008

Project Number: 1508008

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-19					Sample ID: 1508008-01
VOA-TRACE GCMS					
Dichlorodifluoromethane	---	U	0.50	ug/L	
Chloromethane	---	U	0.50	ug/L	
Vinyl Chloride	---	U	0.50	ug/L	
Bromomethane	---	U L	0.50	ug/L	
Chloroethane	---	U	0.50	ug/L	
Trichlorofluoromethane	---	U	0.50	ug/L	
1,1-Dichloroethene	---	U	0.50	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane	---	U	0.50	ug/L	
Carbon Disulfide	---	U	0.50	ug/L	
Acetone	---	U	5.0	ug/L	
Methyl Acetate	---	U	0.50	ug/L	
Methylene Chloride	---	U	0.50	ug/L	
trans-1,2-Dichloroethene	---	U	0.50	ug/L	
Methyl tert-Butyl Ether	---	U	0.50	ug/L	
1,1-Dichloroethane	---	U	0.50	ug/L	
cis-1,2-Dichloroethene	---	U	0.50	ug/L	
2-Butanone	---	U	5.0	ug/L	
Bromochloromethane	---	U	0.50	ug/L	
Chloroform	---	U	0.50	ug/L	
1,1,1-Trichloroethane	---	U	0.50	ug/L	
Cyclohexane	---	U	0.50	ug/L	
Carbon Tetrachloride	---	U	0.50	ug/L	
Benzene	---	U	0.50	ug/L	
1,2-Dichloroethane	---	U	0.50	ug/L	
Trichloroethene	---	U	0.50	ug/L	
1,2-Dichloropropane	---	U	0.50	ug/L	
Bromodichloromethane	---	U	0.50	ug/L	
cis-1,3-Dichloropropene	---	U	0.50	ug/L	

Final Report

Project: Ringwood Mines - 1508008

Project Number: 1508008

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-19					Sample ID: 1508008-01
VOA-TRACE GCMS					
4-Methyl-2-Pentanone	---	U	5.0	ug/L	
Toluene	---	U	0.50	ug/L	
trans-1,3-Dichloropropene	---	U	0.50	ug/L	
1,1,2-Trichloroethane	---	U	0.50	ug/L	
Tetrachloroethene	---	U	0.50	ug/L	
Methylcyclohexane	---	U	0.50	ug/L	
Dibromochloromethane	---	U	0.50	ug/L	
1,2-Dibromoethane	---	U	0.50	ug/L	
2-Hexanone	---	U	5.0	ug/L	
Chlorobenzene	---	U	0.50	ug/L	
Ethylbenzene	---	U	0.50	ug/L	
m/p-Xylene	---	U	0.50	ug/L	
o-Xylene	---	U	0.50	ug/L	
Styrene	---	U	0.50	ug/L	
Bromoform	---	U	0.50	ug/L	
Isopropylbenzene	---	U	0.50	ug/L	
1,1,2,2-Tetrachloroethane	---	U	0.50	ug/L	
1,3-Dichlorobenzene	---	U	0.50	ug/L	
1,4-Dichlorobenzene	---	U	0.50	ug/L	
1,2-Dichlorobenzene	---	U	0.50	ug/L	
1,2-Dibromo-3-Chloropropane	---	U	0.50	ug/L	
1,2,4-Trichlorobenzene	---	U	0.50	ug/L	
1,2,3-Trichlorobenzene	---	U	0.50	ug/L	
NVOA GCMS					
1,4-Dioxane	---	U	1.9	ug/L	
N-Nitrosodimethylamine	---	U	4.8	ug/L	
Benzaldehyde	---	U	4.8	ug/L	
Phenol	---	U	4.8	ug/L	

Final Report

Project: Ringwood Mines - 1508008

Project Number: 1508008

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-19				Sample ID: 1508008-01	
NVOA GCMS					
Bis(2-Chloroethyl)Ether	---	U	4.8	ug/L	
2-Chlorophenol	---	U	4.8	ug/L	
2-Methylphenol	---	U	4.8	ug/L	
Bis(2-Chloroisopropyl)Ether	---	U	4.8	ug/L	
Acetophenone	---	U	4.8	ug/L	
4-Methylphenol	---	U	4.8	ug/L	
N-Nitroso-Di-N-Propylamine	---	U	4.8	ug/L	
Hexachloroethane	---	U L	4.8	ug/L	
Nitrobenzene	---	U	4.8	ug/L	
Isophorone	---	U	4.8	ug/L	
2-Nitrophenol	---	U	4.8	ug/L	
2,4-Dimethylphenol	---	U	4.8	ug/L	
Bis(-2-Chloroethoxy)Methane	---	U	4.8	ug/L	
2,4-Dichlorophenol	---	U	4.8	ug/L	
1,2,4-Trichlorobenzene	---	U	4.8	ug/L	
Naphthalene	---	U	4.8	ug/L	
4-Chloroaniline	---	U L	4.8	ug/L	
Hexachlorobutadiene	---	U	4.8	ug/L	
Caprolactam	---	U	4.8	ug/L	
4-Chloro-3-Methylphenol	---	U	4.8	ug/L	
2-Methylnaphthalene	---	U	4.8	ug/L	
1,2,4,5-Tetrachlorobenzene	---	U	4.8	ug/L	
Hexachlorocyclopentadiene	---	U	4.8	ug/L	
2,4,6-Trichlorophenol	---	U	4.8	ug/L	
2,4,5-Trichlorophenol	---	U	4.8	ug/L	
Biphenyl	---	U	4.8	ug/L	
2-Chloronaphthalene	---	U	4.8	ug/L	
2-Nitroaniline	---	U	4.8	ug/L	

Final Report

Project: Ringwood Mines - 1508008

Project Number: 1508008

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-19					Sample ID: 1508008-01
NVOA GCMS					
Dimethyl Phthalate	---	U L	4.8	ug/L	
Acenaphthylene	---	U	4.8	ug/L	
2,6-Dinitrotoluene	---	U	4.8	ug/L	
3-Nitroaniline	---	U	4.8	ug/L	
Acenaphthene	---	U	4.8	ug/L	
2,4-Dinitrophenol	---	U	24	ug/L	
4-Nitrophenol	---	U	4.8	ug/L	
Dibenzofuran	---	U	4.8	ug/L	
2,4-Dinitrotoluene	---	U	4.8	ug/L	
2,3,4,6-Tetrachlorophenol	---	U	4.8	ug/L	
Fluorene	---	U	4.8	ug/L	
Diethylphthalate	---	U	4.8	ug/L	
4-Chlorophenyl-Phenylether	---	U	4.8	ug/L	
4-Nitroaniline	---	U L	4.8	ug/L	
4,6-Dinitro-2-Methylphenol	---	U	9.5	ug/L	
N-Nitrosodiphenylamine	---	U L	4.8	ug/L	
4-Bromophenyl-Phenylether	---	U	4.8	ug/L	
Hexachlorobenzene	---	U	4.8	ug/L	
Atrazine	---	U	4.8	ug/L	
Pentachlorophenol	---	U	4.8	ug/L	
Phenanthrene	---	U	4.8	ug/L	
Anthracene	---	U	4.8	ug/L	
Carbazole	---	U L	4.8	ug/L	
Di-N-Butyl Phthalate	---	U	4.8	ug/L	
Fluoranthene	---	U	4.8	ug/L	
Pyrene	---	U	4.8	ug/L	
Butylbenzylphthalate	---	U	4.8	ug/L	
3,3'- Dichlorobenzidine	---	U	4.8	ug/L	

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Project: Ringwood Mines - 1508008

Project Number: 1508008

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-19				Sample ID: 1508008-01	
NVOA GCMS					
Benzo(A)Anthracene	---	U	4.8	ug/L	
Chrysene	---	U	4.8	ug/L	
Bis(2-Ethylhexyl)Phthalate	---	U	4.8	ug/L	
Di-N-Octyl Phthalate	---	U	4.8	ug/L	
Benzo(B)Fluoranthene	---	U	4.8	ug/L	
Benzo(K)Fluoranthene	---	U	4.8	ug/L	
Benzo(A)Pyrene	---	U	4.8	ug/L	
Indeno(1,2,3-Cd)Pyrene	---	U	4.8	ug/L	
Dibenzo(A,H)Anthracene	---	U	4.8	ug/L	
Benzo(G,H,I)Perylene	---	U	4.8	ug/L	
PCB Aroclors GC					
Aroclor 1016	---	U	0.03	ug/L	
Aroclor 1221	---	U	0.06	ug/L	
Aroclor 1232	---	U	0.03	ug/L	
Aroclor 1242	---	U L	0.03	ug/L	
Aroclor 1248	---	U	0.03	ug/L	
Aroclor 1254	---	U	0.03	ug/L	
Aroclor 1260	---	U	0.03	ug/L	
Aroclor 1262	---	U	0.03	ug/L	
Aroclor 1268	---	U	0.03	ug/L	
Metals ICP					
Calcium	13000		500	ug/L	
Iron	18000		50	ug/L	
Magnesium	2500		500	ug/L	
Potassium	870		500	ug/L	
Sodium	3000		1000	ug/L	

