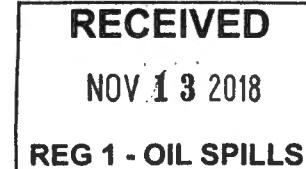


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November 8th 2018

Nick Acampora
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Circle Road, SUNY at Stony Brook
Stony Brook NY 11790-3409



Re: Existing Soil Stockpile Sampling
Former Cibro Terminal Site ID: 130153,
7 Washington Avenue, Island Park NY 11558

Mr. Acampora,

This letter report presents a description of the stockpile management work and sampling results with respect to the existing stockpiles at the former Cibro Terminal site. All work was completed in accord with the approved November 2017 Remedial Action Work Plan (RAWP) and the October 8th 2018 soil stockpile sampling work plan. In response to the NYSDOH comments dated October 12th 2018, Posillico added additional sampling for asbestos fibers to the soil stockpile sampling plan. The sampling frequency for asbestos is described below.

To expedite delivery of sampling results to the New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH), this soil stockpile sampling letter report presents the results of the Part 375 analytes. Results of the requested asbestos sampling will be reported under separate cover due to longer standard turnaround times on the asbestos analytical results.

PROJECT BACKGROUND:

In July 2018 the project was mobilized for initial staging. At mobilization, there were several pre-existing soil stockpiles on-site that were generated during historic site activities. The general site conditions and the estimated stockpile volumes at the time of project mobilization are shown on Figure #1. Due to site conditions, primarily dense overgrown vegetation, the stockpile volumes shown on Figure #1 were estimated.

At the project kick-off meeting on July 31st, 2018 between Posillico and NYSDEC we discussed our stockpile management strategy. Posillico indicated that to facilitate project mobilization, existing stockpiles would be processed and staged in one area of the site and a soil sampling plan developed to characterize those stockpiles. The Existing Soil Stockpile Sampling Plan dated October 12, 2018 was submitted to NYSDEC and NYSDOH for review. The plan provided for analysis of soil for the constituents required by the RWP (e.g., for reuse of site soils) and NYSDEC DER-10 (for use of soils imported to the site) and testing for asbestos as requested by NYSDOH.

STOCKPILE MANAGEMENT:

As of the October 8th soil stockpile sampling plan, stockpiles #1, 3, 4, 5, and 7 (shown on Figure #1) have been processed to remove any debris larger than six-inches and processed material was placed in the clean soil stockpile area along the western perimeter of the property shown on Figure #2. Material from piles #1, 3, and 4 has been placed in soil bin 7/8. Material from piles #5 and 7 has been placed in bin 3-6. Stockpile #13 has been moved to area I3-J4 on Figure #2.

On September 6th, 2018, after the site was grubbed of vegetated overgrowth, a survey drone was flown over the project. Using the data from the drone flight and Virtual Surveyor software the soil stockpile volumes were measured (originally estimated). The updated, measured stockpile volumes are shown in Table #1.

SAMPLING SUMMARY:

The following table describes the original stockpile identifications (Figure #1), lists which soil bin the material was moved into and the approximate size.

Original Stockpile	Moved into Soil Bin #	Measured Volume (cy)	# VOC Samples	# SVOC Samples	# PCB, Pesticide, Metals, and Herbicides	# Asbestos Samples
1,3,4	7/8	3850	8	4	4	1
5, 7	3-6	14050	32	16	16	3
13	NA	1400	4	4	0	1

SAMPLING METHODS STOCKPILE 13:

Posillico dug five test pits on September 10th 2018 into the sidewalls of stockpile #13 using a CAT 308 excavator. The approximate location of the test pits are shown as SP#13-1 through SP#13-5 on Figure 3. This material was on-site material tested for re-use. Grab samples for VOCs were collected from SP#13 test pits #1, #2, #4 and #5. Two composite SVOC samples were collected from SP#13 (test pits 1 and 2) and SP#13 (test pits 3, 4 and 5).

Test pits were photographically logged prior to sample collection. Soil within the test pits were field screened using visual, olfactory, and photo-ionization device (PID) observations. Discrete samples for volatile organic compounds (VOCs) were collected using laboratory-prepared Terra Core sampling kits from the freshly exposed soil exhibiting the highest potential for impacts, organic content, or the smallest grain size. After discrete soil samples were collected, a five-point sample volume was composited. Samples for semi-volatile organic compounds (SVOCs) were collected from the composited sample volumes.

