

June 10, 2019 DEP Update

- NJDEP has issued three Notices of Violation (NOV) to Weldon as a result of the February 2019 sediment discharge from a broken transfer pipe. Two NOVs were for violating the Water Pollution Control Act and one was for violating the Freshwater Wetlands Protection Act. These violations represent the beginning of an enforcement process that will hold Weldon fully accountable for the environmental violations and impacts associated with the February 2019 incident.
- In response to the aforementioned NOVs, Weldon has constructed a silt berm prior to the Weldon tributary (tributary) entering Lake Hopatcong to minimize the passage of silt from the tributary to Lake Hopatcong. NJDEP has also placed an oil boom at the same location as a precaution should any of the Weldon stream cleanup work reconstitute any residual oil remaining from the Valiant oil spill. To that end, NJDEP has required that Weldon coordinate any of their cleanup efforts that are within the zone of the Valiant oil spill with the Valiant Licensed Site Remediation Professional overseeing that matter.
- Weldon, with NJDEP oversight, has also removed approximately 13 cubic yards of stone fines from the area between the transfer pipe that leaked and the tributary in order to eliminate the possibility of this material migrating into the tributary during rain events. Weldon also provided staked hay bales and silt fencing at this location to ensure that any residual fines would not enter the tributary.
- NJDEP subsequently advised Weldon that additional cleanup of the tributary and filtration was necessary. As a result, Weldon submitted a plan to add two additional silt fences with hay bales in the tributary in order to provide additional filtration and collection points. NJDEP approved this plan on June 7th, 2019, and the work is expected to be completed on or about June 11th, 2019.
- Weldon has also submitted a separate plan to NJDEP to remove rock fines/sediment from certain portions of the tributary. The specifics of this plan are currently being evaluated by NJDEP. However, NJDEP does anticipate a timely approval of a plan that will require the removal of additional rock fines/sediment from the tributary.
- Weldon has provided NJDEP with chemical analysis of the rock fine materials as well as sediment sample results from the area of the silt berm. These results have been forwarded to the Lake Hopatcong Commission under separate cover.
- NJDEP will be conducting a fish survey of the tributary on Wednesday June 12th to further assess the ecological impacts of the incident on the tributary. NJDEP also intends to conduct a similar fish survey in the affected area of Lake Hopatcong.
- NJDEP would like to remind local residents that they may report environmental incidents/complaints regarding this matter, including dust complaints, to the NJDEP 24-Hour Environmental Hotline at 877-WARNDEP.



SOIL/SEDIMENT SAMPLING

Weldon Materials Quarry Lake Hopatcong, New Jersey

On Monday May 13, 2019, Boswell Engineering (Boswell), collected three (3) soil/sediment samples at the Weldon Materials property in Lake Hopatcong, New Jersey (the “Site” or “Quarry”). The grab samples were analyzed for Full Target Compound List (TCL) organics, including volatile and semi-volatile organic compounds (VOC/SVOC), pesticides, and polychlorinated biphenyls (PCB); Target Analyte List (TAL) Metals, Extractable Petroleum Hydrocarbons (EPH), hexavalent chromium, and cyanide. The samples were taken at the following locations:

- RM: Sample RM was collected from the stone fines pile at the top of the quarry;
- SP: Sample SP was collected from a sample point in the area where the transfer pipe leaked; and
- BB: Sample BB was obtained from before the silt curtain installed in the stream immediately north of Prospect Point Road.

Results

Tables summarizing the sampling results are attached hereto. All sample results were well below the New Jersey Department of Environmental Protection’s (NJDEP) Residential and Non-Residential Direct Contact Soil Remediation Standards (RDSCRS/NRDCRS). With the exception of three (3) background metals, aluminum, manganese and beryllium, all sample results were also below the State’s Impact to Groundwater Soil Remediation Standards (IGWSRS). Three (3) samples exceeded the IGWSRS for manganese; two (2) for aluminum (SP & BB) and one (1) for beryllium (BB).