Final Report

Project: Ringwood Mines - 1508008

Project Number: 1508008

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-19				Sample ID: 1508008-01	
Metals ICPMS					
Aluminum	27		20	ug/L	
Antimony	---	U	1.0	ug/L	
Arsenic	2.0		1.0	ug/L	
Barium	75		1.0	ug/L	
Beryllium	---	U	1.0	ug/L	
Cadmium	---	U	1.0	ug/L	
Chromium	---	U	2.0	ug/L	
Cobalt	---	U	1.0	ug/L	
Copper	---	U	1.0	ug/L	
Lead	---	U	1.0	ug/L	
Manganese	410		1.0	ug/L	
Nickel	---	U	1.0	ug/L	
Selenium	---	U	1.0	ug/L	
Silver	---	U	1.0	ug/L	
Thallium	---	U	1.0	ug/L	
Vanadium	2.7		1.0	ug/L	
Zinc	51		2.0	ug/L	
Mercury CVAA					
Mercury	---	U	0.20	ug/L	
Field ID: OB-20A				Sample ID: 1508008-02	
VOA-TRACE GCMS					
Dichlorodifluoromethane	---	U	0.50	ug/L	
Chloromethane	---	U	0.50	ug/L	
Vinyl Chloride	---	U	0.50	ug/L	
Bromomethane	---	U	0.50	ug/L	
Chloroethane	---	U	0.50	ug/L	
Trichlorofluoromethane	---	U	0.50	ug/L	

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-20A				Sample ID: 1508008-02	
VOA-TRACE GCMS					
1,1-Dichloroethene	---	U	0.50	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane	---	U	0.50	ug/L	
Carbon Disulfide	---	U	0.50	ug/L	
Acetone	---	U	5.0	ug/L	
Methyl Acetate	---	U	0.50	ug/L	
Methylene Chloride	---	U	0.50	ug/L	
trans-1,2-Dichloroethene	---	U	0.50	ug/L	
Methyl tert-Butyl Ether	---	U	0.50	ug/L	
1,1-Dichloroethane	---	U	0.50	ug/L	
cis-1,2-Dichloroethene	---	U	0.50	ug/L	
2-Butanone	---	U	5.0	ug/L	
Bromochloromethane	---	U	0.50	ug/L	
Chloroform	---	U	0.50	ug/L	
1,1,1-Trichloroethane	---	U	0.50	ug/L	
Cyclohexane	---	U	0.50	ug/L	
Carbon Tetrachloride	---	U	0.50	ug/L	
Benzene	---	U	0.50	ug/L	
1,2-Dichloroethane	---	U	0.50	ug/L	
Trichloroethene	---	U	0.50	ug/L	
1,2-Dichloropropane	---	U	0.50	ug/L	
Bromodichloromethane	---	U	0.50	ug/L	
cis-1,3-Dichloropropene	---	U	0.50	ug/L	
4-Methyl-2-Pentanone	---	U	5.0	ug/L	
Toluene	---	U	0.50	ug/L	
trans-1,3-Dichloropropene	---	U	0.50	ug/L	
1,1,2-Trichloroethane	---	U	0.50	ug/L	
Tetrachloroethene	---	U	0.50	ug/L	
Methylcyclohexane	---	U	0.50	ug/L	

Final Report

Project: Ringwood Mines - 1508008

Project Number: 1508008

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-20A				Sample ID: 1508008-02	
VOA-TRACE GCMS					
Dibromochloromethane	---	U	0.50	ug/L	
1,2-Dibromoethane	---	U	0.50	ug/L	
2-Hexanone	---	U	5.0	ug/L	
Chlorobenzene	---	U	0.50	ug/L	
Ethylbenzene	---	U	0.50	ug/L	
m/p-Xylene	---	U	0.50	ug/L	
o-Xylene	---	U	0.50	ug/L	
Styrene	---	U	0.50	ug/L	
Bromoform	---	U	0.50	ug/L	
Isopropylbenzene	---	U	0.50	ug/L	
1,1,2,2-Tetrachloroethane	---	U	0.50	ug/L	
1,3-Dichlorobenzene	---	U	0.50	ug/L	
1,4-Dichlorobenzene	---	U	0.50	ug/L	
1,2-Dichlorobenzene	---	U	0.50	ug/L	
1,2-Dibromo-3-Chloropropane	---	U	0.50	ug/L	
1,2,4-Trichlorobenzene	---	U	0.50	ug/L	
1,2,3-Trichlorobenzene	---	U	0.50	ug/L	
NVOA GCMS					
1,4-Dioxane	---	U	1.9	ug/L	
N-Nitrosodimethylamine	---	U	4.7	ug/L	
Benzaldehyde	---	U	4.7	ug/L	
Phenol	---	U	4.7	ug/L	
Bis(2-Chloroethyl)Ether	---	U	4.7	ug/L	
2-Chlorophenol	---	U	4.7	ug/L	
2-Methylphenol	---	U	4.7	ug/L	
Bis(2-Chloroisopropyl)Ether	---	U	4.7	ug/L	
Acetophenone	---	U	4.7	ug/L	
4-Methylphenol	---	U	4.7	ug/L	

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-20A				Sample ID: 1508008-02	
NVOA GCMS					
N-Nitroso-Di-N-Propylamine	---	U	4.7	ug/L	
Hexachloroethane	---	U	4.7	ug/L	
Nitrobenzene	---	U	4.7	ug/L	
Isophorone	---	U	4.7	ug/L	
2-Nitrophenol	---	U	4.7	ug/L	
2,4-Dimethylphenol	---	U	4.7	ug/L	
Bis(-2-Chloroethoxy)Methane	---	U	4.7	ug/L	
2,4-Dichlorophenol	---	U	4.7	ug/L	
1,2,4-Trichlorobenzene	---	U	4.7	ug/L	
Naphthalene	---	U	4.7	ug/L	
4-Chloroaniline	---	U	4.7	ug/L	
Hexachlorobutadiene	---	U	4.7	ug/L	
Caprolactam	---	U	4.7	ug/L	
4-Chloro-3-Methylphenol	---	U	4.7	ug/L	
2-Methylnaphthalene	---	U	4.7	ug/L	
1,2,4,5-Tetrachlorobenzene	---	U	4.7	ug/L	
Hexachlorocyclopentadiene	---	U	4.7	ug/L	
2,4,6-Trichlorophenol	---	U	4.7	ug/L	
2,4,5-Trichlorophenol	---	U	4.7	ug/L	
Biphenyl	---	U	4.7	ug/L	
2-Chloronaphthalene	---	U	4.7	ug/L	
2-Nitroaniline	---	U	4.7	ug/L	
Dimethyl Phthalate	---	U	4.7	ug/L	
Acenaphthylene	---	U	4.7	ug/L	
2,6-Dinitrotoluene	---	U	4.7	ug/L	
3-Nitroaniline	---	U	4.7	ug/L	
Acenaphthene	---	U	4.7	ug/L	
2,4-Dinitrophenol	---	U	24	ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-20A				Sample ID: 1508008-02	
NVOA GCMS					
4-Nitrophenol	---	U	4.7	ug/L	
Dibenzofuran	---	U	4.7	ug/L	
2,4-Dinitrotoluene	---	U	4.7	ug/L	
2,3,4,6-Tetrachlorophenol	---	U	4.7	ug/L	
Fluorene	---	U	4.7	ug/L	
Diethylphthalate	---	U	4.7	ug/L	
4-Chlorophenyl-Phenylether	---	U	4.7	ug/L	
4-Nitroaniline	---	U L	4.7	ug/L	
4,6-Dinitro-2-Methylphenol	---	U	9.4	ug/L	
N-Nitrosodiphenylamine	---	U L	4.7	ug/L	
4-Bromophenyl-Phenylether	---	U	4.7	ug/L	
Hexachlorobenzene	---	U	4.7	ug/L	
Atrazine	---	U	4.7	ug/L	
Pentachlorophenol	---	U	4.7	ug/L	
Phenanthrene	---	U	4.7	ug/L	
Anthracene	---	U	4.7	ug/L	
Carbazole	---	U L	4.7	ug/L	
Di-N-Butyl Phthalate	---	U	4.7	ug/L	
Fluoranthene	---	U	4.7	ug/L	
Pyrene	---	U	4.7	ug/L	
Butylbenzylphthalate	---	U	4.7	ug/L	
3,3'- Dichlorobenzidine	---	U	4.7	ug/L	
Benzo(A)Anthracene	---	U	4.7	ug/L	
Chrysene	---	U	4.7	ug/L	
Bis(2-Ethylhexyl)Phthalate	---	U	4.7	ug/L	
Di-N-Octyl Phthalate	---	U	4.7	ug/L	
Benzo(B)Fluoranthene	---	U	4.7	ug/L	
Benzo(K)Fluoranthene	---	U	4.7	ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-20A				Sample ID: 1508008-02	
NVOA GCMS					
Benzo(A)Pyrene	---	U	4.7	ug/L	
Indeno(1,2,3-Cd)Pyrene	---	U	4.7	ug/L	
Dibenzo(A,H)Anthracene	---	U	4.7	ug/L	
Benzo(G,H,I)Perylene	---	U	4.7	ug/L	
Benzenesulfonamide, N-cyclo...	9.0	NJ		ug/L	
PCB Aroclors GC					
Aroclor 1016	---	U L	0.03	ug/L	
Aroclor 1221	---	U L	0.06	ug/L	
Aroclor 1232	---	U L	0.03	ug/L	
Aroclor 1242	---	U L	0.03	ug/L	
Aroclor 1248	---	U L	0.03	ug/L	
Aroclor 1254	---	U L	0.03	ug/L	
Aroclor 1260	---	U L	0.03	ug/L	
Aroclor 1262	---	U L	0.03	ug/L	
Aroclor 1268	---	U L	0.03	ug/L	
Metals ICP					
Calcium	28000		500	ug/L	
Iron	32000		50	ug/L	
Magnesium	2900		500	ug/L	
Potassium	2200		500	ug/L	
Sodium	3000		1000	ug/L	
Metals ICPMS					
Aluminum	130		20	ug/L	
Antimony	---	U	1.0	ug/L	
Arsenic	6.6		1.0	ug/L	
Barium	120		1.0	ug/L	
Beryllium	---	U	1.0	ug/L	