Samples collected on September 10th 2018 for VOCs and SVOCs were stored in a laboratory provided ice-chilled cooler. Samples were transported overnight by common-carrier to Test America's NYS ELAP-accredited laboratory in Buffalo, New York.

During this time in September, Posillico was also sorting material from stockpile #7, which was sampled. The screened material was also sampled, but not reported, because this material was placed into soil bin 3-6 and sampled again with the soil borings described below. Results are attached in the analytical packages, and there were no exceedances over the Restricted Residential or Protection of Groundwater standards.

SAMPLING METHODS SOIL BINS 7/8 AND 3-6:

Posillico contracted Eastern Environmental Solutions, Inc. (Eastern) to assist in the collection of the soil stockpile samples on October 17, 2018. Sampling was performed using a track-mounted Geoprobe model 7822 drill rig. Continuous soil samples were collected up to twenty feet beneath the top of stockpile elevation using a direct-push macro core soil sampling setup. The approximate location of the sample locations are shown on Figure 3.

Sample cores were photographically logged prior to sample collection. Sample cores were field screened using visual, olfactory, and photo-ionization device (PID) observations. Discrete samples for volatile organic compounds (VOCs) were collected using laboratory-prepared Terra Core sampling kits from the core volume exhibiting the highest potential for impacts, organic content, or the smallest grain size. After discrete soil samples were collected, the entire core volume was composited. Samples for semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), herbicides, metals, and asbestos were collected from the composited sample volume.

Samples for VOCs, SVOCs, pesticides, PCBs, herbicides, and metals were stored in a laboratory provided ice-chilled cooler. Samples were transferred same-day to the Test America lab courier and transported to the NYS ELAP-accredited laboratory in Edison, New Jersey. Samples for asbestos were shipped by common-carrier to EMSL's NYS ELAP-accredited laboratory in Cinnaminson, New Jersey.

ROUX Associates and the NYSDEC were present during the soil sampling work, to oversee the sample collection methods.

The samples were collected in accord with the approved RAWP and were analyzed by the following methods as the material was previously imported to the site:

- VOCs - EPA Method 8260C
- SVOCs - EPA method 8270D
- Pesticides - EPA Method 8081B
- PCBs - EPA Method 8082A
- Herbicides - EPA Method 8151A
- Metals - EPA Method 6010D
- Mercury – EPA Method 7471B

STANDARDS, CRITERIA AND GUIDANCE (SCG)

In accord with the section 5.6.6 (Material Reuse On-Site) and section 5.6.9 (Backfill from Off-Site Sources) of the approved November 2017 RAWP the following standards apply to evaluate if soil can be used on the site.

Material Reuse On-Site

- Concentrations of VOCs and SVOCs less than Part 375 Soil Cleanup Objective (SCO) for Restricted-Use, Restricted Residential, Protection of Public Health.
- Site-specific soil cleanup objective (SSSCO) for the top ten VOC tentatively identified compounds (TICs) that are less than 10 ppm total.
- SSSCOs for the top 20 SVOC TICs that are less than 100 ppm total.
- No grossly contaminated soil can be reused.

Imported Backfill

- Imported fill that meet the definition of 6 NYCRR Part 375-6.7(d) for restricted residential uses (use the lower of the protection of groundwater or the protection of public health soil cleanup objectives for restricted residential sites as set forth in Table 375-6.8(b)).

SAMPLING RESULTS SUMMARY

Stockpile #13

Four discrete VOC samples were collected from stockpile #13 and analyzed. The results for VOCs are summarized in Table 2.

Two composite samples were collected from stockpile #13 and analyzed for SVOCs. The results for SVOCs are summarized in Table 3.

There were no exceedances of the part 375 SCOs Restricted-Use, Restricted Residential, Protection of Public Health for VOCs and SVOCs found in samples collected from stockpile #13.

There were no exceedances of the SSSCOs for TICs found in samples collected from stockpile #13.

Soil Bin 7/8:

Eight discrete samples and one duplicate sample were collected from soil bin 7/8 and analyzed for VOCs. The results for VOCs are summarized in Table 2.

Acetone was the only VOC found in samples collected from soil bin 7/8 in exceedance of Part 375 SCO for Restricted-Use, Restricted Residential, Protection of Public Health. In the laboratory QA/QC tests, acetone was found to be skewed high in the MS/MSD samples. Acetone is a common laboratory contaminant therefore those results are not considered indicative of actual impacts to soil.