The metal IGWSRS exceedances are background concentrations for the area. The aluminum concentrations in SP and BB, 9,640 parts per million (ppm) and 7,910 ppm, respectively, are well below the New Jersey Highlands Physiographic Province Median Concentration of 16,800 ppm as presented in *Ambient Levels of Metals in New Jersey Soils* (Sanders, Paul, May 2003). Likewise, the manganese concentration of 122 ppm detected in the stone fines sample (RM) is below the median background concentration of 407 ppm and the manganese concentration of 476 ppm in the SP sample is well below the 90th percentile concentration of 837 ppm. Similarly, the beryllium concentration in sample BB (0.78 ppm) is nearly equal to the background concentration of 0.73 ppm but below the study’s 90th percentile concentration of 1.08 ppm.

In addition, NJDEP’s IGWSRS are based upon NJDEP’s Groundwater Quality Standards (GWQS). The GWQS for aluminum and manganese are secondary, and not based on health considerations, but aesthetic considerations such as taste, odor and appearance. Accordingly, no further evaluation of these samples is

required by the Department's applicable requirements as their presence is not the result of a discharge of these specific metals.

While beryllium's GWQS is not secondary, the laboratory performed the appropriate Synthetic Precipitate Leaching Procedure (SPLP) analysis on sample BB. The laboratory did not report a result above their Reporting Limit (RL), which is well below the NJDEP's Default Leachate Criteria of 20 parts per billion (ppb).

Accordingly, based upon the sample results, the stone fines meet the NJDEP's most stringent Soil Remediation Standards.