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-20A				Sample ID: 1508008-02	
Metals ICPMS					
Cadmium	---	U	1.0	ug/L	
Chromium	---	U	2.0	ug/L	
Cobalt	1.0		1.0	ug/L	
Copper	---	U	1.0	ug/L	
Lead	---	U	1.0	ug/L	
Manganese	740		1.0	ug/L	
Nickel	---	U	1.0	ug/L	
Selenium	---	U	1.0	ug/L	
Silver	---	U	1.0	ug/L	
Thallium	---	U	1.0	ug/L	
Vanadium	1.5		1.0	ug/L	
Zinc	10		2.0	ug/L	
Mercury CVAA					
Mercury	---	U	0.20	ug/L	
Field ID: OB-06				Sample ID: 1508008-03	
VOA-TRACE GCMS					
Dichlorodifluoromethane	---	U	0.50	ug/L	
Chloromethane	---	U	0.50	ug/L	
Vinyl Chloride	---	U	0.50	ug/L	
Bromomethane	---	U	0.50	ug/L	
Chloroethane	---	U	0.50	ug/L	
Trichlorofluoromethane	---	U	0.50	ug/L	
1,1-Dichloroethene	---	U	0.50	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane	---	U	0.50	ug/L	
Carbon Disulfide	---	U	0.50	ug/L	
Acetone	---	U	5.0	ug/L	
Methyl Acetate	---	U	0.50	ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-06				Sample ID: 1508008-03	
VOA-TRACE GCMS					
Methylene Chloride	---	U	0.50	ug/L	
trans-1,2-Dichloroethene	---	U	0.50	ug/L	
Methyl tert-Butyl Ether	---	U	0.50	ug/L	
1,1-Dichloroethane	---	U	0.50	ug/L	
cis-1,2-Dichloroethene	---	U	0.50	ug/L	
2-Butanone	---	U	5.0	ug/L	
Bromochloromethane	---	U	0.50	ug/L	
Chloroform	---	U	0.50	ug/L	
1,1,1-Trichloroethane	---	U	0.50	ug/L	
Cyclohexane	---	U	0.50	ug/L	
Carbon Tetrachloride	---	U	0.50	ug/L	
Benzene	---	U	0.50	ug/L	
1,2-Dichloroethane	---	U	0.50	ug/L	
Trichloroethene	---	U	0.50	ug/L	
1,2-Dichloropropane	---	U	0.50	ug/L	
Bromodichloromethane	---	U	0.50	ug/L	
cis-1,3-Dichloropropene	---	U	0.50	ug/L	
4-Methyl-2-Pentanone	---	U	5.0	ug/L	
Toluene	---	U	0.50	ug/L	
trans-1,3-Dichloropropene	---	U	0.50	ug/L	
1,1,2-Trichloroethane	---	U	0.50	ug/L	
Tetrachloroethene	---	U	0.50	ug/L	
Methylcyclohexane	---	U	0.50	ug/L	
Dibromochloromethane	---	U	0.50	ug/L	
1,2-Dibromoethane	---	U	0.50	ug/L	
2-Hexanone	---	U	5.0	ug/L	
Chlorobenzene	---	U	0.50	ug/L	
Ethylbenzene	---	U	0.50	ug/L	

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-06					Sample ID: 1508008-03
VOA-TRACE GCMS					
m/p-Xylene	---	U	0.50	ug/L	
o-Xylene	---	U	0.50	ug/L	
Styrene	---	U	0.50	ug/L	
Bromoform	---	U	0.50	ug/L	
Isopropylbenzene	---	U	0.50	ug/L	
1,1,2,2-Tetrachloroethane	---	U	0.50	ug/L	
1,3-Dichlorobenzene	---	U	0.50	ug/L	
1,4-Dichlorobenzene	---	U	0.50	ug/L	
1,2-Dichlorobenzene	---	U	0.50	ug/L	
1,2-Dibromo-3-Chloropropane	---	U	0.50	ug/L	
1,2,4-Trichlorobenzene	---	U	0.50	ug/L	
1,2,3-Trichlorobenzene	---	U	0.50	ug/L	
NVOA GCMS					
1,4-Dioxane	---	U	1.9	ug/L	
N-Nitrosodimethylamine	---	U	4.7	ug/L	
Benzaldehyde	---	U	4.7	ug/L	
Phenol	---	U	4.7	ug/L	
Bis(2-Chloroethyl)Ether	---	U	4.7	ug/L	
2-Chlorophenol	---	U	4.7	ug/L	
2-Methylphenol	---	U	4.7	ug/L	
Bis(2-Chloroisopropyl)Ether	---	U	4.7	ug/L	
Acetophenone	---	U	4.7	ug/L	
4-Methylphenol	---	U	4.7	ug/L	
N-Nitroso-Di-N-Propylamine	---	U	4.7	ug/L	
Hexachloroethane	---	U	4.7	ug/L	
Nitrobenzene	---	U	4.7	ug/L	
Isophorone	---	U	4.7	ug/L	
2-Nitrophenol	---	U	4.7	ug/L	

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-06					Sample ID: 1508008-03
NVOA GCMS					
2,4-Dimethylphenol	---	U	4.7	ug/L	
Bis(-2-Chloroethoxy)Methane	---	U	4.7	ug/L	
2,4-Dichlorophenol	---	U	4.7	ug/L	
1,2,4-Trichlorobenzene	---	U	4.7	ug/L	
Naphthalene	---	U	4.7	ug/L	
4-Chloroaniline	---	U	4.7	ug/L	
Hexachlorobutadiene	---	U	4.7	ug/L	
Caprolactam	---	U	4.7	ug/L	
4-Chloro-3-Methylphenol	---	U	4.7	ug/L	
2-Methylnaphthalene	---	U	4.7	ug/L	
1,2,4,5-Tetrachlorobenzene	---	U	4.7	ug/L	
Hexachlorocyclopentadiene	---	U	4.7	ug/L	
2,4,6-Trichlorophenol	---	U	4.7	ug/L	
2,4,5-Trichlorophenol	---	U	4.7	ug/L	
Biphenyl	---	U	4.7	ug/L	
2-Chloronaphthalene	---	U	4.7	ug/L	
2-Nitroaniline	---	U	4.7	ug/L	
Dimethyl Phthalate	---	U	4.7	ug/L	
Acenaphthylene	---	U	4.7	ug/L	
2,6-Dinitrotoluene	---	U	4.7	ug/L	
3-Nitroaniline	---	U	4.7	ug/L	
Acenaphthene	---	U	4.7	ug/L	
2,4-Dinitrophenol	---	U	24	ug/L	
4-Nitrophenol	---	U	4.7	ug/L	
Dibenzofuran	---	U	4.7	ug/L	
2,4-Dinitrotoluene	---	U	4.7	ug/L	
2,3,4,6-Tetrachlorophenol	---	U	4.7	ug/L	
Fluorene	---	U	4.7	ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-06					Sample ID: 1508008-03
NVOA GCMS					
Diethylphthalate	---	U	4.7	ug/L	
4-Chlorophenyl-Phenylether	---	U	4.7	ug/L	
4-Nitroaniline	---	U L	4.7	ug/L	
4,6-Dinitro-2-Methylphenol	---	U	9.4	ug/L	
N-Nitrosodiphenylamine	---	U L	4.7	ug/L	
4-Bromophenyl-Phenylether	---	U	4.7	ug/L	
Hexachlorobenzene	---	U	4.7	ug/L	
Atrazine	---	U	4.7	ug/L	
Pentachlorophenol	---	U	4.7	ug/L	
Phenanthrene	---	U	4.7	ug/L	
Anthracene	---	U	4.7	ug/L	
Carbazole	---	U L	4.7	ug/L	
Di-N-Butyl Phthalate	---	U	4.7	ug/L	
Fluoranthene	---	U	4.7	ug/L	
Pyrene	---	U	4.7	ug/L	
Butylbenzylphthalate	---	U	4.7	ug/L	
3,3'- Dichlorobenzidine	---	U	4.7	ug/L	
Benzo(A)Anthracene	---	U	4.7	ug/L	
Chrysene	---	U	4.7	ug/L	
Bis(2-Ethylhexyl)Phthalate	---	U	4.7	ug/L	
Di-N-Octyl Phthalate	---	U	4.7	ug/L	
Benzo(B)Fluoranthene	---	U	4.7	ug/L	
Benzo(K)Fluoranthene	---	U	4.7	ug/L	
Benzo(A)Pyrene	---	U	4.7	ug/L	
Indeno(1,2,3-Cd)Pyrene	---	U	4.7	ug/L	
Dibenzo(A,H)Anthracene	---	U	4.7	ug/L	
Benzo(G,H,I)Perylene	---	U	4.7	ug/L	

