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Via Electronic and US Mail

November 25, 2015

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

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

Dear Mr. Gowers:

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

Sampling Locations

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

Overburden Groundwater Monitoring Wells:

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

Bedrock Groundwater Monitoring Wells:

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

Surface Water Sampling Locations:

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

Mine Structure Sampling Locations:

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

PMS – Peters Mine Air Shaft
CMS – Cannon Mine Shaft

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

Sample Collection and Analyses

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

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

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

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

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

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

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

Groundwater Elevation Data

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

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

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

Analytical Data

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

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

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

Results Summary

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

Peters Mine Pit AOC - Groundwater

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

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

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

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

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

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

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

O'Connor Disposal Area AOC - Groundwater

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

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

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

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

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

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

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

Cannon Mine Pit AOC – Groundwater

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

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

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

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

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

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

Sally's Pond Area – Groundwater

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

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

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

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

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

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

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

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

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

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

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

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

Mine Water

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Surface Water

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

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

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

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

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

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

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

Quality Control Samples

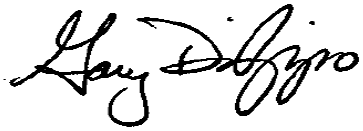
Field and trip blanks were collected in accordance with the established protocols for quality assurance purposes. Tables 11A – 11D summarize the Groundwater/Surface Water Quality Control Sample Data and Table 12 summarizes the Data Validation Qualifiers. As shown in Tables 11A-11D, the trip blanks did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

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

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

Sincerely,

CORNERSTONE ENGINEERING GROUP, LLC



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Enclosure

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Table 1
Summary Data for Monitoring Wells

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

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

Table 1
Summary Data for Monitoring Wells

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

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

Table 1
Summary Data for Monitoring Wells

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

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

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

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

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

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

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

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

Table 3
Summary of Well Performance and Sample Collection
August 2015

Ringwood Mines/Landfill Superfund Site

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

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

ZIST - Zone Isolation System Technology monitoring well

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

Table 3
Summary of Well Performance and Sample Collection
August 2015

Ringwood Mines/Landfill Superfund Site

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

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

ZIST - Zone Isolation System Technology monitoring well

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

NS - Not sampled

Table 3
Summary of Well Performance and Sample Collection
August 2015

Ringwood Mines/Landfill Superfund Site

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

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

ZIST - Zone Isolation System Technology monitoring well

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

NS - Not sampled

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

Ringwood Mines/Landfill Superfund Site

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

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

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

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

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

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

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

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

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

Ringwood Mines/Landfill Superfund Site

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

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

Ringwood Mines/Landfill Superfund Site

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

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

Ringwood Mines/Landfill Superfund Site

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

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

Geochemical parameters reported at time of sampling.

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

Ringwood Mines/Landfill Superfund Site

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

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

Ringwood Mines/Landfill Superfund Site

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

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

Ringwood Mines/Landfill Superfund Site

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

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

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

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

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

Geochemical parameters reported at time of sampling.

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

Ringwood Mines/Landfill Superfund Site

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

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

Geochemical parameters reported at time of sampling.

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

Ringwood Mines/Landfill Superfund Site

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

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

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

Ringwood Mines/Landfill Superfund Site

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

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

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

Ringwood Mines/Landfill Superfund Site

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

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

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

Ringwood Mines/Landfill Superfund Site

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

** Dry

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

See Table 12 for validation qualifiers.

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

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

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

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

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

See Table 12 for validation qualifiers.

Result exceeds NJGWQS (NJAC 7:9C M

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

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

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

Parameter	**Result Unit**	RW- 6	RW- 6A	RW- 7	RW-11 S (236-241)	RW-11D (262-267)	RW-13 (71-91)	RW-13 (100-120)	RW-13 (150-170)	SC-1
Selenium	mg/l	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0010 J	0.0031	0.012	0.0006 U	0.0006 U
Selenium, Dissolved	mg/l	0.00066 J	0.0006 U	0.0006 U	0.0006 U	0.003 U	0.0030 B	0.011	0.0006 U	0.0006 U
Silver	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Silver, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0025 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l	6.8	8.2	4.2	3.1	210	19.4	246	9.9	4.1
Sodium, Dissolved	mg/l	6.5	8.1	3.9	3	209	20.3	210	153	3.5
Thallium	mg/l	0.0002 U	0.0002 U	0.00037 J	0.0002 U	0.0002 U	0.00020 J	0.00090 J	0.0002 U	0.0002 U
Thallium, Dissolved	mg/l	0.0002 U	0.0002 U	0.00064 J	0.0002 U	0.001 U	0.0002 U	0.00089 J	0.0002 U	0.0002 U
Vanadium	mg/l	0.0027 B	0.0033 B	0.0019 UB	0.0024 B	0.0024 B	0.0067 B	0.039 B	0.0020 B	0.0039 B
Vanadium, Dissolved	mg/l	0.0014 UB	0.0011 UB	0.0018 UB	0.0011 UB	0.0013 UB	0.0022 B	0.035 B	0.0020 B	0.0013 UB
Zinc	mg/l	0.01 U	0.01 U	0.01 U F	0.015 J	0.01 U	0.01 U	0.01 U	0.01 U	0.034
Zinc, Dissolved	mg/l	0.01 U	0.01 U	0.01 U	0.013 J	0.05 U	0.01 U	0.01 U	0.01 U	0.010 J
Wet Chemistry										
Bicarbonate Alkalinity as Ca	mg/l	284	326	40.8	49	5 U	146	5 U	96.4	217
Total Alkalinity as CaCO3	mg/l	284	326	40.8	49	1300	146	547	96.4	217
Chloride	mg/l	5.97	2	1.86	0.82 J	40.5	37.7	25.9	3.66	1.45
Sulfate	mg/l	1.41	0.6 U	10.8	7.21	40.6	63	50.7	16.5	0.6 U
See Table 12 for validation qualifiers.										
Result exceeds NJGWQS (NJAC 7:9C M										

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

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

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

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

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

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

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

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

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

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

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

Parameter	Result Unit	OB-25	OB-27	OB-30B	OB-30C	RW- 3 (77-87)	RW- 3 DS (155-160)	RW- 3 DS (155-160) - Dup-04-082515	RW- 3DD (175-180)
Benzene, 1,2,3,5-tetramethyl- - TIC	ug/l								
Benzene, 1,2,4,5-tetramethyl- - TIC	ug/l		8.4 NJ						
Benzene, 1,3-diethyl- - TIC	ug/l		10 NJ						
Benzene, 1,4-diethyl- - TIC	ug/l								
Benzene, 1-ethyl-2,4-dimethyl- - TIC	ug/l		7.3 NJ						
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	ug/l								
Benzene, 2-ethyl-1,4-dimethyl- - TIC	ug/l								
Benzene, 4-ethyl-1,2-dimethyl- - TIC	ug/l								
Cyclopentane, methyl- - TIC	ug/l								
Cysteic acid - TIC	ug/l						8.6 NJ		
Ethyl acrylate - TIC	ug/l								
Hexane - TIC	ug/l								
Indan, 1-methyl- - TIC	ug/l		6.0 NJ						
Indane - TIC	ug/l								
Isobutyl alcohol - TIC	ug/l						38 J	47 J	
Naphthalene - TIC	ug/l		5.9						
n-Butylbenzene - TIC	ug/l								
N-Propylbenzene - TIC	ug/l								
Propene, hexafluoro- - TIC	ug/l								
Silanol, dimethyl(1,1,2-trimethylpropyl) - TIC	ug/l	3.2 NJ							
tert-Butyldimethylsilanol - TIC	ug/l								
Tetrahydrofuran - TIC	ug/l								1.1 J
Total Alkanes - TIC	ug/l								
Total Alkanes TIC - TIC	ug/l								
Unknown - TIC	ug/l		4.6 NJ						
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C March 2014)
*Samples re-analyzed with non-detectable results. Both original and non-detect results shown.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Parameter	Result Unit	OB-13-DUP-02	RW- 2 (279-289)	RW- 2 (452-462)	RW- 8 (163-173)	RW- 8 (204-214)	RW- 9 (206-216)	RW- 9A (85-95)	RW-10 (120-130)
Tridecanoic acid - TIC	ug/l						5.6 NJ		
Unknown - TIC	ug/l			6.7 J					
PCBs									
None									
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