WELDON QUARRY SOIL SAMPLING

SAMPLE ID:	RM				SP				BB							
LAB ID:	L1920071-03				L1920071-01				L1920071-02							
SAMPLE LOCATION:	STONE FINES FROM PILE				SAMPLE POINT/TRANSFER PIPE				BEFORE BOOM							
COLLECTION DATE:	5/13/2019				5/13/2019				5/13/2019							
SAMPLE MATRIX:	SOIL				SOIL				SOIL							
	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	NJ-IGWS (mg/kg)	NJ-NRDCSRS (mg/kg)	NJ-RDCSRS (mg/kg)	
VOLATILE ORGANICS BY EPA 5035																
1,2-Dibromo-3-chloropropane	ND		0.00041	0.00014	ND		0.0048	0.0016	ND		0.021	0.007	0.005	0.2	0.08	
1,4-Dioxane	ND		0.011	0.0048	ND		0.13	0.056	ND		0.56	0.25	-	-	-	
1,2-Dibromoethane	ND		0.00014	0.00003	ND		0.0016	0.00045	ND		0.007	0.002	0.005	0.04	0.008	
Methylene chloride	ND		0.00069	0.00032	ND		0.008	0.0037	ND		0.035	0.016	0.01	230	46	
1,1-Dichloroethane	ND		0.00014	0.00002	ND		0.0016	0.00023	ND		0.007	0.001	0.2	24	8	
Chloroform	ND		0.00021	0.00001	ND		0.0024	0.00022	ND		0.01	0.00098	0.4	2	0.6	
Carbon tetrachloride	ND		0.00014	0.00003	ND		0.0016	0.00037	ND		0.007	0.0016	0.005	4	2	
1,2-Dichloropropane	ND		0.00014	0.00001	ND		0.0016	0.0002	ND		0.007	0.00088	0.005	5	2	
Dibromochloromethane	ND		0.00014	0.00001	ND		0.0016	0.00022	ND		0.007	0.00098	0.005	8	3	
1,1,2-Trichloroethane	ND		0.00014	0.00003	ND		0.0016	0.00043	ND		0.007	0.0019	0.02	6	2	
Tetrachloroethene	ND		0.00006	0.00002	ND		0.0008	0.00031	ND		0.0035	0.0014	0.005	1500	43	
Chlorobenzene	ND		0.00006	0.00001	ND		0.0008	0.0002	ND		0.0035	0.00089	0.6	7400	510	
Trichlorofluoromethane	ND		0.00055	0.00009	ND		0.0064	0.0011	ND		0.028	0.0049	34	340000	23000	
1,2-Dichloroethane	ND		0.00014	0.00003	ND		0.0016	0.00041	ND		0.007	0.0018	0.005	3	0.9	
1,1,1-Trichloroethane	ND		0.00006	0.00002	ND		0.0008	0.00027	ND		0.0035	0.0012	0.3	-	160000	
Bromodichloromethane	ND		0.00006	0.00001	ND		0.0008	0.00017	ND		0.0035	0.00076	0.005	3	1	
trans-1,3-Dichloropropene	ND		0.00014	0.00003	ND		0.0016	0.00044	ND		0.007	0.0019	0.005	7	2	
cis-1,3-Dichloropropene	ND		0.00006	0.00002	ND		0.0008	0.00025	ND		0.0035	0.0011	0.005	7	2	
1,3-Dichloropropene, Total	ND		0.00006	0.00002	ND		0.0008	0.00025	ND		0.0035	0.0011	0.005	-	-	
Bromoform	ND		0.00055	0.00003	ND		0.0064	0.00039	ND		0.028	0.0017	0.03	280	81	
1,1,2,2-Tetrachloroethane	ND		0.00006	0.00002	ND		0.0008	0.00027	ND		0.0035	0.0012	0.007	3	1	
Benzene	ND		0.00006	0.00002	ND		0.0008	0.00027	ND		0.0035	0.0012	0.005	5	2	
Toluene	ND		0.00014	0.00007	ND		0.0016	0.00087	ND		0.007	0.0038	7	91000	6300	
Ethylbenzene	ND		0.00014	0.00001	ND		0.0016	0.00023	ND		0.007	0.00099	13	110000	7800	
Chloromethane	ND		0.00055	0.00013	ND		0.0064	0.0015	ND		0.028	0.0065	-	12	4	
Bromomethane	ND		0.00028	0.00008	ND		0.0032	0.00093	ND		0.014	0.0041	0.04	59	25	
Vinyl chloride	ND		0.00014	0.00004	ND		0.0016	0.00054	ND		0.007	0.0023	0.005	2	0.7	
Chloroethane	ND		0.00028	0.00006	ND		0.0032	0.00072	ND		0.014	0.0032	-	1100	220	
1,1-Dichloroethene	ND		0.00014	0.00003	ND		0.0016	0.00038	ND		0.007	0.0017	0.008	150	11	
trans-1,2-Dichloroethene	ND		0.00021	0.00001	ND		0.0024	0.00022	ND		0.01	0.00096	0.6	720	300	
Trichloroethene	ND		0.00006	0.00001	ND		0.0008	0.00022	ND		0.0035	0.00096	0.01	10	3	
1,2-Dichlorobenzene	ND		0.00028	0.00002	ND		0.0032	0.00023	ND		0.014	0.001	17	59000	5300	
1,3-Dichlorobenzene	ND		0.00028	0.00002	ND		0.0032	0.00024	ND		0.014	0.001	19	59000	5300	
1,4-Dichlorobenzene	ND		0.00028	0.00002	ND		0.0032	0.00027	ND		0.014	0.0012	2	13	5	