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-06				Sample ID: 1508008-03	
PCB Aroclors GC					
Aroclor 1016	---	U L	0.03	ug/L	
Aroclor 1221	---	U L	0.06	ug/L	
Aroclor 1232	---	U L	0.03	ug/L	
Aroclor 1242	---	U L	0.03	ug/L	
Aroclor 1248	---	U L	0.03	ug/L	
Aroclor 1254	---	U L	0.03	ug/L	
Aroclor 1260	---	U L	0.03	ug/L	
Aroclor 1262	---	U L	0.03	ug/L	
Aroclor 1268	---	U L	0.03	ug/L	
Metals ICP					
Calcium	24000		500	ug/L	
Iron	4300		50	ug/L	
Magnesium	5900		500	ug/L	
Potassium	1900		500	ug/L	
Sodium	16000		1000	ug/L	
Metals ICPMS					
Aluminum	---	U	20	ug/L	
Antimony	---	U	1.0	ug/L	
Arsenic	---	U	1.0	ug/L	
Barium	18		1.0	ug/L	
Beryllium	---	U	1.0	ug/L	
Cadmium	---	U	1.0	ug/L	
Chromium	---	U	2.0	ug/L	
Cobalt	7.6		1.0	ug/L	
Copper	3.8		1.0	ug/L	
Lead	---	U	1.0	ug/L	
Manganese	710		1.0	ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: OB-06				Sample ID: 1508008-03	
Metals ICPMS					
Nickel	1.8		1.0	ug/L	
Selenium	---	U	1.0	ug/L	
Silver	---	U	1.0	ug/L	
Thallium	---	U	1.0	ug/L	
Vanadium	---	U	1.0	ug/L	
Zinc	3.5		2.0	ug/L	
Mercury CVAA					
Mercury	---	U	0.20	ug/L	
Field ID: RW-06				Sample ID: 1508008-04	
VOA-TRACE GCMS					
Dichlorodifluoromethane	---	U	0.50	ug/L	
Chloromethane	---	U	0.50	ug/L	
Vinyl Chloride	---	U	0.50	ug/L	
Bromomethane	---	U	0.50	ug/L	
Chloroethane	3.3		0.50	ug/L	
Trichlorofluoromethane	---	U	0.50	ug/L	
1,1-Dichloroethene	---	U	0.50	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane	---	U	0.50	ug/L	
Carbon Disulfide	---	U	0.50	ug/L	
Acetone	---	U	5.0	ug/L	
Methyl Acetate	---	U	0.50	ug/L	
Methylene Chloride	---	U	0.50	ug/L	
trans-1,2-Dichloroethene	---	U	0.50	ug/L	
Methyl tert-Butyl Ether	---	U	0.50	ug/L	
1,1-Dichloroethane	0.53		0.50	ug/L	
cis-1,2-Dichloroethene	---	U	0.50	ug/L	
2-Butanone	---	U	5.0	ug/L	

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: RW-06					Sample ID: 1508008-04
VOA-TRACE GCMS					
Bromochloromethane	---	U	0.50	ug/L	
Chloroform	---	U	0.50	ug/L	
1,1,1-Trichloroethane	---	U	0.50	ug/L	
Cyclohexane	---	U	0.50	ug/L	
Carbon Tetrachloride	---	U	0.50	ug/L	
Benzene	1.2		0.50	ug/L	
1,2-Dichloroethane	---	U	0.50	ug/L	
Trichloroethene	---	U	0.50	ug/L	
1,2-Dichloropropane	---	U	0.50	ug/L	
Bromodichloromethane	---	U	0.50	ug/L	
cis-1,3-Dichloropropene	---	U	0.50	ug/L	
4-Methyl-2-Pentanone	---	U	5.0	ug/L	
Toluene	---	U	0.50	ug/L	
trans-1,3-Dichloropropene	---	U	0.50	ug/L	
1,1,2-Trichloroethane	---	U	0.50	ug/L	
Tetrachloroethene	---	U	0.50	ug/L	
Methylcyclohexane	---	U	0.50	ug/L	
Dibromochloromethane	---	U	0.50	ug/L	
1,2-Dibromoethane	---	U	0.50	ug/L	
2-Hexanone	---	U	5.0	ug/L	
Chlorobenzene	---	U	0.50	ug/L	
Ethylbenzene	---	U	0.50	ug/L	
m/p-Xylene	---	U	0.50	ug/L	
o-Xylene	---	U	0.50	ug/L	
Styrene	---	U	0.50	ug/L	
Bromoform	---	U	0.50	ug/L	
Isopropylbenzene	---	U	0.50	ug/L	
1,1,2,2-Tetrachloroethane	---	U	0.50	ug/L	

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: RW-06					Sample ID: 1508008-04
VOA-TRACE GCMS					
1,3-Dichlorobenzene	---	U	0.50	ug/L	
1,4-Dichlorobenzene	---	U	0.50	ug/L	
1,2-Dichlorobenzene	---	U	0.50	ug/L	
1,2-Dibromo-3-Chloropropane	---	U	0.50	ug/L	
1,2,4-Trichlorobenzene	---	U	0.50	ug/L	
1,2,3-Trichlorobenzene	---	U	0.50	ug/L	
NVOA GCMS					
1,4-Dioxane	---	U	1.9	ug/L	
N-Nitrosodimethylamine	---	U	4.8	ug/L	
Benzaldehyde	---	U	4.8	ug/L	
Phenol	---	U	4.8	ug/L	
Bis(2-Chloroethyl)Ether	---	U	4.8	ug/L	
2-Chlorophenol	---	U	4.8	ug/L	
2-Methylphenol	---	U	4.8	ug/L	
Bis(2-Chloroisopropyl)Ether	---	U	4.8	ug/L	
Acetophenone	---	U	4.8	ug/L	
4-Methylphenol	---	U	4.8	ug/L	
N-Nitroso-Di-N-Propylamine	---	U	4.8	ug/L	
Hexachloroethane	---	U	4.8	ug/L	
Nitrobenzene	---	U	4.8	ug/L	
Isophorone	---	U	4.8	ug/L	
2-Nitrophenol	---	U	4.8	ug/L	
2,4-Dimethylphenol	---	U	4.8	ug/L	
Bis(-2-Chloroethoxy)Methane	---	U	4.8	ug/L	
2,4-Dichlorophenol	---	U	4.8	ug/L	
1,2,4-Trichlorobenzene	---	U	4.8	ug/L	
Naphthalene	---	U	4.8	ug/L	
4-Chloroaniline	---	U	4.8	ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: RW-06				Sample ID: 1508008-04	
NVOA GCMS					
Hexachlorobutadiene	---	U	4.8	ug/L	
Caprolactam	---	U	4.8	ug/L	
4-Chloro-3-Methylphenol	---	U	4.8	ug/L	
2-Methylnaphthalene	---	U	4.8	ug/L	
1,2,4,5-Tetrachlorobenzene	---	U	4.8	ug/L	
Hexachlorocyclopentadiene	---	U	4.8	ug/L	
2,4,6-Trichlorophenol	---	U	4.8	ug/L	
2,4,5-Trichlorophenol	---	U	4.8	ug/L	
Biphenyl	---	U	4.8	ug/L	
2-Chloronaphthalene	---	U	4.8	ug/L	
2-Nitroaniline	---	U	4.8	ug/L	
Dimethyl Phthalate	---	U	4.8	ug/L	
Acenaphthylene	---	U	4.8	ug/L	
2,6-Dinitrotoluene	---	U	4.8	ug/L	
3-Nitroaniline	---	U	4.8	ug/L	
Acenaphthene	---	U	4.8	ug/L	
2,4-Dinitrophenol	---	U	24	ug/L	
4-Nitrophenol	---	U	4.8	ug/L	
Dibenzofuran	---	U	4.8	ug/L	
2,4-Dinitrotoluene	---	U	4.8	ug/L	
2,3,4,6-Tetrachlorophenol	---	U	4.8	ug/L	
Fluorene	---	U	4.8	ug/L	
Diethylphthalate	---	U	4.8	ug/L	
4-Chlorophenyl-Phenylether	---	U	4.8	ug/L	
4-Nitroaniline	---	U L	4.8	ug/L	
4,6-Dinitro-2-Methylphenol	---	U	9.6	ug/L	
N-Nitrosodiphenylamine	---	U L	4.8	ug/L	
4-Bromophenyl-Phenylether	---	U	4.8	ug/L	

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Project: Ringwood Mines - 1508008

Project Number: 1508008

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: RW-06				Sample ID: 1508008-04	
NVOA GCMS					
Hexachlorobenzene	---	U	4.8	ug/L	
Atrazine	---	U	4.8	ug/L	
Pentachlorophenol	---	U	4.8	ug/L	
Phenanthrene	---	U	4.8	ug/L	
Anthracene	---	U	4.8	ug/L	
Carbazole	---	U L	4.8	ug/L	
Di-N-Butyl Phthalate	---	U	4.8	ug/L	
Fluoranthene	---	U	4.8	ug/L	
Pyrene	---	U	4.8	ug/L	
Butylbenzylphthalate	---	U	4.8	ug/L	
3,3'- Dichlorobenzidine	---	U	4.8	ug/L	
Benzo(A)Anthracene	---	U	4.8	ug/L	
Chrysene	---	U	4.8	ug/L	
Bis(2-Ethylhexyl)Phthalate	---	U	4.8	ug/L	
Di-N-Octyl Phthalate	---	U	4.8	ug/L	
Benzo(B)Fluoranthene	---	U	4.8	ug/L	
Benzo(K)Fluoranthene	---	U	4.8	ug/L	
Benzo(A)Pyrene	---	U	4.8	ug/L	
Indeno(1,2,3-Cd)Pyrene	---	U	4.8	ug/L	
Dibenzo(A,H)Anthracene	---	U	4.8	ug/L	
Benzo(G,H,I)Perylene	---	U	4.8	ug/L	
Cyclohexanamine, N-cyclohexyl-	16	NJ		ug/L	
PCB Aroclors GC					
Aroclor 1016	---	U L	0.03	ug/L	
Aroclor 1221	---	U L	0.06	ug/L	
Aroclor 1232	---	U L	0.03	ug/L	
Aroclor 1242	---	U L	0.03	ug/L	
Aroclor 1248	---	U L	0.03	ug/L	