Four composite samples were collected from soil bin 7/8 and analyzed for SVOC; pesticides; PCBs; herbicides; metals; mercury. The results for these analytes are summarized in Tables 3 through 8.

Benzo[b]fluoranthene was the only exceedance detected for SVOCs found in samples collected from soil bin 7/8 in exceedance of part 375 SCO for Restricted-Use, Restricted Residential, Protection of Public Health. The Part 375 SCO for Restricted Residential, Protection of Public Health for Benzo[b]fluoranthene is 1 ppm. Benzo[b]fluoranthene was found at concentrations slightly higher than restricted-residential SCO with concentrations of 1.1 and 1.4 ppm at depths 0-10' and 10-17' BGS in SB#12.

Chrysene was the only exceedance detected for SVOCs found in samples collected from soil bin 7/8 in exceedance of part 375 SCO for Protection of Groundwater standard at 1.2 ppm at depths 10-17' BGS in SB#13; the standard for Chrysene is 1 ppm.

There were no exceedances of the Part 375 SCOs for Restricted-Use, Restricted Residential, Protection of Public Health for pesticides, PCBs, herbicides, metals, and mercury found in samples collected from soil bin 7/8.

There were no exceedances of the SSSCOs for TICs found in samples collected from soil bin 7/8.

Soil Bin 3-6:

Thirty-two discrete samples and one duplicate sample were collected from soil bin 3-6 and analyzed for VOCs. The results for VOCs are summarized in Table 2.

Sixteen composite samples and one duplicate sample were collected from soil bin 3-6 and analyzed and analyzed for SVOC; pesticides; PCBs; herbicides; metals; mercury. The results for these analytes are summarized in Tables 3 through 8.

There were no exceedances of the Part 375 SCOs for the lower of Restricted-Use, Restricted Residential, Protection of Public Health or Protection of Ground Water for VOCs, SVOCs, pesticides, PCBs, herbicides, metals, and mercury found in samples collected from soil bin 3-6.

There were no exceedances of the SSSCOs for TICs found in samples collected from soil bin 3-6.

CONCLUSIONS AND RECOMMENDATIONS:

Soil tested from stockpile #13 (1400 CY) and from soil bin 3-6 (14,050 CY) can be used on the above reference property without restrictions.

Soil tested from soil bin 7/8 (3850 CY) in the area of SB #12 will be delineated as shown on Figure #3; the soil from this cell will be isolated, and pending NYSDEC approval, used for placement below the soil cover/cap. The remaining soil from soil bin 7/8 can be used on the above reference property without restrictions.

Feel free to reach out if you have any questions or concerns.