Methyl tert butyl ether	0.00012	J	0.00028	0.00002	0.00087	J	0.0032	0.00032	0.0045	J	0.014	0.0014	0.2	320	110	
p/m-Xylene	ND		0.00028	0.00007	ND		0.0032	0.0009	ND		0.014	0.0039	19	170000	12000	
o-Xylene	ND		0.00014	0.00004	ND		0.0016	0.00047	ND		0.007	0.002	19	170000	12000	
Xylenes, Total	ND		0.00014	0.00004	ND		0.0016	0.00047	ND		0.007	0.002	19	170000	12000	
cis-1,2-Dichloroethene	ND		0.00014	0.00002	ND		0.0016	0.00028	ND		0.007	0.0012	0.3	560	230	
1,2-Dichloroethene, Total	ND		0.00014	0.00001	ND		0.0016	0.00022	ND		0.007	0.00096	-	-	-	
Styrene	ND		0.00014	0.00002	ND		0.0016	0.00031	ND		0.007	0.0014	3	260	90	
Dichlorodifluoromethane	ND		0.00014	0.00013	ND		0.0016	0.0015	ND		0.007	0.0064	39	230000	490	
Acetone	0.041		0.0014	0.00066	0.1		0.016	0.0077	1.2		0.07	0.034	19	-	70000	
Carbon disulfide	ND		0.0014	0.00063	ND		0.016	0.0073	ND		0.07	0.032	6	110000	7800	
2-Butanone	0.0022		0.0014	0.00031	ND		0.016	0.0036	0.12		0.07	0.016	0.9	44000	3100	
4-Methyl-2-pentanone	ND		0.0014	0.00018	ND		0.016	0.002	ND		0.07	0.009	-	-	-	
2-Hexanone	ND		0.0014	0.00016	ND		0.016	0.0019	ND		0.07	0.0083	-	-	-	
Bromochloromethane	ND		0.00028	0.00002	ND		0.0032	0.00033	ND		0.014	0.0014	-	-	-	
Isopropylbenzene	ND		0.00014	0.00001	ND		0.0016	0.00017	ND		0.007	0.00076	-	-	-	
1,2,3-Trichlorobenzene	ND		0.00028	0.00004	ND		0.0032	0.00052	ND		0.014	0.0022	-	-	-	
1,2,4-Trichlorobenzene	ND		0.00028	0.00003	ND		0.0032	0.00044	ND		0.014	0.0019	0.7	820	73	
Methyl Acetate	0.014		0.00055	0.00013	0.015		0.0064	0.0015	0.07		0.028	0.0067	22	-	78000	
Cyclohexane	ND		0.0014	0.00007	ND		0.016	0.00087	ND		0.07	0.0038	-	-	-	
Methyl cyclohexane	ND		0.00055	0.00008	ND		0.0064	0.00097	ND		0.028	0.0042	-	-	-	
Freon-113	ND		0.00055	0.00009	ND		0.0064	0.0011	ND		0.028	0.0048	-	-	-	
Total VOCs	0.05732	-	-	-	0.11587	-	-	-	1.3945	-	-	-	-	-	-	
Total TIC Compounds	0.004	J	0	0	0.011	J	0	0	0.243	J	0	0	-	-	-	
SEMIVOLATILE ORGANICS BY GC/MS																
Acenaphthene	ND		0.14	0.015	ND		0.19	0.02	ND		0.57	0.06	110	37000	3400	
2-Chloronaphthalene	ND		0.18	0.017	ND		0.24	0.023	ND		0.71	0.068	-	-	-	
Hexachlorobenzene	ND		0.051	0.017	ND		0.07	0.023	ND		0.2	0.068	0.2	1	0.3	
Bis(2-chloroethyl)ether	ND		0.064	0.021	ND		0.087	0.029	ND		0.26	0.086	0.2	2	0.4	
3,3'-Dichlorobenzidine	ND		0.14	0.046	ND		0.19	0.062	ND		0.55	0.18	0.2	4	1	
2,4-Dinitrotoluene	ND		0.089	0.03	ND		0.12	0.04	ND		0.35	0.12	-	3	0.7	
2,6-Dinitrotoluene	ND		0.071	0.024	ND		0.096	0.032	ND		0.28	0.094	-	3	0.7	
Fluoranthene	ND		0.11	0.02	0.083	J	0.14	0.028	0.12	J	0.43	0.082	1300	24000	2300	
4-Chlorophenyl phenyl ether	ND		0.18	0.015	ND		0.24	0.02	ND		0.71	0.06	-	-	-	
Bis(2-chloroisopropyl)ether	ND		0.21	0.02	ND		0.29	0.028	ND		0.86	0.082	5	67	23	
Bis(2-chloroethoxy)methane	ND		0.19	0.017	ND		0.26	0.023	ND		0.77	0.068	-	-	-	
Hexachlorobutadiene	ND		0.066	0.022	ND		0.09	0.03	ND		0.26	0.088	0.9	25	6	
Hexachlorocyclopentadiene	ND		0.51	0.11	ND		0.69	0.15	ND		2	0.45	320	110	45	
Hexachloroethane	ND		0.087	0.029	ND		0.12	0.039	ND		0.35	0.12	0.2	48	12	
Isophorone	ND		0.06	0.02	ND		0.081	0.027	ND		0.24	0.08	0.2	2000	510	
Naphthalene	ND		0.18	0.022	ND		0.24	0.03	ND		0.71	0.087	25	17	6	
Nitrobenzene	ND		0.079	0.026	ND		0.11	0.036	ND		0.32	0.1	0.2	14	5	
NDPA/DPA	ND		0.044	0.014	ND		0.06	0.02	ND		0.18	0.058	0.4	390	99	
n-Nitrosodi-n-propylamine	ND		0.045	0.015	ND		0.061	0.02	ND		0.18	0.06	0.2	0.3	0.2	
Bis(2-ethylhexyl)phthalate	ND		0.18	0.018	0.04	J	0.24	0.025	ND		0.71	0.074	1200	140	35	
Butyl benzyl phthalate	ND		0.18	0.024	ND		0.24	0.032								