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Project Number: 1508008

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: RW-06				Sample ID: 1508008-04	
PCB Aroclors GC					
Aroclor 1254	---	U L	0.03	ug/L	
Aroclor 1260	---	U L	0.03	ug/L	
Aroclor 1262	---	U L	0.03	ug/L	
Aroclor 1268	---	U L	0.03	ug/L	
Metals ICP					
Calcium	74000		500	ug/L	
Iron	36000		50	ug/L	
Magnesium	13000		500	ug/L	
Manganese	6200		5.0	ug/L	
Potassium	2900		500	ug/L	
Sodium	6200		1000	ug/L	
Metals ICPMS					
Aluminum	22		20	ug/L	
Antimony	---	U	1.0	ug/L	
Arsenic	---	U	1.0	ug/L	
Barium	380		1.0	ug/L	
Beryllium	---	U	1.0	ug/L	
Cadmium	---	U	1.0	ug/L	
Chromium	3.5		2.0	ug/L	
Cobalt	1.2		1.0	ug/L	
Copper	1.0		1.0	ug/L	
Lead	---	U	1.0	ug/L	
Nickel	---	U	1.0	ug/L	
Selenium	---	U	1.0	ug/L	
Silver	---	U	1.0	ug/L	
Thallium	---	U	1.0	ug/L	
Vanadium	1.3		1.0	ug/L	

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Project Number: 1508008

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: RW-06				Sample ID: 1508008-04	
Metals ICPMS					
Zinc	12		2.0	ug/L	
Mercury CVAA					
Mercury	---	U	0.20	ug/L	
Field ID: RW-6A				Sample ID: 1508008-05	
VOA-TRACE GCMS					
Dichlorodifluoromethane	---	U	0.50	ug/L	
Chloromethane	---	U	0.50	ug/L	
Vinyl Chloride	---	U	0.50	ug/L	
Bromomethane	---	U	0.50	ug/L	
Chloroethane	2.2		0.50	ug/L	
Trichlorofluoromethane	---	U	0.50	ug/L	
1,1-Dichloroethene	---	U	0.50	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane	---	U	0.50	ug/L	
Carbon Disulfide	---	U	0.50	ug/L	
Acetone	---	U	5.0	ug/L	
Methyl Acetate	---	U	0.50	ug/L	
Methylene Chloride	---	U	0.50	ug/L	
trans-1,2-Dichloroethene	---	U	0.50	ug/L	
Methyl tert-Butyl Ether	---	U	0.50	ug/L	
1,1-Dichloroethane	---	U	0.50	ug/L	
cis-1,2-Dichloroethene	---	U	0.50	ug/L	
2-Butanone	---	U	5.0	ug/L	
Bromochloromethane	---	U	0.50	ug/L	
Chloroform	---	U	0.50	ug/L	
1,1,1-Trichloroethane	---	U	0.50	ug/L	
Cyclohexane	3.9		0.50	ug/L	
Carbon Tetrachloride	---	U	0.50	ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: RW-6A				Sample ID: 1508008-05	
VOA-TRACE GCMS					
Benzene	8.5		0.50	ug/L	
1,2-Dichloroethane	---	U	0.50	ug/L	
Trichloroethene	---	U	0.50	ug/L	
1,2-Dichloropropane	---	U	0.50	ug/L	
Bromodichloromethane	---	U	0.50	ug/L	
cis-1,3-Dichloropropene	---	U	0.50	ug/L	
4-Methyl-2-Pentanone	---	U	5.0	ug/L	
Toluene	---	U	0.50	ug/L	
trans-1,3-Dichloropropene	---	U	0.50	ug/L	
1,1,2-Trichloroethane	---	U	0.50	ug/L	
Tetrachloroethene	---	U	0.50	ug/L	
Methylcyclohexane	1.1		0.50	ug/L	
Dibromochloromethane	---	U	0.50	ug/L	
1,2-Dibromoethane	---	U	0.50	ug/L	
2-Hexanone	---	U	5.0	ug/L	
Chlorobenzene	---	U	0.50	ug/L	
Ethylbenzene	---	U	0.50	ug/L	
m/p-Xylene	15		0.50	ug/L	
o-Xylene	---	U	0.50	ug/L	
Styrene	---	U	0.50	ug/L	
Bromoform	---	U	0.50	ug/L	
Isopropylbenzene	6.6		0.50	ug/L	
1,1,2,2-Tetrachloroethane	---	U	0.50	ug/L	
1,3-Dichlorobenzene	---	U	0.50	ug/L	
1,4-Dichlorobenzene	---	U	0.50	ug/L	
1,2-Dichlorobenzene	---	U	0.50	ug/L	
1,2-Dibromo-3-Chloropropane	---	U	0.50	ug/L	
1,2,4-Trichlorobenzene	---	U	0.50	ug/L	

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: RW-6A				Sample ID: 1508008-05	
VOA-TRACE GCMS					
1,2,3-Trichlorobenzene	---	U	0.50	ug/L	
Benzene, 1,2,3-trimethyl-	15	NJ		ug/L	
Benzene, 1,2,4,5-tetramethyl-	8.2	NJ		ug/L	
Benzene, 1,3,5-trimethyl-	4.0	NJ		ug/L	
Benzene, 1-methyl-2-(1-meth...	12	NJ		ug/L	
Benzene, 2-ethyl-1,3-dimethyl-	4.0	NJ		ug/L	
Benzene, propyl-	7.0	NJ		ug/L	
Cyclopentane, methyl-	12	NJ		ug/L	
Indan, 1-methyl-	5.9	NJ		ug/L	
Indane	12	NJ		ug/L	
Pentane, 3-methyl-	4.2	NJ		ug/L	
NVOA GCMS					
1,4-Dioxane	---	U	1.9	ug/L	
N-Nitrosodimethylamine	---	U	4.7	ug/L	
Benzaldehyde	---	U	4.7	ug/L	
Phenol	---	U	4.7	ug/L	
Bis(2-Chloroethyl)Ether	---	U	4.7	ug/L	
2-Chlorophenol	---	U	4.7	ug/L	
2-Methylphenol	---	U	4.7	ug/L	
Bis(2-Chloroisopropyl)Ether	---	U	4.7	ug/L	
Acetophenone	---	U	4.7	ug/L	
4-Methylphenol	---	U	4.7	ug/L	
N-Nitroso-Di-N-Propylamine	---	U	4.7	ug/L	
Hexachloroethane	---	U	4.7	ug/L	
Nitrobenzene	---	U	4.7	ug/L	
Isophorone	---	U	4.7	ug/L	
2-Nitrophenol	---	U	4.7	ug/L	