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

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

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

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

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

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

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

Parameter	Result Unit	NJGWQS mg/l	OB- 2	OB- 3	OB- 4	OB- 5	OB- 6	OB- 7	OB-12	OB-13	OB-13-DUP-02	RW- 2 (279-289)
Selenium, Dissolved	mg/l	0.04	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.00069 J
Silver	mg/l	0.04	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Silver, Dissolved	mg/l	0.04	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l	50	3.6	3.5 B	109	32.1 B	15.8	10.2	3.2 B	3.2 B	3.2 B	134
Sodium, Dissolved	mg/l	50	3.9	3.4	97.2	32.7	15.7	11.1	3.2	3	3.4	125
Thallium	mg/l	0.002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Thallium, Dissolved	mg/l	0.002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00059 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Vanadium	mg/l		0.0015 UB	0.0011 UB	0.0017 UB	0.0012 UB	0.0015 UB	0.0017 UB	0.0011 UB	0.0014 UB	0.0015 UB	0.018 B
Vanadium, Dissolved	mg/l		0.0018 UB	0.00082 UB	0.00096 UB	0.00084 UB	0.0012 UB	0.0019 UB	0.00096 UB	0.0013 UB	0.0013 UB	0.017 B
Zinc	mg/l	2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc, Dissolved	mg/l	2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Wet Chemistry												
Bicarbonate Alkalinity as	mg/l		37.6	47.7	204	318	82.5	297	17.2	24.4	22.9	5 U
Total Alkalinity as $CaCO_3$	mg/l		37.6	47.7	204	318	82.5	297	17.2	24.4	22.9	104
Chloride	mg/l	250	2.18	1.66	238	67	14.7	8.06	1.22	2.75	2.73	194
Sulfate	mg/l	250	10.1	8.5	3.15	4.49	21.8	7.39	15.3	7.65	7.34	176

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

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

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

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

Parameter	Result Unit	RW- 2 (452-462)	RW- 8 (163-173)	RW- 8 (204-214)	RW- 9 (206-216)	RW- 9A (85-95)	RW-10 (120-130)	RW-10 (185-195)	RW-10A (51-61)	RW-10A (75-85)	SC-2
Selenium, Dissolved	mg/l	0.0049 J	0.0006 U	0.0006 U	NA	0.0006 U	0.0027	0.00081 J	0.0006 U	0.0006 U	0.0006 U
Silver	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Silver, Dissolved	mg/l	0.0025 U	0.0005 U	0.0005 U	NA	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l	371	52.4	87.5	162	5.9	65.8	39	27.6	5	7.3
Sodium, Dissolved	mg/l	382	48.9	92.5	NA	6.4	64.9	41.5	16.7	5.1	64.1
Thallium	mg/l	0.00051 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Thallium, Dissolved	mg/l	0.0029 J	0.0002 U	0.0002 U	NA	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Vanadium	mg/l	0.040 B	0.0012 UB	0.0014 UB	0.0015 UB	0.0014 UB	0.0088 B	0.0024 B	0.0017 UB	0.0014 UB	0.0015 UB
Vanadium, Dissolved	mg/l	0.040 B	0.0013 UB	0.0011 UB	NA	0.00098 UB	0.0071 B	0.0028 B	0.00090 UB	0.0015 UB	0.0016 UB
Zinc	mg/l	0.01 U	0.01 U	0.022 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.013 J	0.03
Zinc, Dissolved	mg/l	0.05 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	0.01 U	0.049	0.01 U	0.01 U
Wet Chemistry											
Bicarbonate Alkalinity as	mg/l	5 U	72.8	216	NA	76.6	5 U	5 U	207	147	208
Total Alkalinity as CaCO3	mg/l	127	72.8	216	NA	76.6	121	69.5	207	147	208
Chloride	mg/l	601 J	11.1	55.2	NA	1.52	8.09	4.61	2.61	3.02	1.93
Sulfate	mg/l	167 J	162	149	NA	14.2	134	123	36.2	34.1	27.4

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Parameter	Result Unit	NJGWQS mg/l	OB-10	OB-10-DUP-03	OB-29	RW-12 (55-65)	RW-12 (130-140)
Selenium, Dissolved	mg/l	0.04	0.0006 U	0.0006 U	0.0038	0.0088	0.0006 U
Silver	mg/l	0.04	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Silver, Dissolved	mg/l	0.04	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l	50	3.1	3.3	3.2	170	98.8
Sodium, Dissolved	mg/l	50	3.4	3.3	131	155 E	3.9
Thallium	mg/l	0.002	0.00024 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Thallium, Dissolved	mg/l	0.002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Vanadium	mg/l		0.0010 UB	0.0011 UB	0.0028 B	0.0068 B	0.015 B
Vanadium, Dissolved	mg/l		0.0016 UB	0.0016 UB	0.015 B	0.0048 B	0.0022 B
Zinc	mg/l	2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc, Dissolved	mg/l	2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Wet Chemistry							
Bicarbonate Alkalinity as	mg/l		43.9	43.6	44.6	5 U	5 U
Total Alkalinity as $CaCO_3$	mg/l		43.9	43.6	44.6	101	159
Chloride	mg/l	250	3.43	3.39	3.22	47.2	21.5
Sulfate	mg/l	250	5.88	5.85	5.38	299	145
Total Alkalinity as $CaCO_3$	mg/l		43.9	43.6	44.6	101	159

See Table 12 for validation qualifiers.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Parameter	Result Unit	NJGWQS mg/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
Selenium	mg/l	0.04	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Selenium, Dissolved	mg/l	0.04	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Silver	mg/l	0.04	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Silver, Dissolved	mg/l	0.04	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l	50	85.7	79.6	79.8	82.7	2.8	4.7	29.6
Sodium, Dissolved	mg/l	50	90.4	83.2	77.3	87.2	2.7	4.8	30.9
Thallium	mg/l	0.002	0.00051 J	0.0002 U	0.0002 U	0.0002 U	0.00067 J	0.0002 U	0.0002 U
Thallium, Dissolved	mg/l	0.002	0.00060 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00030 J	0.0002 U
Vanadium	mg/l		0.0010 UB	0.0024 B	0.0028 B	0.0022 B	0.0016 UB	0.010 B	0.0050 B
Vanadium, Dissolved	mg/l		0.0017 UB	0.00095 UB	0.00095 UB	0.0010 UB	0.0017 UB	0.00084 UB	0.00089 UB
Zinc	mg/l	2	0.96	0.86	2.5	8.2	1.6	4	5.7
Zinc, Dissolved	mg/l	2	0.48	0.15	0.91	2.8	1.6	2.8	4.6
Wet Chemistry									
Bicarbonate Alkalinity as	mg/l		229	240	248	249	24	191	506
Total Alkalinity as $CaCO_3$	mg/l		229	240	248	249	24	191	506
Chloride	mg/l	250	191 J	175	172	183 J	1.13	1.76	11.2
Sulfate	mg/l	250	3.36	3.46	2.85	3.46	4.35	1.99	0.6 U

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Parameter	Result Unit	SW-NOB-02	SW-PAB-00	SW-PAB-01	SW-PAB-01A	SW-PAB-02	SW-PAB-03	SW-PAB-04	SW-PAB-04_DUP-04-081915	SW-PMB-01	SW-PMB-02
Potassium, Dissolved	mg/l	0.94 J	0.59 J	0.68 J	1.7	1.4	0.52 J	1.1	1.1	8.3	3.8
Selenium	mg/l	0.0006 U	0.0006 U	0.00074 J	0.00063 J	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.00062 UB	0.0006 U
Selenium, Dissolved	mg/l	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Silver	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Silver, Dissolved	mg/l	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Sodium	mg/l	3.3	4.5	3.5	4.5	5.4	7.1	20.9	12.1	61.7	56.3
Sodium, Dissolved	mg/l	12.6	4.2	3.2	3.6	5.3	6.4	6	5.7	64.3	51
Thallium	mg/l	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00033 J	0.0011 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Thallium, Dissolved	mg/l	0.0002 U	0.0002 U	0.0002 U	0.00020 J	0.00040 J	0.00088 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Vanadium	mg/l	0.0030 B	0.0020 B	0.0016 UB	0.0017 UB	0.0014 UB	0.0014 UB	0.0015 UB	0.0015 UB	0.0016 UB	0.0015 UB
Vanadium, Dissolved	mg/l	0.0020 B	0.0013 UB	0.00090 UB	0.00079 UB	0.00079 UB	0.00078 UB	0.0011 UB	0.0010 UB	0.00090 UB	0.0011 UB
Zinc	mg/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc, Dissolved	mg/l	0.01 U	0.01 U	0.01 U	0.01 U	0.023 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Wet Chemistry											
Bicarbonate Alkalinity as	mg/l	43.3	31.4	32.4	92.1	88.4	65.6	83	83	147	138
Total Alkalinity as $CaCO_3$	mg/l	43.3	31.4	32.4	92.1	88.4	65.6	83	83	147	138
Chloride	mg/l	1.42	1.01	1.07	1.75	3.88	8.42	6.41	6.11	112	87
Sulfate	mg/l	6.2	8.15	4.78	1.74	0.78 J	5.04	3.95	3.98	1.76	7.16

See Table 12 for validation qualifiers

Result exceeds NJGWQS (NJAC 7:9

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

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

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

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

See Table 12 for validation qualifiers.