WELDON QUARRY SOIL SAMPLING

SAMPLE ID:	RM				SP				BB						
LAB ID:	L1920071-03				L1920071-01				L1920071-02						
SAMPLE LOCATION:	STONE FINES FROM PILE				SAMPLE POINT/TRANSFER PIPE				BEFORE BOOM						
COLLECTION DATE:	5/13/2019				5/13/2019				5/13/2019						
SAMPLE MATRIX:	SOIL				SOIL				SOIL						
	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	NJ-IGWS (mg/kg)	NJ-NRDCSRS (mg/kg)	NJ-RDCSRS (mg/kg)
PESTICIDES BY GC															
Delta-BHC	ND		0.0017	0.00033	ND		0.00228	0.00044	ND		0.00691	0.00135			
Lindane	ND		0.00071	0.00031	ND		0.00094	0.00042	ND		0.00288	0.00129	0.002	2	0.4
Alpha-BHC	ND		0.00071	0.0002	ND		0.00094	0.00026	ND		0.00288	0.00081	0.002	0.5	0.1
Beta-BHC	ND		0.0017	0.00064	ND		0.00228	0.00086	ND		0.00691	0.00262	0.002	2	0.4
Heptachlor	ND		0.00085	0.00038	ND		0.00114	0.00051	ND		0.00346	0.00155	0.5	0.7	0.1
Aldrin	ND		0.0017	0.0006	ND		0.00228	0.0008	ND		0.00691	0.00243	0.2	0.2	0.04
Heptachlor epoxide	ND		0.0032	0.00095	ND		0.00427	0.00128	ND		0.013	0.00389	0.01	0.3	0.07
Endrin	ND		0.00071	0.00029	ND		0.00094	0.00038	ND		0.00288	0.00118	1	340	23
Endrin aldehyde	ND		0.00213	0.00074	ND		0.00284	0.00099	ND		0.00864	0.00302	-	-	-
Endrin ketone	ND		0.0017	0.00043	ND		0.00228	0.00058	ND		0.00691	0.00178	-	-	-
Dieldrin	ND		0.00106	0.00053	ND		0.00142	0.00071	ND		0.00432	0.00216	0.003	0.2	0.04
4,4'-DDE	ND		0.0017	0.00039	ND		0.00228	0.00052	0.00362	JP	0.00691	0.0016	18	9	2
4,4'-DDD	ND		0.0017	0.0006	ND		0.00228	0.00081	ND		0.00691	0.00246	4	13	3
4,4'-DDT	ND		0.0032	0.00137	ND		0.00427	0.00183	ND		0.013	0.00556	11	8	2
Endosulfan I	ND		0.0017	0.0004	ND		0.00228	0.00053	ND		0.00691	0.00163	4	6800	470
Endosulfan II	ND		0.0017	0.00057	ND		0.00228	0.00076	ND		0.00691	0.00231	4	6800	470
Endosulfan sulfate	ND		0.00071	0.00033	ND		0.00094	0.00045	ND		0.00288	0.00137	2	6800	470
Methoxychlor	ND		0.0032	0.00099	ND		0.00427	0.00133	ND		0.013	0.00403	160	5700	390
Toxaphene	ND		0.032	0.00895	ND		0.0427	0.0119	ND		0.13	0.0363	0.3	3	0.6
Chlordane	ND		0.0138	0.00564	ND		0.0185	0.00754	ND		0.0561	0.0229	0.05	1	0.2
cis-Chlordane	ND		0.00213	0.00059	ND		0.00284	0.00079	ND		0.00864	0.00241	0.05	1	0.2
trans-Chlordane	ND		0.00213	0.00056	ND		0.00284	0.00075	0.00357	JIP	0.00864	0.00228	0.05	1	0.2
POLYCHLORINATED BIPHENYLS BY GC															
Aroclor 1016	ND		0.0352	0.00312	ND		0.0486	0.00432	ND		0.142	0.0126	0.2	1	0.2
Aroclor 1221	ND		0.0352	0.00352	ND		0.0486	0.00487	ND		0.142	0.0142	0.2	1	0.2
Aroclor 1232	ND		0.0352	0.00745	ND		0.0486	0.0103	ND		0.142	0.0301	0.2	1	0.2
Aroclor 1242	ND		0.0352	0.00474	ND		0.0486	0.00655	ND		0.142	0.0191	0.2	1	0.2
Aroclor 1248	ND		0.0352	0.00527	ND		0.0486	0.00729	ND		0.142	0.0213	0.2	1	0.2