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: RW-6A				Sample ID: 1508008-05	
NVOA GCMS					
2,4-Dimethylphenol	---	U	4.7	ug/L	
Bis(-2-Chloroethoxy)Methane	---	U	4.7	ug/L	
2,4-Dichlorophenol	---	U	4.7	ug/L	
1,2,4-Trichlorobenzene	---	U	4.7	ug/L	
Naphthalene	7.9		4.7	ug/L	
4-Chloroaniline	---	U	4.7	ug/L	
Hexachlorobutadiene	---	U	4.7	ug/L	
Caprolactam	---	U	4.7	ug/L	
4-Chloro-3-Methylphenol	---	U	4.7	ug/L	
2-Methylnaphthalene	---	U	4.7	ug/L	
1,2,4,5-Tetrachlorobenzene	---	U	4.7	ug/L	
Hexachlorocyclopentadiene	---	U	4.7	ug/L	
2,4,6-Trichlorophenol	---	U	4.7	ug/L	
2,4,5-Trichlorophenol	---	U	4.7	ug/L	
Biphenyl	---	U	4.7	ug/L	
2-Chloronaphthalene	---	U	4.7	ug/L	
2-Nitroaniline	---	U	4.7	ug/L	
Dimethyl Phthalate	---	U	4.7	ug/L	
Acenaphthylene	---	U	4.7	ug/L	
2,6-Dinitrotoluene	---	U	4.7	ug/L	
3-Nitroaniline	---	U	4.7	ug/L	
Acenaphthene	---	U	4.7	ug/L	
2,4-Dinitrophenol	---	U	24	ug/L	
4-Nitrophenol	---	U	4.7	ug/L	
Dibenzofuran	---	U	4.7	ug/L	
2,4-Dinitrotoluene	---	U	4.7	ug/L	
2,3,4,6-Tetrachlorophenol	---	U	4.7	ug/L	
Fluorene	---	U	4.7	ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: RW-6A				Sample ID: 1508008-05	
NVOA GCMS					
Diethylphthalate	---	U	4.7	ug/L	
4-Chlorophenyl-Phenylether	---	U	4.7	ug/L	
4-Nitroaniline	---	U L	4.7	ug/L	
4,6-Dinitro-2-Methylphenol	---	U	9.4	ug/L	
N-Nitrosodiphenylamine	---	U L	4.7	ug/L	
4-Bromophenyl-Phenylether	---	U	4.7	ug/L	
Hexachlorobenzene	---	U	4.7	ug/L	
Atrazine	---	U	4.7	ug/L	
Pentachlorophenol	---	U	4.7	ug/L	
Phenanthrene	---	U	4.7	ug/L	
Anthracene	---	U	4.7	ug/L	
Carbazole	---	U L	4.7	ug/L	
Di-N-Butyl Phthalate	---	U	4.7	ug/L	
Fluoranthene	---	U	4.7	ug/L	
Pyrene	---	U	4.7	ug/L	
Butylbenzylphthalate	---	U	4.7	ug/L	
3,3'- Dichlorobenzidine	---	U	4.7	ug/L	
Benzo(A)Anthracene	---	U	4.7	ug/L	
Chrysene	---	U	4.7	ug/L	
Bis(2-Ethylhexyl)Phthalate	---	U	4.7	ug/L	
Di-N-Octyl Phthalate	---	U	4.7	ug/L	
Benzo(B)Fluoranthene	---	U	4.7	ug/L	
Benzo(K)Fluoranthene	---	U	4.7	ug/L	
Benzo(A)Pyrene	---	U	4.7	ug/L	
Indeno(1,2,3-Cd)Pyrene	---	U	4.7	ug/L	
Dibenzo(A,H)Anthracene	---	U	4.7	ug/L	
Benzo(G,H,I)Perylene	---	U	4.7	ug/L	
2(3H)-Benzothiazolone	9.0	NJ		ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: RW-6A				Sample ID: 1508008-05	
NVOA GCMS					
Benzene, 1,2,3,5-tetramethyl-	10	NJ		ug/L	
Benzene, 1,2,3-trimethyl-	17	NJ		ug/L	
Benzene, 1-ethyl-2,3-dimethyl-	13	NJ		ug/L	
Benzenesulfonamide, N-cyclo...	9.6	NJ		ug/L	
Cyclohexanamine, N-cyclohexyl-	14	NJ		ug/L	
Indane	13	NJ		ug/L	
Phenol, 4,4'-(1-methylethyl...	18	NJ		ug/L	
PCB Aroclors GC					
Aroclor 1016	---	U	0.03	ug/L	
Aroclor 1221	---	U	0.06	ug/L	
Aroclor 1232	---	U	0.03	ug/L	
Aroclor 1242	---	U L	0.03	ug/L	
Aroclor 1248	---	U	0.03	ug/L	
Aroclor 1254	---	U	0.03	ug/L	
Aroclor 1260	---	U	0.03	ug/L	
Aroclor 1262	---	U	0.03	ug/L	
Aroclor 1268	---	U	0.03	ug/L	
Metals ICP					
Calcium	87000		500	ug/L	
Iron	23000		50	ug/L	
Magnesium	20000		500	ug/L	
Manganese	14000		5.0	ug/L	
Potassium	3000		500	ug/L	
Sodium	7600		1000	ug/L	

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: RW-6A				Sample ID: 1508008-05	
Metals ICPMS					
Aluminum	---	U	20	ug/L	
Antimony	---	U	1.0	ug/L	
Arsenic	---	U	1.0	ug/L	
Barium	43		1.0	ug/L	
Beryllium	---	U	1.0	ug/L	
Cadmium	---	U	1.0	ug/L	
Chromium	---	U	2.0	ug/L	
Cobalt	19		1.0	ug/L	
Copper	1.4		1.0	ug/L	
Lead	---	U	1.0	ug/L	
Nickel	2.9		1.0	ug/L	
Selenium	---	U	1.0	ug/L	
Silver	---	U	1.0	ug/L	
Thallium	---	U	1.0	ug/L	
Vanadium	2.3		1.0	ug/L	
Zinc	22		2.0	ug/L	
Mercury CVAA					
Mercury	---	U	0.20	ug/L	
Field ID: SC-01				Sample ID: 1508008-06	
VOA-TRACE GCMS					
Dichlorodifluoromethane	---	U	0.50	ug/L	
Chloromethane	---	U	0.50	ug/L	
Vinyl Chloride	---	U	0.50	ug/L	
Bromomethane	---	U	0.50	ug/L	
Chloroethane	0.80		0.50	ug/L	
Trichlorofluoromethane	---	U	0.50	ug/L	
1,1-Dichloroethene	---	U	0.50	ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: SC-01				Sample ID: 1508008-06	
VOA-TRACE GCMS					
1,1,2-Trichloro-1,2,2-Trifluoroethane	---	U	0.50	ug/L	
Carbon Disulfide	---	U	0.50	ug/L	
Acetone	---	U	5.0	ug/L	
Methyl Acetate	---	U	0.50	ug/L	
Methylene Chloride	---	U	0.50	ug/L	
trans-1,2-Dichloroethene	---	U	0.50	ug/L	
Methyl tert-Butyl Ether	---	U	0.50	ug/L	
1,1-Dichloroethane	---	U	0.50	ug/L	
cis-1,2-Dichloroethene	---	U	0.50	ug/L	
2-Butanone	---	U	5.0	ug/L	
Bromochloromethane	---	U	0.50	ug/L	
Chloroform	---	U	0.50	ug/L	
1,1,1-Trichloroethane	---	U	0.50	ug/L	
Cyclohexane	1.9		0.50	ug/L	
Carbon Tetrachloride	---	U	0.50	ug/L	
Benzene	1.5		0.50	ug/L	
1,2-Dichloroethane	---	U	0.50	ug/L	
Trichloroethene	---	U	0.50	ug/L	
1,2-Dichloropropane	---	U	0.50	ug/L	
Bromodichloromethane	---	U	0.50	ug/L	
cis-1,3-Dichloropropene	---	U	0.50	ug/L	
4-Methyl-2-Pentanone	---	U	5.0	ug/L	
Toluene	0.60		0.50	ug/L	
trans-1,3-Dichloropropene	---	U	0.50	ug/L	
1,1,2-Trichloroethane	---	U	0.50	ug/L	
Tetrachloroethene	---	U	0.50	ug/L	
Methylcyclohexane	1.8		0.50	ug/L	
Dibromochloromethane	---	U	0.50	ug/L	

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: SC-01					Sample ID: 1508008-06
VOA-TRACE GCMS					
1,2-Dibromoethane	---	U	0.50	ug/L	
2-Hexanone	---	U	5.0	ug/L	
Chlorobenzene	---	U	0.50	ug/L	
Ethylbenzene	2.3		0.50	ug/L	
m/p-Xylene	58		0.50	ug/L	
o-Xylene	5.4		0.50	ug/L	
Styrene	---	U	0.50	ug/L	
Bromoform	---	U	0.50	ug/L	
Isopropylbenzene	2.2		0.50	ug/L	
1,1,2,2-Tetrachloroethane	---	U	0.50	ug/L	
1,3-Dichlorobenzene	---	U	0.50	ug/L	
1,4-Dichlorobenzene	---	U	0.50	ug/L	
1,2-Dichlorobenzene	---	U	0.50	ug/L	
1,2-Dibromo-3-Chloropropane	---	U	0.50	ug/L	
1,2,4-Trichlorobenzene	---	U	0.50	ug/L	
1,2,3-Trichlorobenzene	---	U	0.50	ug/L	
1H-Indene, 2,3-dihydro-4-me...	2.3	NJ		ug/L	
Benzene, 1,2,3,4-tetramethyl-	3.0	NJ		ug/L	
Benzene, 1,2,3,5-tetramethyl-	1.9	NJ		ug/L	
Benzene, 1,2,3-trimethyl- (01)	6.2	NJ		ug/L	
Benzene, 1,2,4,5-tetramethyl-	4.3	NJ		ug/L	
Benzene, 1,3,5-trimethyl-	1.5	NJ		ug/L	
Benzene, 1-methyl-2-(1-meth...	4.8	NJ		ug/L	
Cyclopentane, methyl-	3.5	NJ		ug/L	
Indane	2.5	NJ		ug/L	

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: SC-01					Sample ID: 1508008-06
NVOA GCMS					
1,4-Dioxane	---	U	1.9	ug/L	
N-Nitrosodimethylamine	---	U	4.7	ug/L	
Benzaldehyde	---	U	4.7	ug/L	
Phenol	---	U	4.7	ug/L	
Bis(2-Chloroethyl)Ether	---	U	4.7	ug/L	
2-Chlorophenol	---	U	4.7	ug/L	
2-Methylphenol	---	U	4.7	ug/L	
Bis(2-Chloroisopropyl)Ether	---	U	4.7	ug/L	
Acetophenone	---	U	4.7	ug/L	
4-Methylphenol	---	U	4.7	ug/L	
N-Nitroso-Di-N-Propylamine	---	U	4.7	ug/L	
Hexachloroethane	---	U	4.7	ug/L	
Nitrobenzene	---	U	4.7	ug/L	
Isophorone	---	U	4.7	ug/L	
2-Nitrophenol	---	U	4.7	ug/L	
2,4-Dimethylphenol	---	U	4.7	ug/L	
Bis(-2-Chloroethoxy)Methane	---	U	4.7	ug/L	
2,4-Dichlorophenol	---	U	4.7	ug/L	
1,2,4-Trichlorobenzene	---	U	4.7	ug/L	
Naphthalene	---	U	4.7	ug/L	
4-Chloroaniline	---	U	4.7	ug/L	
Hexachlorobutadiene	---	U	4.7	ug/L	
Caprolactam	---	U	4.7	ug/L	
4-Chloro-3-Methylphenol	---	U	4.7	ug/L	
2-Methylnaphthalene	---	U	4.7	ug/L	
1,2,4,5-Tetrachlorobenzene	---	U	4.7	ug/L	
Hexachlorocyclopentadiene	---	U	4.7	ug/L	
2,4,6-Trichlorophenol	---	U	4.7	ug/L	