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

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

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

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

Parameter	Result Unit	SW-MRB-01	SW-MRB-02	SW-MRB-03	SW-NOB-02	SW-PAB-00	SW-PAB-01	SW-PAB-01A	SW-PAB-02
Ethylbenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Ethylene Dibromide	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Freon-113	ug/l	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methyl acetate	ug/l	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ
Methyl tert-butyl ether	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Methylene Chloride	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Styrene	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	0.17 U	0.33 J	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
trans-1,2-Dichloroethene	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Xylenes, Total	ug/l	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Tentatively Identified Compounds (TICs)									
None									
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

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

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

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

Parameter	Result Unit	SW-PAB-03	SW-PAB-04	SW-PAB-04_DUP-04-081915	SW-PMB-01	SW-PMB-02
Ethylbenzene	ug/l	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Ethylene Dibromide	ug/l	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Freon-113	ug/l	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Isopropylbenzene	ug/l	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methyl acetate	ug/l	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ	0.58 UJ
Methyl tert-butyl ether	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylcyclohexane	ug/l	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Methylene Chloride	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Styrene	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Tetrachloroethene	ug/l	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Toluene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
trans-1,2-Dichloroethene	ug/l	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Trichloroethene	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Vinyl chloride	ug/l	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Xylenes, Total	ug/l	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Tentatively Identified Compounds (TICs)						
None						
See Table 12 for validation qualifiers.						
Result exceeds NJGWQS (NJAC 7:9C March 2014)						

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

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

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

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

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

Parameter	Result Unit	NJSWQS ug/l	PMP-Pond	SR-3 Pond	SR-3 Seep 1	SR-3 Seep 2	SW-03	SW-11	SW-MRB-00
Cholestan-3-ol, 4-methyl-, (3.beta.,4.al - TIC	ug/l		3.7 NJ						
Diethylene glycol dibenzoate - TIC	ug/l							8.1 NJ	
Diethyltoluamide - TIC	ug/l			3.3 NJ					17 NJ
Heptadecane - TIC	ug/l								
n-Hexadecanoic acid - TIC	ug/l				4.0 NJ	4.3 NJ			
Octadecanoic acid - TIC	ug/l			5.3 NJ	3.5 NJ	4.1 NJ			
Octaethylene glycol monododecyl ether - TIC	ug/l								
Oleic Acid - TIC	ug/l		5.0 NJ					6.9 NJ	
Oxirane, heptadecyl- - TIC	ug/l								
Tetradecanoic acid - TIC	ug/l		4.2 NJ						
Tridecanoic acid - TIC	ug/l			5.8 NJ					
See Table 12 for validation qualifiers.									
Result exceeds NJGWQS (NJAC 7:9C March 2014)									

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

See Table 12 for validation qualifiers.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Table 12
CADENA Data Validation Qualifiers
August 2015

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

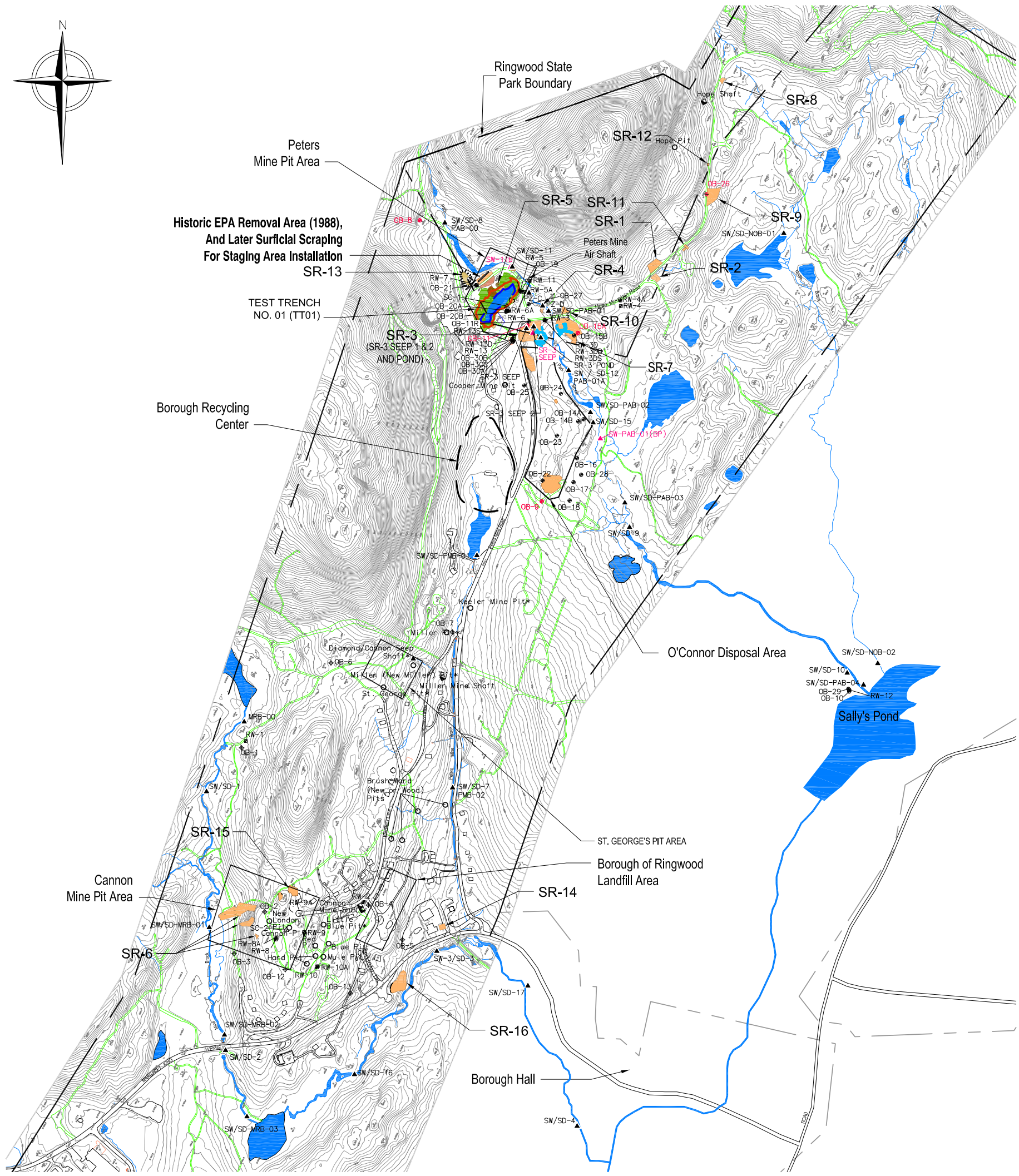
Notes:
Results for 1,4-dioxane, benzene, lead, and arsenic are presented in this table. See Summary tables for full results.
Results are presented in µg/L unless otherwise noted.
[1] NJGWQS, New Jersey Groundwater Quality Standard NJAC7:9C March 2014
Shaded values exceed NJGWQS.
< = not detected
B (inorganic)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

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

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

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

ATTACHMENT A
FIGURES



NOTES:

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

LEGEND

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

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

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

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

cornerstone environmental

PREPARED BY:
CORNERSTONE ENGINEERING GROUP, LLC

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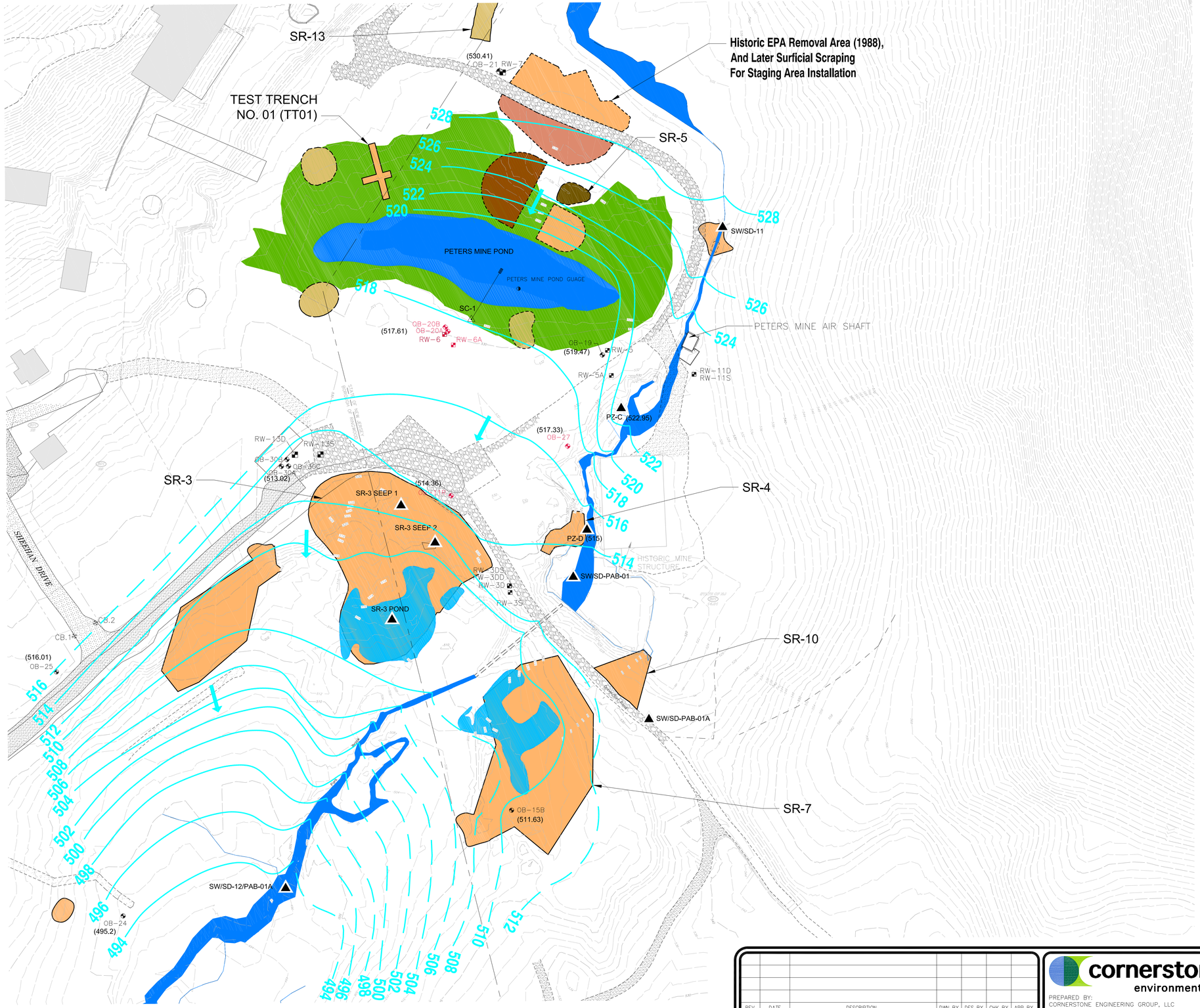
RINGWOOD MINES/LANDFILL SUPERFUND SITE
RINGWOOD, NEW JERSEY
ANNUAL GROUNDWATER SURFACE WATER & MINE WATER SAMPLING REPORT

SAMPLING LOCATION PLAN

SHEET NO. 1

PROJECT NO. 150648

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\PMCR01-F-01-SITE PLAN TOPO.DWG Layout: FIGURE 03 User: larisa.chizhov Nov 23, 2015 - 11:37am



LEGEND:

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

NOTES:

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

0 60' 120'
GRAPHIC SCALE

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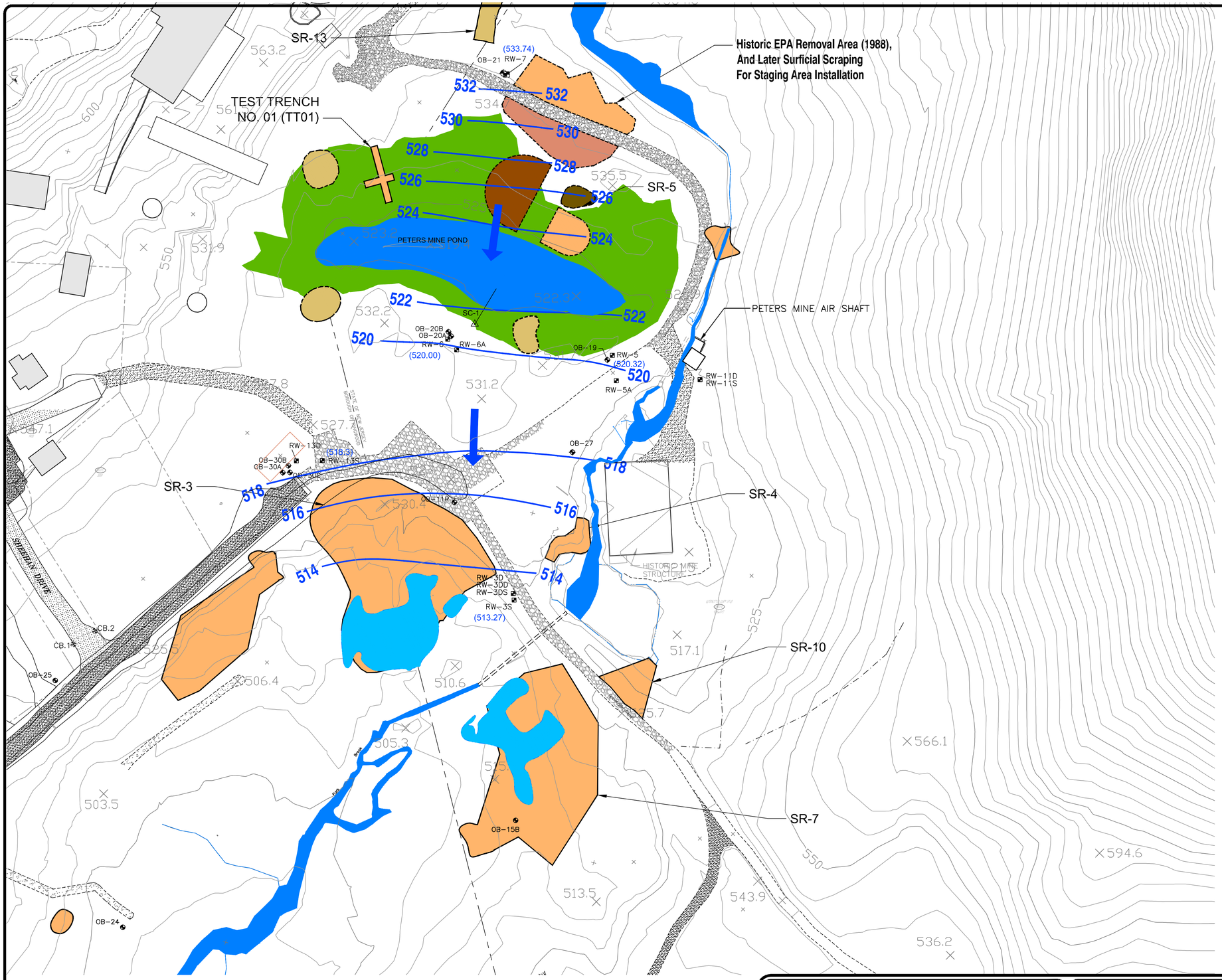
RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER,
AND MINE WATER MONITORING REPORT

OVERBURDEN WELL LOCATIONS AND GROUNDWATER CONTOURS IN THE PETERS MINE PIT - AUGUST 2015

SHEET NO. **2**

PROJECT NO. 140802

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



0 60' 120'
GRAPHIC SCALE

LEGEND:

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

NOTES:

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

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

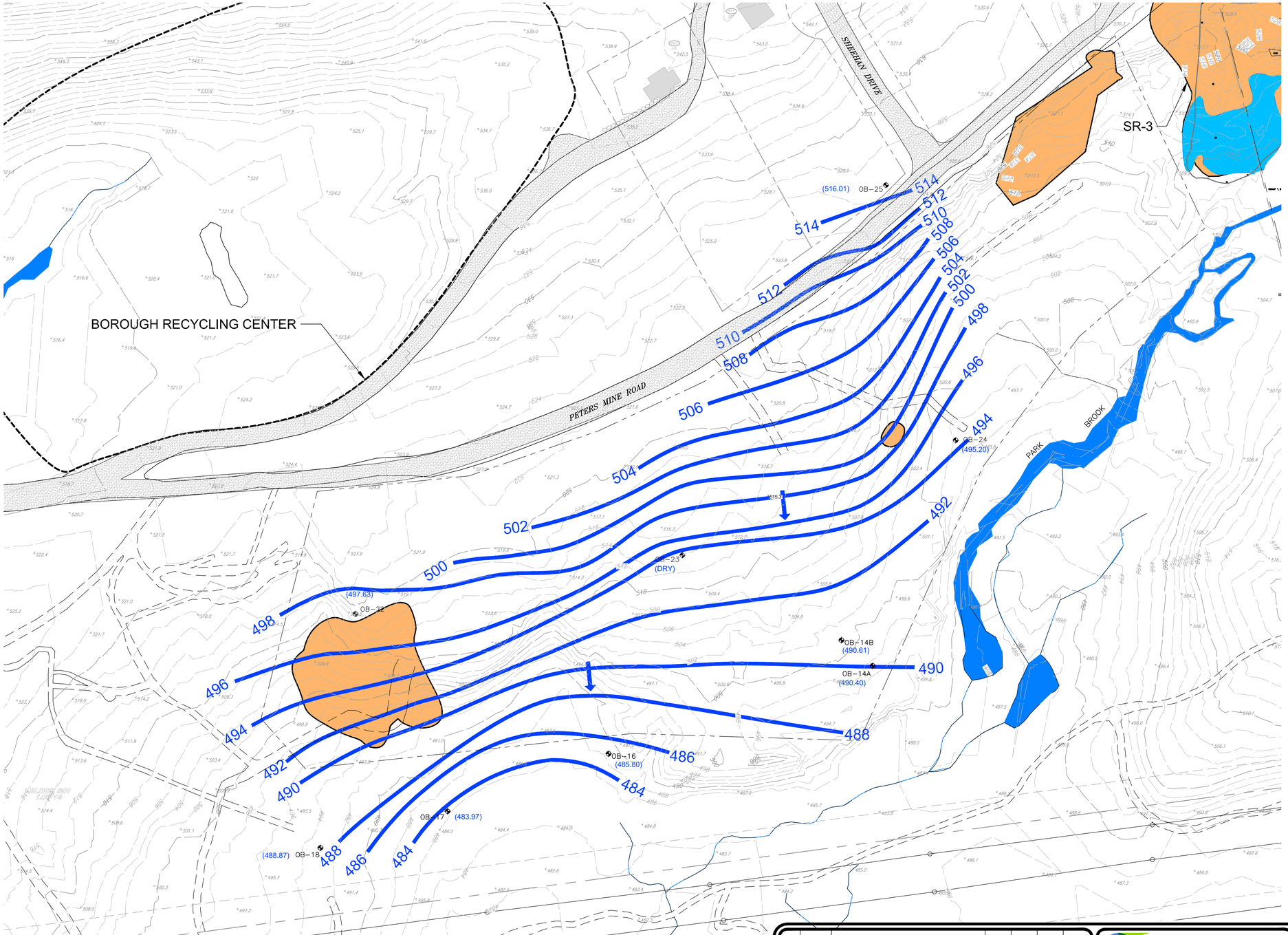
WELL LOCATIONS AND SHALLOW BEDROCK GROUNDWATER CONTOURS IN THE PETERS MINE PIT - AUGUST 2015

SHEET NO.
3

PROJECT NO.
140802

1" 1/2" 0" 1"

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 – RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMCR01-S-F-03-SHALLOW BEDROCK PETERS MINE PIT.dwg Layout: 11D User: larlea.chichow Nov 17, 2015 – 12:12pm



0 30 60 90
SCALE IN FEET

LEGEND:

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

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

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

SHEET NO. **4**

PROJECT NO. 140802

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMCR01-S-F-04-OW OCDA.dwg Layout: 15B User: tarlos.shishov Nov 17, 2015 - 12:22pm

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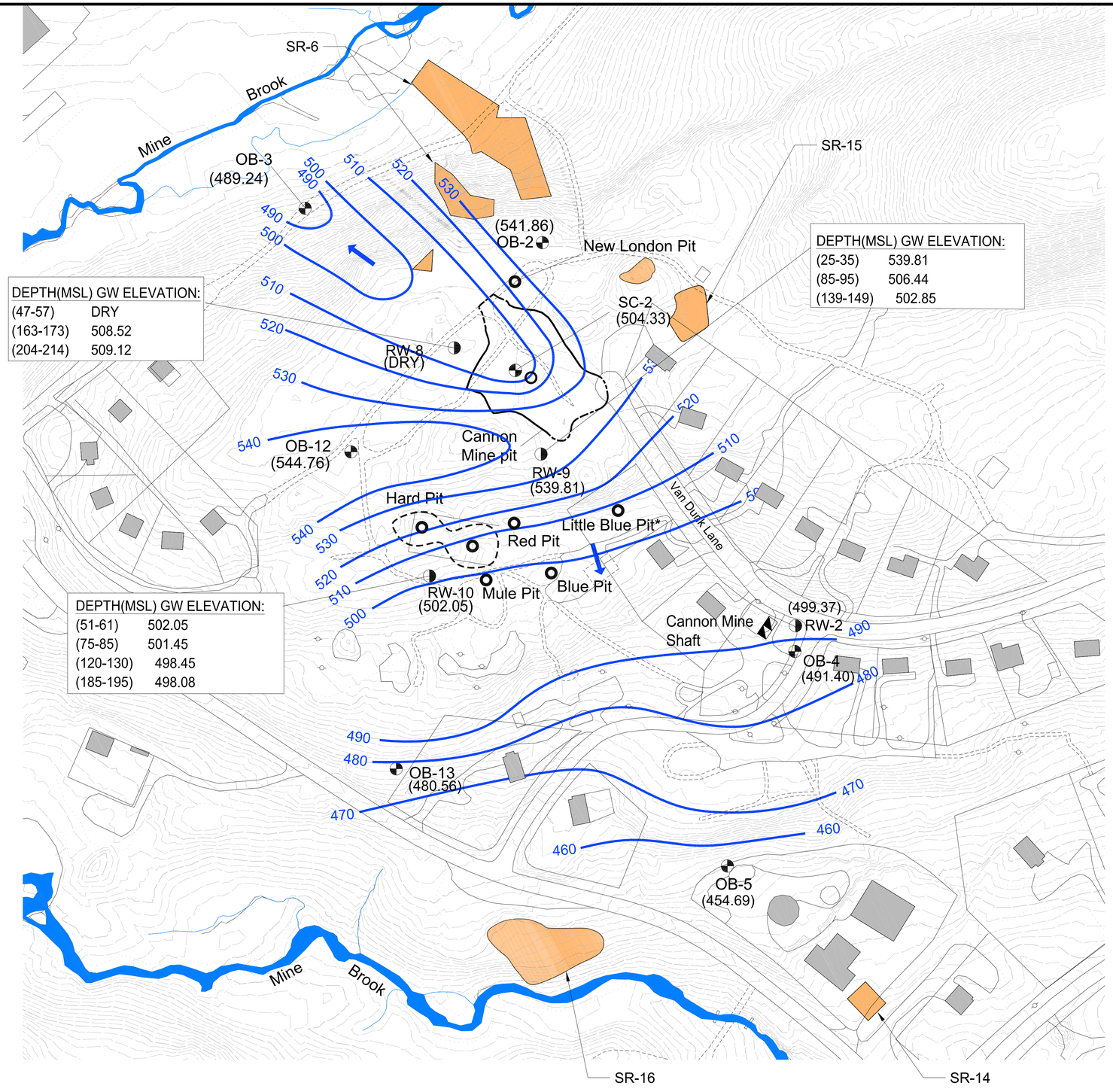