Aroclor 1254	ND		0.0352	0.00385	ND		0.0486	0.00532	ND		0.142	0.0155	0.2	1	0.2
Aroclor 1260	ND		0.0352	0.0065	ND		0.0486	0.00898	ND		0.142	0.0262	0.2	1	0.2
Aroclor 1262	ND		0.0352	0.00446	ND		0.0486	0.00617	ND		0.142	0.018	0.2	1	0.2
Aroclor 1268	ND		0.0352	0.00364	ND		0.0486	0.00504	ND		0.142	0.0147	0.2	1	0.2
PCBs, Total	ND		0.0352	0.00312	ND		0.0486	0.00432	ND		0.142	0.0126	0.2	1	0.2
NJ EXTRACTABLE PETROLEUM HYDROCARBONS (TOTAL)															
Total EPH	ND		25.4	25.4	209		34.8	34.8	640		102	102	-	5300 *	8000 *
TOTAL METALS															
Aluminum, Total	1370		8.24	2.22	9640		11.1	2.99	7910		32.7	8.83	6000		78000
Antimony, Total	ND		4.12	0.313	ND		5.54	0.421	ND		16.3	1.24	6	450	31
Arsenic, Total	1.1		0.824	0.171	1.63		1.11	0.23	3.53		3.27	0.68	19	19	19
Barium, Total	29.1		0.824	0.143	129		1.11	0.193	90.9		3.27	0.669	2100	59000	16000
Beryllium, Total	0.124	J	0.412	0.027	0.542	J	0.554	0.037	0.784	J	1.63	0.108	0.7	140	16
Cadmium, Total	ND		0.824	0.081	ND		1.11	0.108	ND		3.27	0.32	2	78	78
Calcium, Total	3040		8.24	2.88	8680		11.1	3.88	8970		32.7	11.4	-	-	-
Chromium, Total	2.67		0.824	0.079	12.7		1.11	0.108	11		3.27	0.314	-	-	-
Cobalt, Total	1.94		1.65	0.137	12.3		2.21	0.184	10.8		6.54	0.543	90	590	1600
Copper, Total	4.14		0.824	0.212	26.5		1.11	0.286	43.8		3.27	0.843	11000	45000	3100
Iron, Total	8670		4.12	0.744	28600		5.54	1	21400		16.3	2.95	-	-	-
Lead, Total	0.742	J	4.12	0.221	4.37	J	5.54	0.297	22.8		16.3	0.876	90	800	400
Magnesium, Total	801		8.24	1.27	6390		11.1	1.7	3020		32.7	5.03	-	-	-
Manganese, Total	122		0.824	0.131	476		1.11	0.176	1020		3.27	0.52	65	5900	11000
Mercury, Total	ND		0.068	0.014	ND		0.093	0.02	ND		0.273	0.058	0.1	65	23
Nickel, Total	0.824	J	2.06	0.199	11.4		2.77	0.268	17.7		8.17	0.791	48	23000	1600
Potassium, Total	833		206	11.9	4090		277	15.9	1470		817	47.1	-	-	-
Selenium, Total	ND		1.65	0.212	ND		2.21	0.286	1.67	J	6.54	0.843	11	5700	390
Silver, Total	ND		0.824	0.233	ND		1.11	0.313	ND		3.27	0.925	1	5700	390
Sodium, Total	282		165	2.6	685		221	3.49	586	J	654	10.3	-	-	-
Thallium, Total	ND		1.65	0.26	ND		2.21	0.349	ND		6.54	1.03	3	-	-
Vanadium, Total	3.58		0.824	0.167	23		1.11	0.225	21.7		3.27	0.664	-	1100	78
Zinc, Total	10.4		4.12	0.241	72.1		5.54	0.324	135		16.3	0.958	930	110000	23000
NJ HEXAVALENT CHROMIUM															
Chromium, Hexavalent	ND		0.871	0.174	ND		1.18	0.236	ND		3.48	0.696	-	-	-
GENERAL CHEMISTRY															
Solids, Total	91.8		0.1	NA	67.9		0.1	NA	23		0.1	NA	-	-	-
Cyanide, Total	ND		1	0.22	ND		1.4	0.3	ND		4.2	0.89	20	680	47
pH	9.1		0	NA	7.8		0	NA	7.4		0	NA	-	-	-
Oxidation/Reduction Potential	190		0	NA	170		0	NA	130		0	NA	-	-	-