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Field ID: SC-01				Sample ID: 1508008-06	
NVOA GCMS					
2,4,5-Trichlorophenol	---	U	4.7	ug/L	
Biphenyl	---	U	4.7	ug/L	
2-Chloronaphthalene	---	U	4.7	ug/L	
2-Nitroaniline	---	U	4.7	ug/L	
Dimethyl Phthalate	---	U	4.7	ug/L	
Acenaphthylene	---	U	4.7	ug/L	
2,6-Dinitrotoluene	---	U	4.7	ug/L	
3-Nitroaniline	---	U	4.7	ug/L	
Acenaphthene	---	U	4.7	ug/L	
2,4-Dinitrophenol	---	U	24	ug/L	
4-Nitrophenol	---	U	4.7	ug/L	
Dibenzofuran	---	U	4.7	ug/L	
2,4-Dinitrotoluene	---	U	4.7	ug/L	
2,3,4,6-Tetrachlorophenol	---	U	4.7	ug/L	
Fluorene	---	U	4.7	ug/L	
Diethylphthalate	---	U	4.7	ug/L	
4-Chlorophenyl-Phenylether	---	U	4.7	ug/L	
4-Nitroaniline	---	U L	4.7	ug/L	
4,6-Dinitro-2-Methylphenol	---	U	9.4	ug/L	
N-Nitrosodiphenylamine	---	U L	4.7	ug/L	
4-Bromophenyl-Phenylether	---	U	4.7	ug/L	
Hexachlorobenzene	---	U	4.7	ug/L	
Atrazine	---	U	4.7	ug/L	
Pentachlorophenol	---	U	4.7	ug/L	
Phenanthrene	---	U	4.7	ug/L	
Anthracene	---	U	4.7	ug/L	
Carbazole	---	U L	4.7	ug/L	
Di-N-Butyl Phthalate	---	U	4.7	ug/L	

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: SC-01				Sample ID: 1508008-06	
NVOA GCMS					
Fluoranthene	---	U	4.7	ug/L	
Pyrene	---	U	4.7	ug/L	
Butylbenzylphthalate	---	U	4.7	ug/L	
3,3'- Dichlorobenzidine	---	U	4.7	ug/L	
Benzo(A)Anthracene	---	U	4.7	ug/L	
Chrysene	---	U	4.7	ug/L	
Bis(2-Ethylhexyl)Phthalate	---	U	4.7	ug/L	
Di-N-Octyl Phthalate	---	U	4.7	ug/L	
Benzo(B)Fluoranthene	---	U	4.7	ug/L	
Benzo(K)Fluoranthene	---	U	4.7	ug/L	
Benzo(A)Pyrene	---	U	4.7	ug/L	
Indeno(1,2,3-Cd)Pyrene	---	U	4.7	ug/L	
Dibenzo(A,H)Anthracene	---	U	4.7	ug/L	
Benzo(G,H,I)Perylene	---	U	4.7	ug/L	
2(3H)-Benzothiazolone	10	NJ		ug/L	
Benzenesulfonamide, N-cyclo...	10	NJ		ug/L	
Cyclohexanamine, N-cyclohexyl-	15	NJ		ug/L	
o-Xylene	29	NJ		ug/L	
PCB Aroclors GC					
Aroclor 1016	---	U L	0.03	ug/L	
Aroclor 1221	---	U L	0.06	ug/L	
Aroclor 1232	---	U L	0.03	ug/L	
Aroclor 1242	---	U L	0.03	ug/L	
Aroclor 1248	---	U L	0.03	ug/L	
Aroclor 1254	---	U L	0.03	ug/L	
Aroclor 1260	---	U L	0.03	ug/L	
Aroclor 1262	---	U L	0.03	ug/L	
Aroclor 1268	---	U L	0.03	ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: SC-01				Sample ID: 1508008-06	
Metals ICP					
Calcium	40000		500	ug/L	
Iron	74000		50	ug/L	
Magnesium	4000		500	ug/L	
Potassium	2400		500	ug/L	
Sodium	3500		1000	ug/L	
Metals ICPMS					
Aluminum	57		20	ug/L	
Antimony	---	U	1.0	ug/L	
Arsenic	---	U	1.0	ug/L	
Barium	400		1.0	ug/L	
Beryllium	---	U	1.0	ug/L	
Cadmium	---	U	1.0	ug/L	
Chromium	3.6		2.0	ug/L	
Cobalt	3.4		1.0	ug/L	
Copper	---	U	1.0	ug/L	
Lead	13		1.0	ug/L	
Manganese	690		1.0	ug/L	
Nickel	13		1.0	ug/L	
Selenium	---	U	1.0	ug/L	
Silver	---	U	1.0	ug/L	
Thallium	---	U	1.0	ug/L	
Vanadium	2.5		1.0	ug/L	
Zinc	35		2.0	ug/L	

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: SC-01				Sample ID: 1508008-06	
Mercury CVAA					
Mercury	---	U	0.20	ug/L	
Field ID: SC-11				Sample ID: 1508008-07	
VOA-TRACE GCMS					
Dichlorodifluoromethane	---	U	0.50	ug/L	
Chloromethane	---	U	0.50	ug/L	
Vinyl Chloride	---	U	0.50	ug/L	
Bromomethane	---	U	0.50	ug/L	
Chloroethane	0.82		0.50	ug/L	
Trichlorofluoromethane	---	U	0.50	ug/L	
1,1-Dichloroethene	---	U	0.50	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane	---	U	0.50	ug/L	
Carbon Disulfide	---	U	0.50	ug/L	
Acetone	5.1		5.0	ug/L	
Methyl Acetate	---	U	0.50	ug/L	
Methylene Chloride	---	U	0.50	ug/L	
trans-1,2-Dichloroethene	---	U	0.50	ug/L	
Methyl tert-Butyl Ether	---	U	0.50	ug/L	
1,1-Dichloroethane	---	U	0.50	ug/L	
cis-1,2-Dichloroethene	---	U	0.50	ug/L	
2-Butanone	---	U	5.0	ug/L	
Bromochloromethane	---	U	0.50	ug/L	
Chloroform	---	U	0.50	ug/L	
1,1,1-Trichloroethane	---	U	0.50	ug/L	
Cyclohexane	1.8		0.50	ug/L	
Carbon Tetrachloride	---	U	0.50	ug/L	
Benzene	1.4		0.50	ug/L	
1,2-Dichloroethane	---	U	0.50	ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: SC-11				Sample ID: 1508008-07	
VOA-TRACE GCMS					
Trichloroethene	---	U	0.50	ug/L	
1,2-Dichloropropane	---	U	0.50	ug/L	
Bromodichloromethane	---	U	0.50	ug/L	
cis-1,3-Dichloropropene	---	U	0.50	ug/L	
4-Methyl-2-Pentanone	---	U	5.0	ug/L	
Toluene	0.61		0.50	ug/L	
trans-1,3-Dichloropropene	---	U	0.50	ug/L	
1,1,2-Trichloroethane	---	U	0.50	ug/L	
Tetrachloroethene	---	U	0.50	ug/L	
Methylcyclohexane	1.7		0.50	ug/L	
Dibromochloromethane	---	U	0.50	ug/L	
1,2-Dibromoethane	---	U	0.50	ug/L	
2-Hexanone	---	U	5.0	ug/L	
Chlorobenzene	---	U	0.50	ug/L	
Ethylbenzene	2.2		0.50	ug/L	
m/p-Xylene	55		0.50	ug/L	
o-Xylene	5.2		0.50	ug/L	
Styrene	---	U	0.50	ug/L	
Bromoform	---	U	0.50	ug/L	
Isopropylbenzene	2.1		0.50	ug/L	
1,1,2,2-Tetrachloroethane	---	U	0.50	ug/L	
1,3-Dichlorobenzene	---	U	0.50	ug/L	
1,4-Dichlorobenzene	---	U	0.50	ug/L	
1,2-Dichlorobenzene	---	U	0.50	ug/L	
1,2-Dibromo-3-Chloropropane	---	U	0.50	ug/L	
1,2,4-Trichlorobenzene	---	U	0.50	ug/L	
1,2,3-Trichlorobenzene	---	U	0.50	ug/L	
1H-Indene, 2,3-dihydro-5-me...	2.0	NJ		ug/L	

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Field ID: SC-11				Sample ID: 1508008-07	
VOA-TRACE GCMS					
Benzene, 1,2,3,4-tetramethyl-	3.8	NJ		ug/L	
Benzene, 1,2,3-trimethyl- (02)	3.6	NJ		ug/L	
Benzene, 1,2,4,5-tetramethyl-	2.7	NJ		ug/L	
Benzene, 1,2,4-trimethyl-	5.8	NJ		ug/L	
Benzene, 1-methyl-2-(1-meth...	4.2	NJ		ug/L	
Benzene, 1-methyl-3-(1-meth...	1.8	NJ		ug/L	
Cyclopentane, methyl-	3.3	NJ		ug/L	
NVOA GCMS					
1,4-Dioxane	---	U	1.9	ug/L	
N-Nitrosodimethylamine	---	U	4.8	ug/L	
Benzaldehyde	---	U	4.8	ug/L	
Phenol	---	U	4.8	ug/L	
Bis(2-Chloroethyl)Ether	---	U	4.8	ug/L	
2-Chlorophenol	---	U	4.8	ug/L	
2-Methylphenol	---	U	4.8	ug/L	
Bis(2-Chloroisopropyl)Ether	---	U	4.8	ug/L	
Acetophenone	---	U	4.8	ug/L	
4-Methylphenol	---	U	4.8	ug/L	
N-Nitroso-Di-N-Propylamine	---	U	4.8	ug/L	
Hexachloroethane	---	U	4.8	ug/L	
Nitrobenzene	---	U	4.8	ug/L	
Isophorone	---	U	4.8	ug/L	
2-Nitrophenol	---	U	4.8	ug/L	
2,4-Dimethylphenol	---	U	4.8	ug/L	
Bis(-2-Chloroethoxy)Methane	---	U	4.8	ug/L	
2,4-Dichlorophenol	---	U	4.8	ug/L	
1,2,4-Trichlorobenzene	---	U	4.8	ug/L	