0 100 200 300
SCALE IN FEET

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

LEGEND

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

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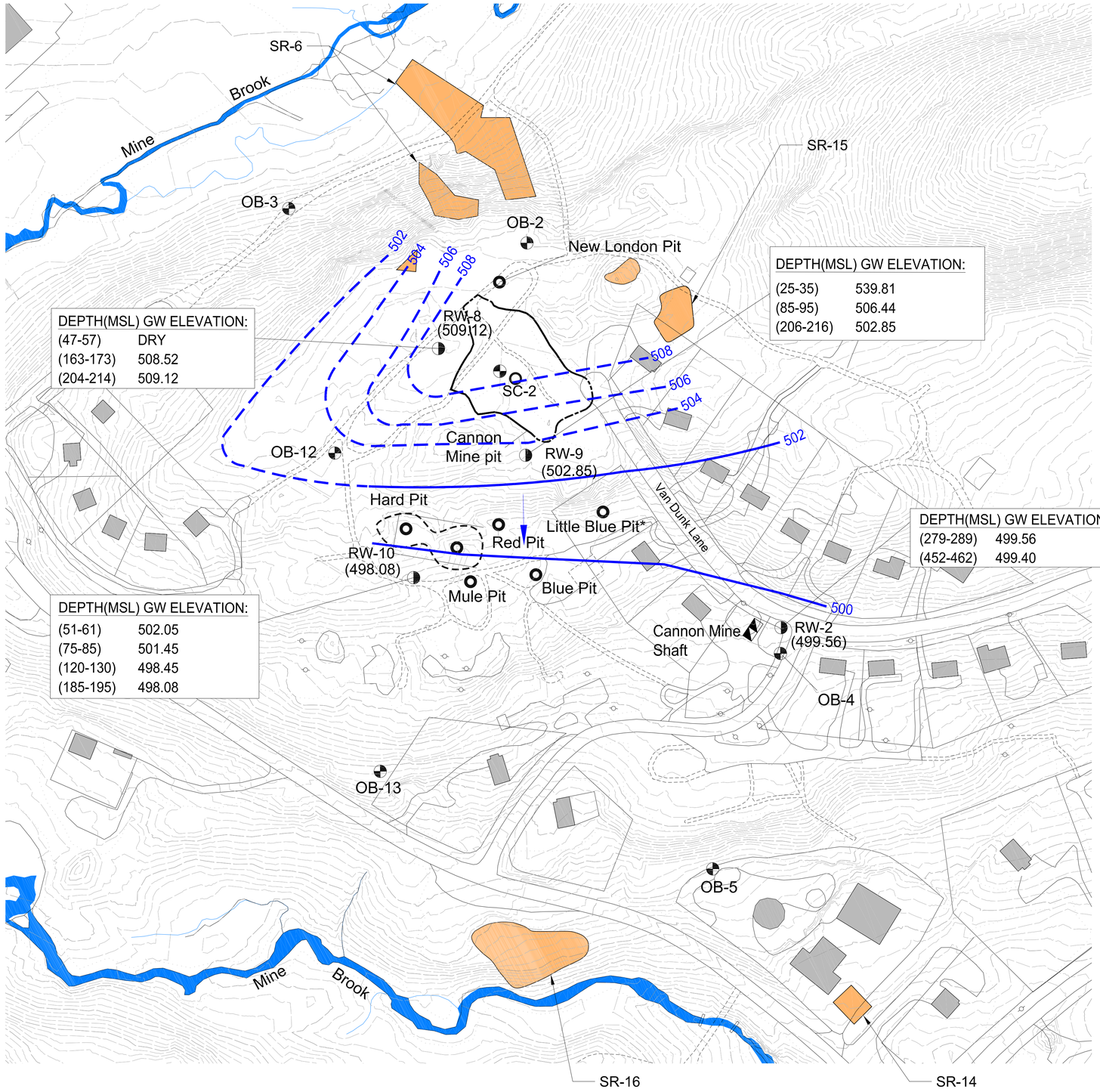
RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT

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

SHEET NO.
5

PROJECT NO.
140802

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\TMCR01-S-F-05-SHALLOW BEDROCK CMP.dwg Layout: 13B User: larisa.ritchey Nov 23, 2015 - 1:27pm



0 100 200 300
SCALE IN FEET

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

LEGEND

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

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

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

SHEET NO.
6

PROJECT NO.
140802

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 – RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMCR01-S-F-06-DEEP BEDROCK CMP.dwg Layout: 130 User: larisa.chizhov Nov 23, 2015 – 1:28pm

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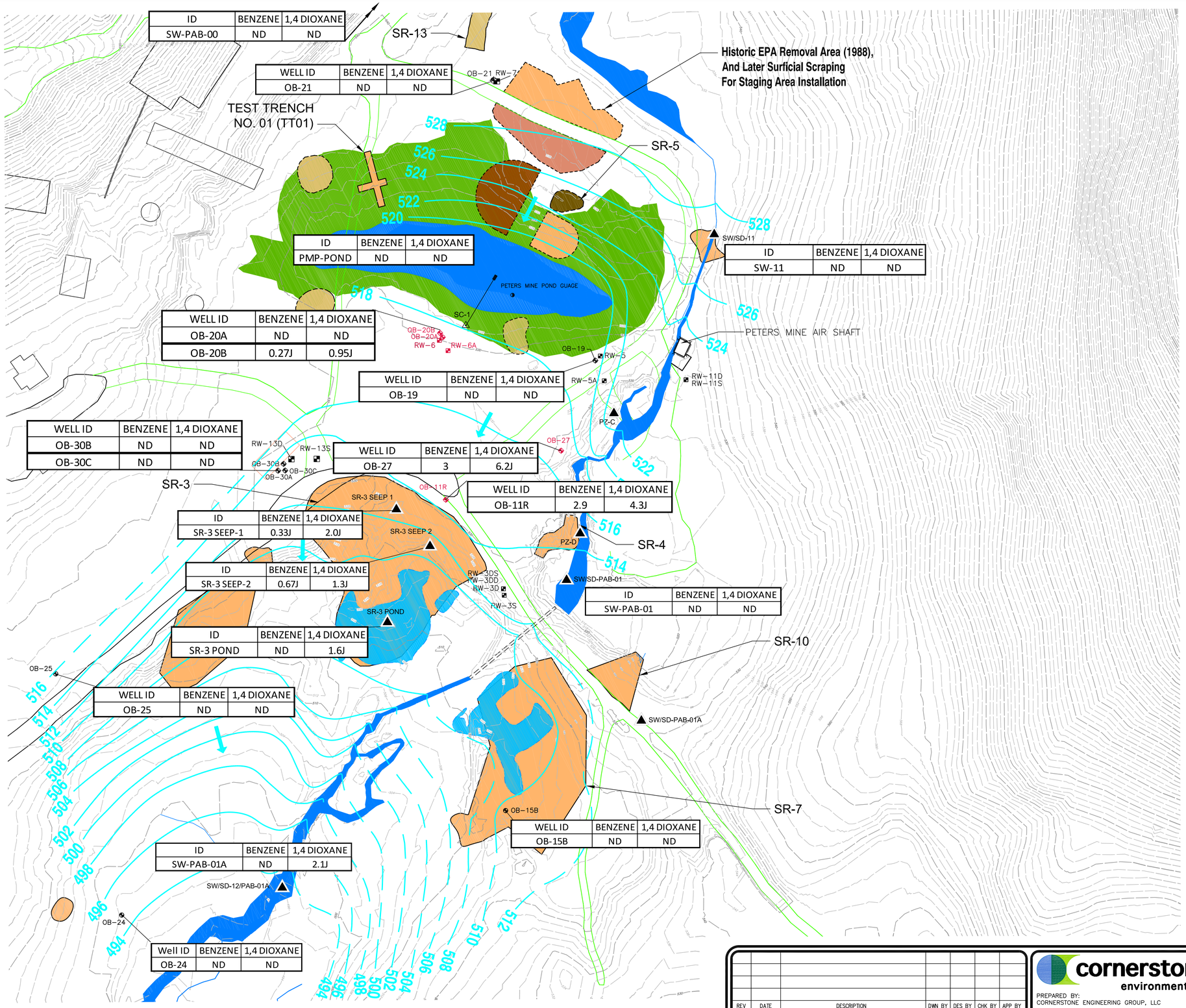

ID	BENZENE	1,4 DIOXANE
SW-PAB-00	ND	ND

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

ID	BENZENE	1,4 DIOXANE
PMP-POND	ND	ND

ID	BENZENE	1,4 DIOXANE
SW-11	ND	ND

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

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

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

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

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

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

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

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

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

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

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

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

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

LEGEND:

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

NOTES:

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

0 60' 120'
GRAPHIC SCALE

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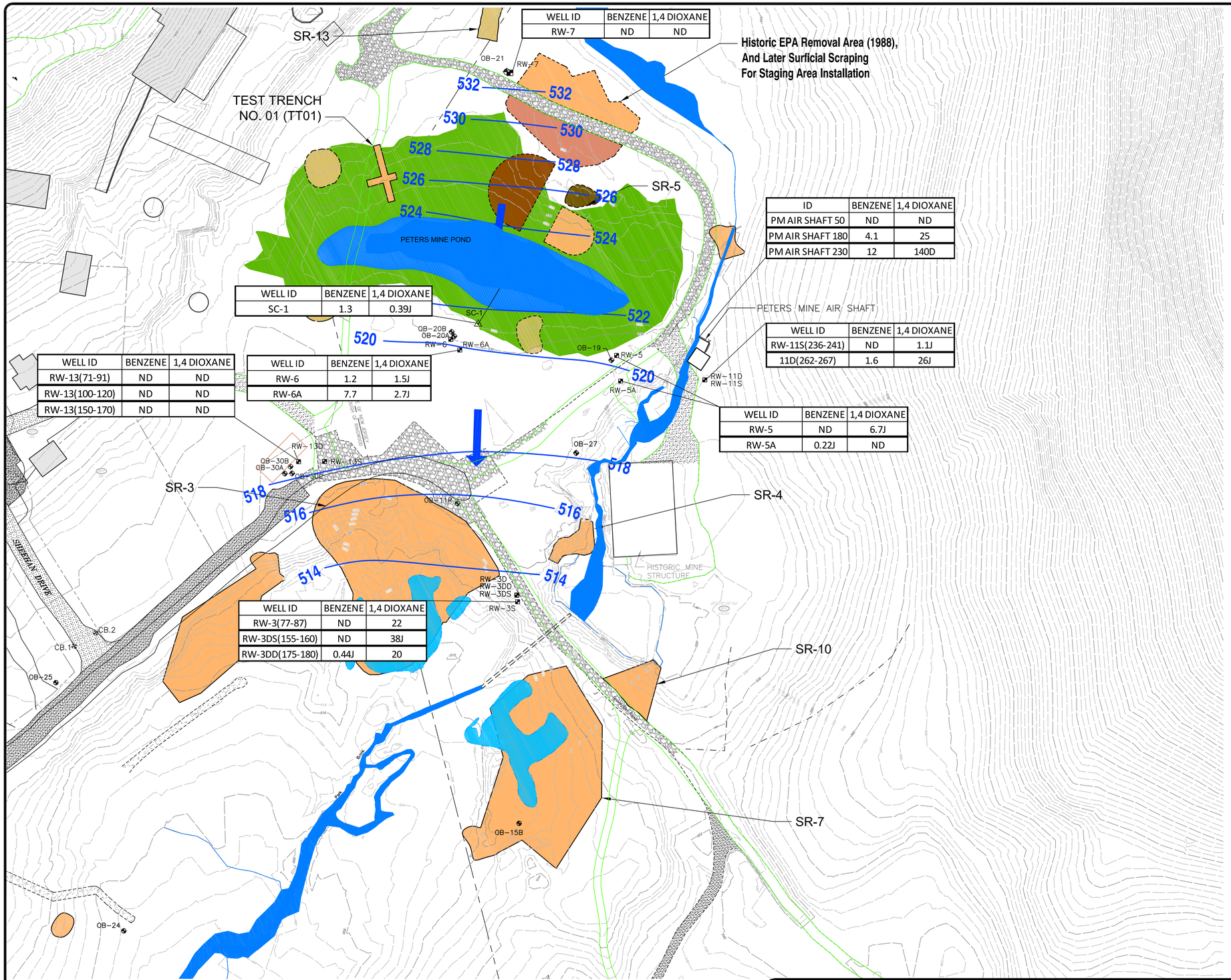
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT

OVERBURDEN AND SURFACE BENZENE AND 1,4 DIOXANE CONCENTRATIONS IN THE PETERS MINE PIT - AUGUST 2015

SHEET NO. **7**

PROJECT NO. 140802

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



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

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

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

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

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

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

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

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

0 60' 120'
GRAPHIC SCALE

LEGEND:

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

NOTES:

1. BEDROCK CONTOURS BASED ON INTERVAL 75 TO 125 FEET BELOW GROUND SURFACE (405–440 FT MSL).
2. RW–5A AND RW–6A NOT USED TO CONTOUR BEDROCK.
3. RW–3S REPRESENTS THE 77–87 FOOT INTERVAL AND RW–3D IS A MULTIPORT WELL.
4. RW–13S REPRESENTS THE 71–91 FOOT INTERVAL AND RW–13D IS A MULTIPORT WELL.
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RINGWOOD MINES/LANDFILL SITE
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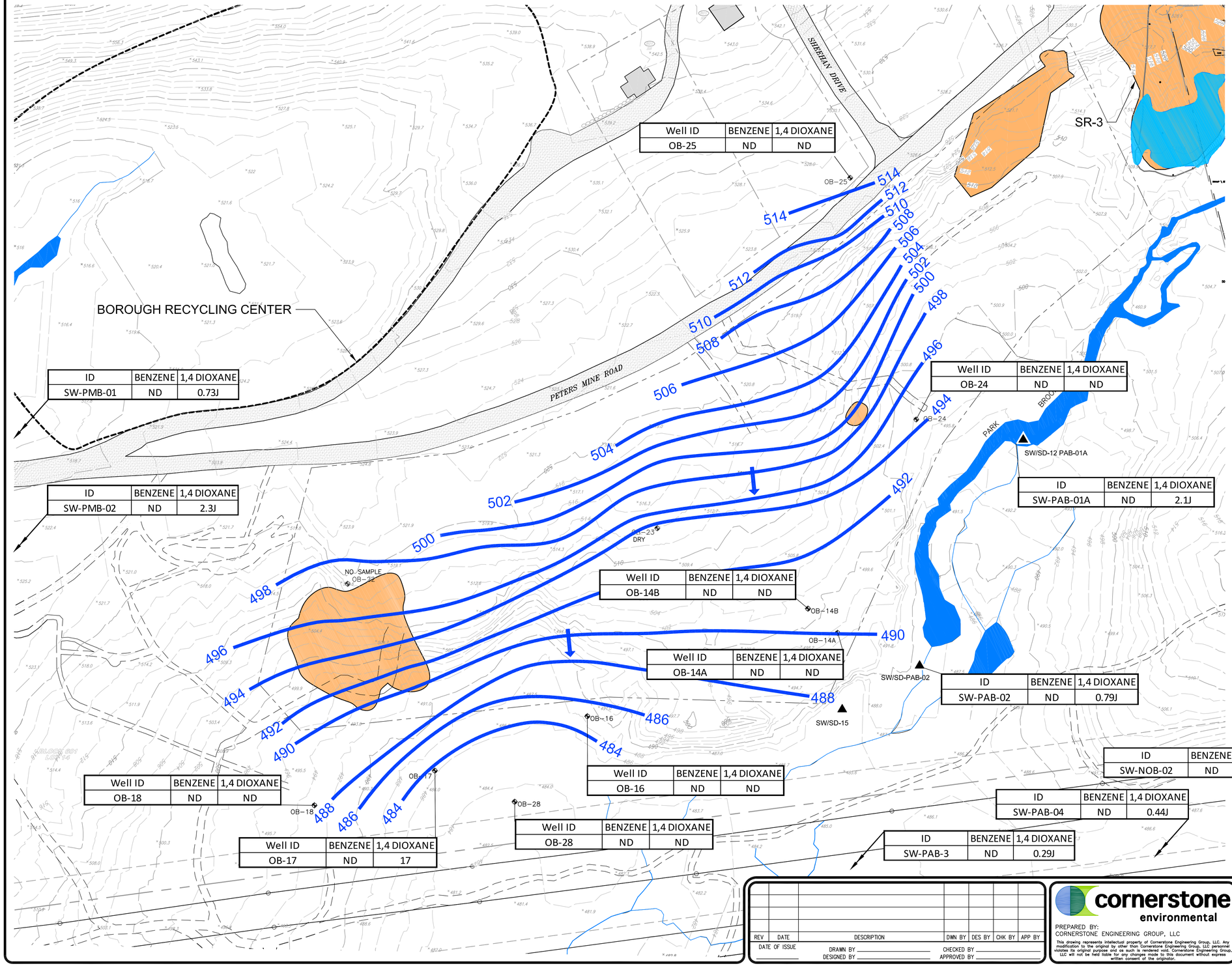
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT

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

SHEET NO.
8

PROJECT NO.
140802

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMC801-S-F-08-BENZENE DIOXANE SHALLOW PETERS MINE PIT.dwg Layout: 11D User: larisa.shizhov Nov 23, 2015 - 10:40am



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

0 30 60 90
SCALE IN FEET

LEGEND:

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

NOTES:

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

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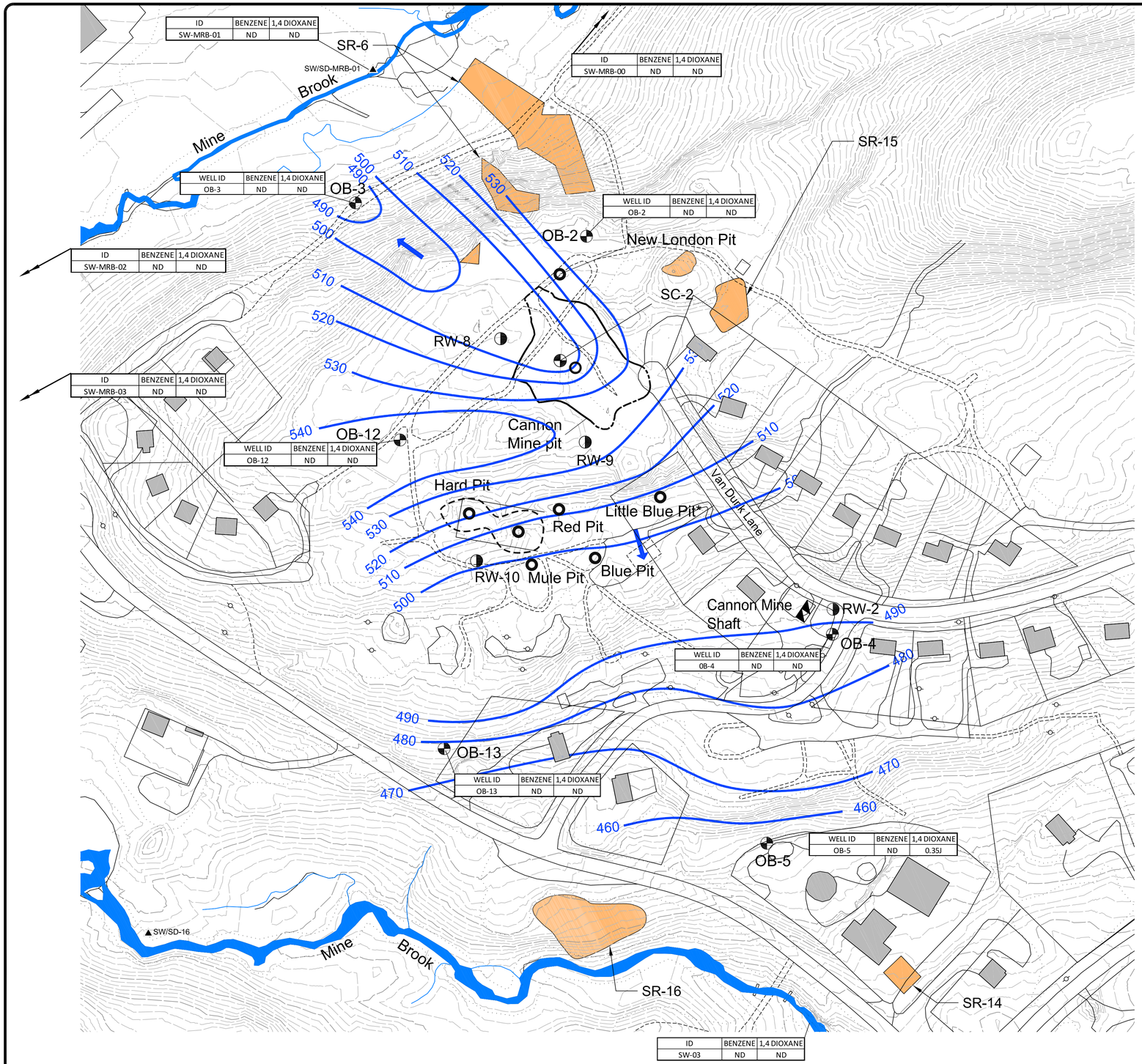
RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER,
AND MINE WATER MONITORING REPORT

BENZENE AND 1,4 DIOXANE CONCENTRATIONS IN THE FORMER OCDA - AUGUST 2015

SHEET NO. **9**

PROJECT NO. 140802

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMCR01-5-F-09-BENZENE DIOXINE GW OCDA.dwg Layout: 15B User: larisa.chizhov Nov 25, 2015 - 8:16am



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

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

WELL ID	BENZENE	1,4 DIOXANE
OB-3	ND	ND

WELL ID	BENZENE	1,4 DIOXANE
OB-2	ND	ND

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

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

WELL ID	BENZENE	1,4 DIOXANE
OB-12	ND	ND

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

WELL ID	BENZENE	1,4 DIOXANE
OB-13	ND	ND

WELL ID	BENZENE	1,4 DIOXANE
OB-5	ND	0.35J

ID	BENZENE	1,4 DIOXANE
SW-03	ND	ND

0 100 200 300
SCALE IN FEET

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

LEGEND

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

NOTES:

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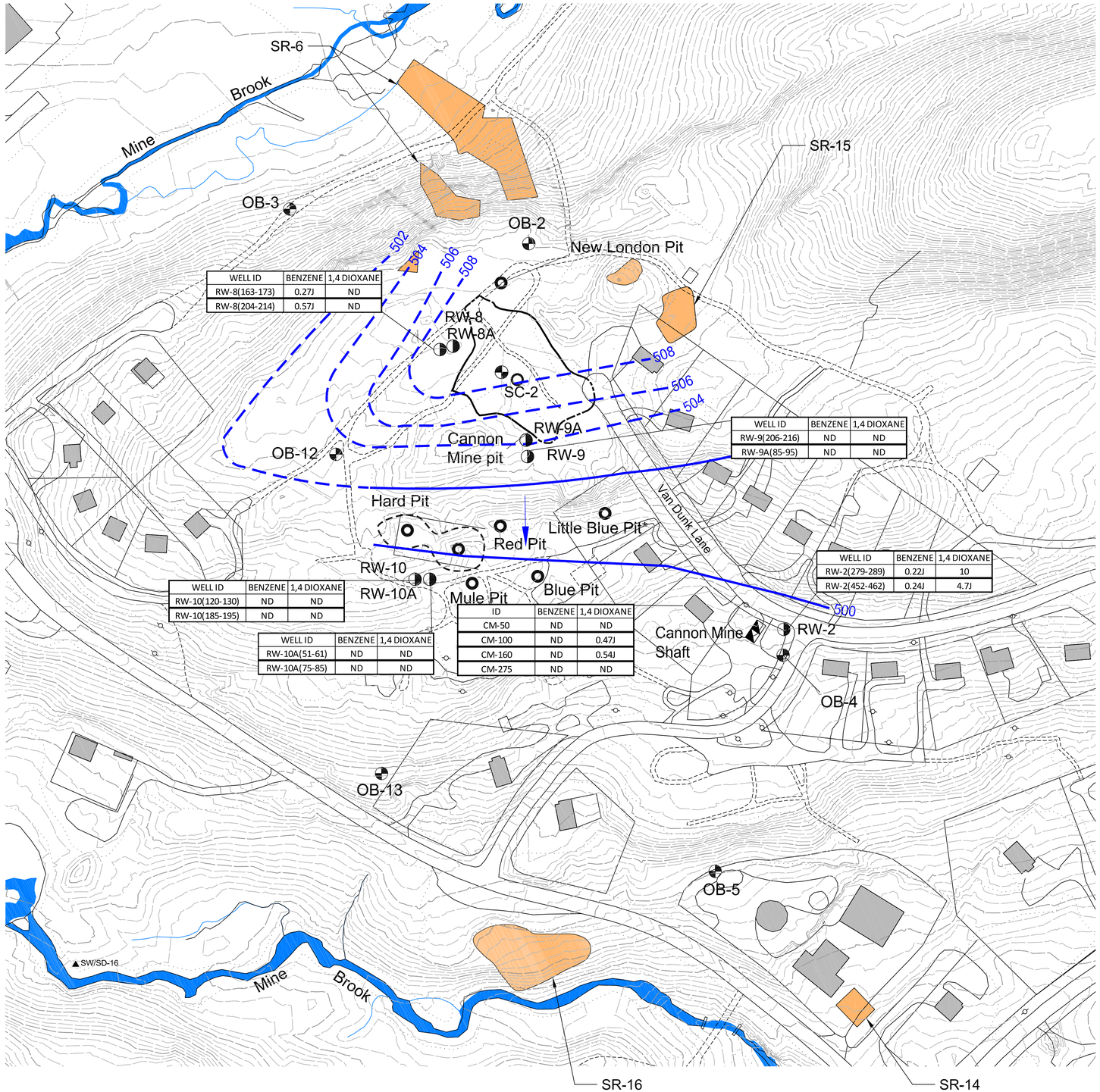
RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT

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

SHEET NO. **10**

PROJECT NO. 140802

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



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

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

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

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

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

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

0 100 200 300
SCALE IN FEET

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

LEGEND

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

NOTES:

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

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

SHEET NO.
11

PROJECT NO.
140802

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1" 1/2" 0" 1"

ATTACHMENT B
FIELD SAMPLING DATA SHEETS (ON COMPACT DISC)

ATTACHMENT C
LABORATORY REPORTS (ON COMPACT DISC)

ATTACHMENT D
DATA VALIDATION REPORTS (ON COMPACT DISC)

ATTACHMENT E

USEPA SPLIT SAMPLE DATA REPORT (ON COMPACT DISC)