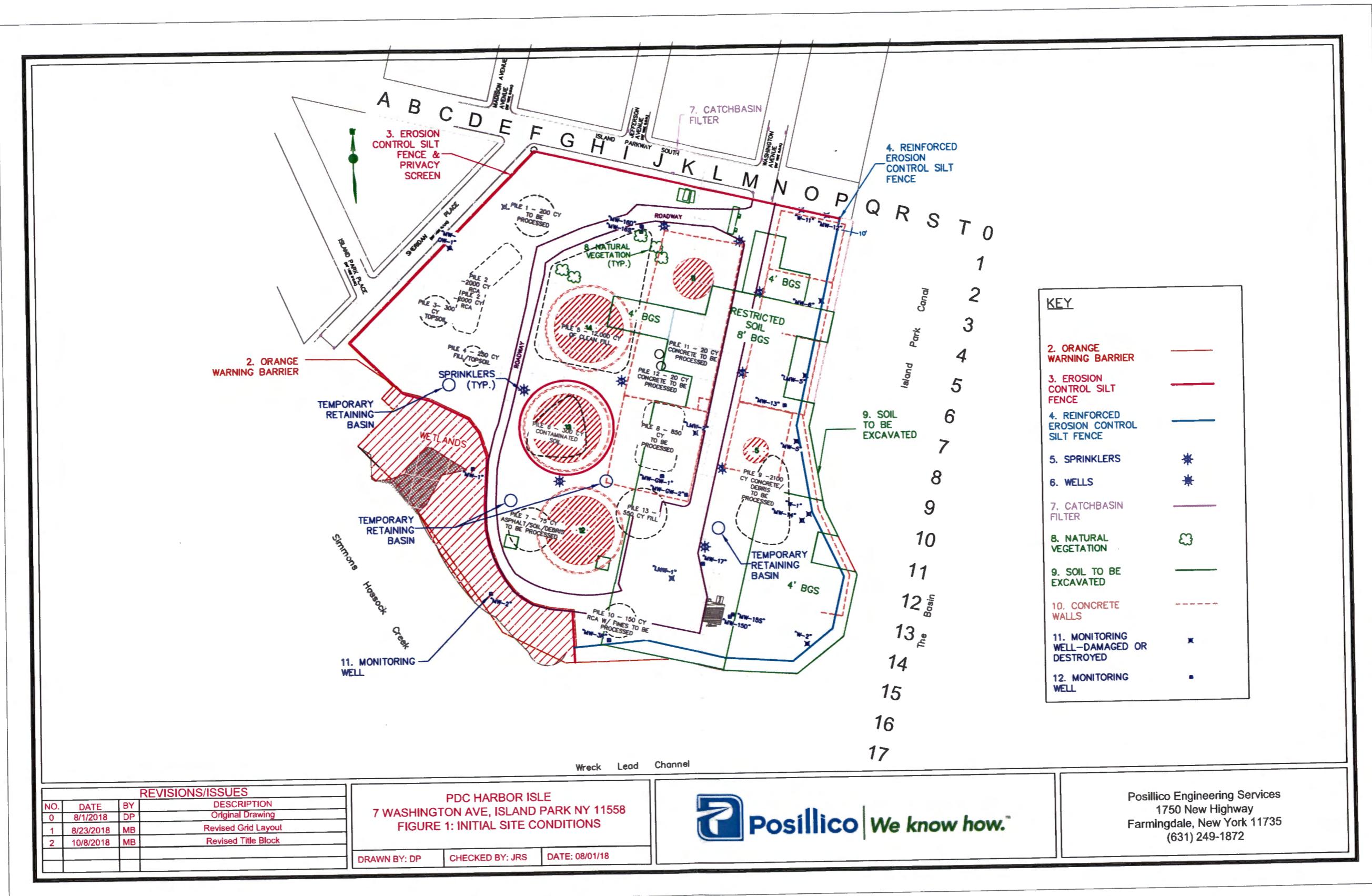
Regards,

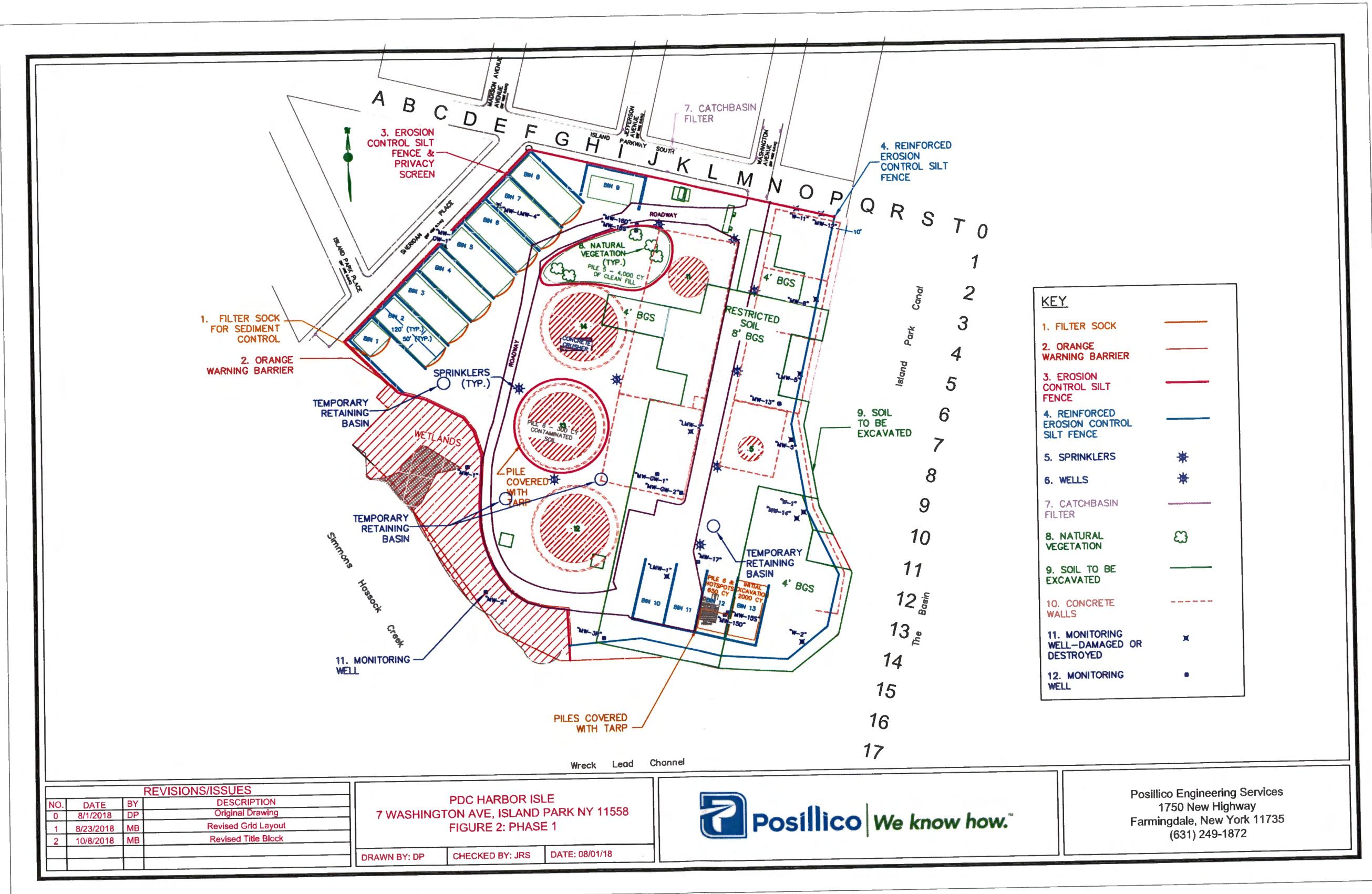


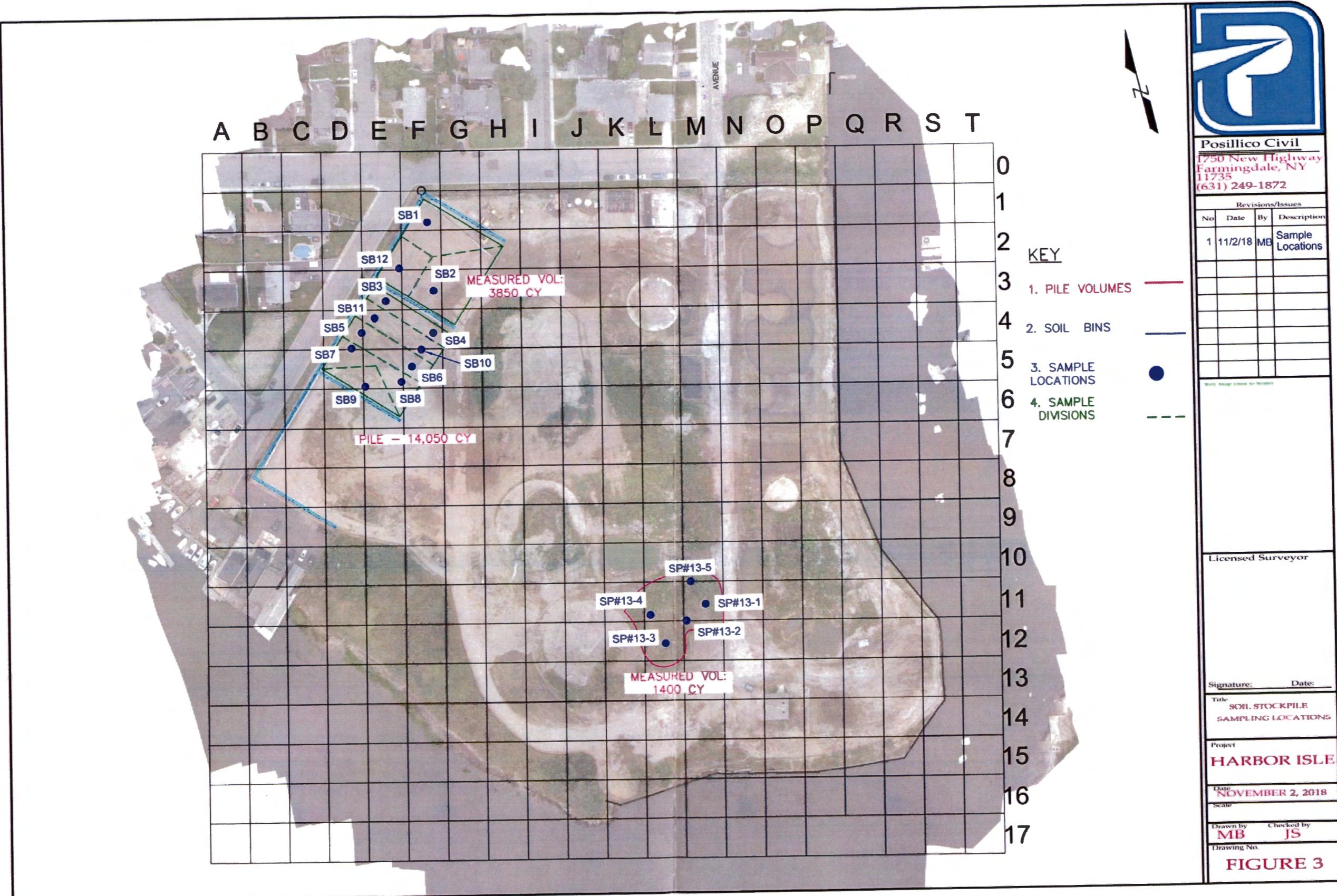
James Smyth
Environmental Engineer

cc:

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November 8th 2018

Former Cibro Terminal Site ID: 130153
7 Washington Avenue, Island Park NY 11558

Table #1: Soil Stockpile Location and Volumes

Pile #	Bin #	Volume (CY)	Source	Proposed Samples	Asbestos Samples
1, 3, 4	7, 8	3850	Unknown Off-site	8 discrete samples to be analyzed for TCL VOC + 10 TICS and 4 composite samples to be analyzed for TCL SVOC + 20 TICS, TCL Pesticides, TCL PCBs, TCL herbicides, and TCL Metals	1 Sample PLM Quantitative and TEM Qualitative and subsequently TEM Quantitive if a positive qualitatively
5, 7	3, 4, 5, 6	14050	Unknown Off-site	30 discrete samples to be analyzed for TCL VOC + 10 TICS and 15 composite samples to be analyzed for TCL SVOC + 20 TICS, TCL Pesticides, TCL PCBs, TCL herbicides, and TCL Metals	3 Samples PLM Quantitative and TEM Qualitative and subsequently TEM Quantitive if a positive qualitatively