* = EPH Soil Remediation Criterion/Residual Product Limit
 = Result exceeds NJDEP Impact to Groundwater Soil Screening Level
 Q= Qualifier
 J = Estimated Concentration <RL but >MDL
 RL = Laboratory Reporting Limit
 MDL = Laboratory Method Detection Limit
 ND = Not Detected

NJ-IGWS: NJ - New Jersey Impact to Groundwater Soil Screening Levels (IGWSSL) Criteria per November 2013 Guidance Regulation (Version 2.0).
 NJ-NRDCSRS: NJ - New Jersey 2017 Non-Residential Direct Contact Soil Remediation Standards Criteria per Soil Remediation Standards, last amended September 18, 2017.
 NJ-RDCSRS: NJ - New Jersey 2017 Residential Direct Contact Soil Remediation Standards Criteria per Soil Remediation Standards, last amended September 18, 2017.

SPLP ANALYTICAL RESULTS SUMMARY TABLE

WELDON MATERIALS QUARRY
LAKE HAPATCONG, NEW JERSEY
OUR FILE NO. 18-181

Sample ID:				BB			
Sampling Date				5/13/2019			
Parameters	RDCSRS	NRDCSRS	IGWSSL	Conc	Q	RL	MDL
TAL Metals (mg/kg)							
Beryllium	16	140	0.7	0.784	J	1.63	0.108
SPLP Pesticides (ug/L)							
Default Leachate Criteria (ug/L)							
Beryllium	20			ND		5.00	1.070
General Analytical							
Weight of soil for Metals Leachate-Kg				0.1			
SPLP Metals Leachate volume-L				2			
Final pH of Metals Leachate				6.84			

NOTES:

RDCSRS = NJDEP Residential Direct Contact Soil Remediation Standard
NRDCSRS = NJDEP Non-Residential Direct Contact Soil Remediation Standard
IGWSSL = Impact to Groundwater Soil Screening Level
SPLP = Synthetic Precipitate Leaching Procedure

mg/kg = milligrams per kilogram = ppm = parts per million
ug/L = micrograms per liter = parts per billion = ppb