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: SC-11				Sample ID: 1508008-07	
NVOA GCMS					
Naphthalene	5.9		4.8	ug/L	
4-Chloroaniline	---	U	4.8	ug/L	
Hexachlorobutadiene	---	U	4.8	ug/L	
Caprolactam	---	U	4.8	ug/L	
4-Chloro-3-Methylphenol	---	U	4.8	ug/L	
2-Methylnaphthalene	---	U	4.8	ug/L	
1,2,4,5-Tetrachlorobenzene	---	U	4.8	ug/L	
Hexachlorocyclopentadiene	---	U	4.8	ug/L	
2,4,6-Trichlorophenol	---	U	4.8	ug/L	
2,4,5-Trichlorophenol	---	U	4.8	ug/L	
Biphenyl	---	U	4.8	ug/L	
2-Chloronaphthalene	---	U	4.8	ug/L	
2-Nitroaniline	---	U	4.8	ug/L	
Dimethyl Phthalate	---	U	4.8	ug/L	
Acenaphthylene	---	U	4.8	ug/L	
2,6-Dinitrotoluene	---	U	4.8	ug/L	
3-Nitroaniline	---	U	4.8	ug/L	
Acenaphthene	---	U	4.8	ug/L	
2,4-Dinitrophenol	---	U	24	ug/L	
4-Nitrophenol	---	U	4.8	ug/L	
Dibenzofuran	---	U	4.8	ug/L	
2,4-Dinitrotoluene	---	U	4.8	ug/L	
2,3,4,6-Tetrachlorophenol	---	U	4.8	ug/L	
Fluorene	---	U	4.8	ug/L	
Diethylphthalate	---	U	4.8	ug/L	
4-Chlorophenyl-Phenylether	---	U	4.8	ug/L	
4-Nitroaniline	---	U L	4.8	ug/L	
4,6-Dinitro-2-Methylphenol	---	U	9.5	ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: SC-11				Sample ID: 1508008-07	
NVOA GCMS					
N-Nitrosodiphenylamine	---	U L	4.8	ug/L	
4-Bromophenyl-Phenylether	---	U	4.8	ug/L	
Hexachlorobenzene	---	U	4.8	ug/L	
Atrazine	---	U	4.8	ug/L	
Pentachlorophenol	---	U	4.8	ug/L	
Phenanthrene	---	U	4.8	ug/L	
Anthracene	---	U	4.8	ug/L	
Carbazole	---	U L	4.8	ug/L	
Di-N-Butyl Phthalate	---	U	4.8	ug/L	
Fluoranthene	---	U	4.8	ug/L	
Pyrene	---	U	4.8	ug/L	
Butylbenzylphthalate	---	U	4.8	ug/L	
3,3'- Dichlorobenzidine	---	U	4.8	ug/L	
Benzo(A)Anthracene	---	U	4.8	ug/L	
Chrysene	---	U	4.8	ug/L	
Bis(2-Ethylhexyl)Phthalate	---	U	4.8	ug/L	
Di-N-Octyl Phthalate	---	U	4.8	ug/L	
Benzo(B)Fluoranthene	---	U	4.8	ug/L	
Benzo(K)Fluoranthene	---	U	4.8	ug/L	
Benzo(A)Pyrene	---	U	4.8	ug/L	
Indeno(1,2,3-Cd)Pyrene	---	U	4.8	ug/L	
Dibenzo(A,H)Anthracene	---	U	4.8	ug/L	
Benzo(G,H,I)Perylene	---	U	4.8	ug/L	
2(3H)-Benzothiazolone	11	NJ		ug/L	
Benzenesulfonamide, N-cyclo...	13	NJ		ug/L	
p-Xylene	37	NJ		ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: SC-11				Sample ID: 1508008-07	
PCB Aroclors GC					
Aroclor 1016	---	U L	0.03	ug/L	
Aroclor 1221	---	U L	0.06	ug/L	
Aroclor 1232	---	U L	0.03	ug/L	
Aroclor 1242	---	U L	0.03	ug/L	
Aroclor 1248	---	U L	0.03	ug/L	
Aroclor 1254	---	U L	0.03	ug/L	
Aroclor 1260	---	U L	0.03	ug/L	
Aroclor 1262	---	U L	0.03	ug/L	
Aroclor 1268	---	U L	0.03	ug/L	
Metals ICP					
Calcium	41000		500	ug/L	
Iron	74000		50	ug/L	
Magnesium	4100		500	ug/L	
Potassium	2400		500	ug/L	
Sodium	3500		1000	ug/L	
Metals ICPMS					
Aluminum	55		20	ug/L	
Antimony	---	U	1.0	ug/L	
Arsenic	---	U	1.0	ug/L	
Barium	400		1.0	ug/L	
Beryllium	---	U	1.0	ug/L	
Cadmium	---	U	1.0	ug/L	
Chromium	3.6		2.0	ug/L	
Cobalt	3.3		1.0	ug/L	
Copper	---	U	1.0	ug/L	
Lead	13		1.0	ug/L	
Manganese	680		1.0	ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: SC-11				Sample ID: 1508008-07	
Metals ICPMS					
Nickel	12		1.0	ug/L	
Selenium	---	U	1.0	ug/L	
Silver	---	U	1.0	ug/L	
Thallium	---	U	1.0	ug/L	
Vanadium	2.4		1.0	ug/L	
Zinc	32		2.0	ug/L	
Mercury CVAA					
Mercury	---	U	0.20	ug/L	
Field ID: TB-01				Sample ID: 1508008-08	
VOA-TRACE GCMS					
Dichlorodifluoromethane	---	U	0.50	ug/L	
Chloromethane	---	U	0.50	ug/L	
Vinyl Chloride	---	U	0.50	ug/L	
Bromomethane	---	U	0.50	ug/L	
Chloroethane	---	U	0.50	ug/L	
Trichlorofluoromethane	---	U	0.50	ug/L	
1,1-Dichloroethene	---	U	0.50	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane	---	U	0.50	ug/L	
Carbon Disulfide	---	U	0.50	ug/L	
Acetone	9.6		5.0	ug/L	
Methyl Acetate	---	U	0.50	ug/L	
Methylene Chloride	---	U	0.50	ug/L	
trans-1,2-Dichloroethene	---	U	0.50	ug/L	
Methyl tert-Butyl Ether	---	U	0.50	ug/L	
1,1-Dichloroethane	---	U	0.50	ug/L	
cis-1,2-Dichloroethene	---	U	0.50	ug/L	
2-Butanone	---	U	5.0	ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: TB-01				Sample ID: 1508008-08	
VOA-TRACE GCMS					
Bromochloromethane	---	U	0.50	ug/L	
Chloroform	---	U	0.50	ug/L	
1,1,1-Trichloroethane	---	U	0.50	ug/L	
Cyclohexane	---	U	0.50	ug/L	
Carbon Tetrachloride	---	U	0.50	ug/L	
Benzene	---	U	0.50	ug/L	
1,2-Dichloroethane	---	U	0.50	ug/L	
Trichloroethene	---	U	0.50	ug/L	
1,2-Dichloropropane	---	U	0.50	ug/L	
Bromodichloromethane	---	U	0.50	ug/L	
cis-1,3-Dichloropropene	---	U	0.50	ug/L	
4-Methyl-2-Pentanone	---	U	5.0	ug/L	
Toluene	---	U	0.50	ug/L	
trans-1,3-Dichloropropene	---	U	0.50	ug/L	
1,1,2-Trichloroethane	---	U	0.50	ug/L	
Tetrachloroethene	---	U	0.50	ug/L	
Methylcyclohexane	---	U	0.50	ug/L	
Dibromochloromethane	---	U	0.50	ug/L	
1,2-Dibromoethane	---	U	0.50	ug/L	
2-Hexanone	---	U	5.0	ug/L	
Chlorobenzene	---	U	0.50	ug/L	
Ethylbenzene	---	U	0.50	ug/L	
m/p-Xylene	---	U	0.50	ug/L	
o-Xylene	---	U	0.50	ug/L	
Styrene	---	U	0.50	ug/L	
Bromoform	---	U	0.50	ug/L	
Isopropylbenzene	---	U	0.50	ug/L	
1,1,2,2-Tetrachloroethane	---	U	0.50	ug/L	

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Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: TB-01				Sample ID: 1508008-08	
VOA-TRACE GCMS					
1,3-Dichlorobenzene	---	U	0.50	ug/L	
1,4-Dichlorobenzene	---	U	0.50	ug/L	
1,2-Dichlorobenzene	---	U	0.50	ug/L	
1,2-Dibromo-3-Chloropropane	---	U	0.50	ug/L	
1,2,4-Trichlorobenzene	---	U	0.50	ug/L	
1,2,3-Trichlorobenzene	---	U	0.50	ug/L	