13	Not Moved	1400	On-site	4 discrete samples to be analyzed for TCL VOC + 10 TICS and 2 composite samples to be analyzed for TCL SVOC + 20 TICS	1 Sample PLM Quantitative and TEM Qualitative and subsequently TEM Quantitive if a positive qualitatively

November 2018
 Former Clbro Petroleum Terminal Site
 Brownfield Cleanup Site C130153
 Island Park, New York

Table 2
 Results Summary for Volatile Organic Compounds (VOCs) BY 8260C

Sample ID	NY 375-6.8(b)	NY 375-6.8(b)	Results Summary for Volatile Organic Compounds (VOCs) BY 8260C											
			874-881-8-6	874-881-18-18	874-882-6-16	874-882-6-17	874-444-883-4-18	874-444-883-17-38	874-444-884-4-10	874-444-884-10-38	874-444-885-4-15	874-444-885-18-18	874-444-886-4-18	874-444-886-18-38
Sampling Date	& CP-51 T-1	& CP-51 T-1	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018
Matrix	Restricted Residential	GW	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Dilution Factor	Soil Cleanup	Soil Cleanup	1	1	1	1	1	1	1	1	1	1	1	1
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Volatile Organic Compounds (VOCs) BY 8260C	Criteria	Criteria	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
1,2,4-Trimethylbenzene		100000	1100	NR	NR	NR	13	NR	NR	NR	NR	NR	NR	NR
1,3,5-Trimethylbenzene		NA	NA	NR	NR	NR	5.4	NR	NR	NR	NR	NR	NR	NR
2-Butanone (MEK)		NA	300	6.7 J	13	17	11	NR	NR	NR	NR	NR	NR	NR
Acetone		100000	50	170	74	73	28	NR	NR	11	9.7	NR	NR	6.2
Benzene		4800	60	NR	NR	NR	0.94	NR	NR	NR	NR	0.26 J	NR	NR
Ethylbenzene		41000	1000	NR	NR	NR	1.3	NR	NR	NR	NR	NR	NR	NR
Methyl tert-butyl ether		100000	930	NR	NR	NR	0.21 J	NR	NR	NR	NR	NR	NR	NR
Methylene Chloride		100000	50	2.6	2.1	2.7	2.6	0.82	4.9	2.6	2.4	2.3	1.5	3.4
N-Propylbenzene		100000	3900	NR	NR	NR	0.56 J	NR	NR	NR	NR	NR	NR	NR
sec-Butylbenzene		100000	11000	NR	NR	NR	0.12 J	NR	NR	NR	NR	NR	NR	NR
Tetrachloroethene		19000	1300	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Toluene		100000	700	NR	NR	NR	2.6	NR	NR	NR	NR	0.94	NR	NR
Trichloroethene		21000	470	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.22 J	NR
Xylenes, Total		100000	1600	NR	NR	NR	22	NR	NR	NR	NR	NR	NR	NR
Total Conc.		NA	NA	179.3	89.1	92.7	41.6	48.83	0.82	15.8	12.3	2.4	3.5	1.72
Total Estimated Conc. (TCs)		SSSCO: 10000						89.8						

B : The analyte was found in an associated blank, as well as in the sample.

J : Indicates an estimated value.



November 2018
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Brownfield Cleanup Site C130153
Island Park, New York

Table 2 (Cont'd)

B : The analyte was found in an associated blank, as well as in the sample.

J: Indicates an estimated value.



November 2018
Former Cibro Petroleum Terminal Site
Brownfield Cleanup Site C130153
Island Park, New York

Table 2 (Cont'd)

B : The analyte was found in an associated blank, as well as in the sample.

• Indicates an estimated value



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 Former Cibro Petroleum Terminal Site
 Brownfield Cleanup Site C130153
 Island Park, New York

Table 2 (Cont'd)
 Results Summary for Volatile Organic Compounds (VOCs) BY 8260C

Sample ID	NY 375-6.8(b)	NY 375-6.8(b)												
			DUP 1	SP#912 (P-97)	SP#912 (P-97)	SP#912 (P-97)	SP#912 (P-97)	DUP 2	SP#11-1	SP#11-4	SP#13-2	SP#13-5		
Sampling Date	& CP-51 T-1	& CP-51 T-1	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	09/10/18	09/10/18	09/10/18	09/10/18	09/10/18		
Matrix	Restricted Residential	GW	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil		
Dilution Factor	Soil Cleanup	Soil Cleanup	1	1	1	1	1	1	1	1	1	1		
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg		
Volatile Organic Compounds (VOCs) BY 8260C	Criteria	Criteria	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
1,2,4-Trimethylbenzene	100000	1100	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,3,5-Trimethylbenzene	NA	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2-Butanone (MEK)	NA	300	NR	4.5 J	1.7	16	34	25	NR	NR	NR	NR	NR	NR
Acetone	100000	50	NR	88	4.7	260	480	260	24 U	9.8 J	28	13 J		
Benzene	4800	60	NR	0.75 J	NR	NR	0.26 J	NR	NR	NR	NR	NR	NR	NR
Ethylbenzene	41000	1000	NR	0.27 J	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methyl tert-butyl ether	100000	930	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylene Chloride	100000	50	3.7	1.5	3.4	2.7	5.2	0.76 J	NR	NR	NR	NR	NR	NR
N-Propylbenzene	100000	3900	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
sec-Butylbenzene	100000	11000	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Tetrachloroethene	19000	1300	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Toluene	100000	700	NR	6.3	0.75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Trichloroethene	21000	470	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Xylenes, Total	100000	1600	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Total Conc.	NA	NA	3.7	101.32	10.55	278.7	519.46	285.76	0.0	9.8	29.0	13.0		
Total Estimated Conc. (TICs)	SSSCO: 10000			13						0.0	0.0	8.6	39.0	

B : The analyte was found in an associated blank, as well as in the sample.

J : Indicates an estimated value.

November 2018
 Former Clbro Petroleum Terminal Site
 Brownfield Cleanup Site C130153
 Island Park, New York

Table 3
 Results Summary for Semi-Volatile Organic Compounds (SVOCs) BY 8270D

Sample ID	NY 375-6.8(b)	NY 375-6.8(b)	87-4-9814-17	87-4-9824-26	87-4-9834-35	87-4-9844-45	87-4-9854-54	87-4-9864-63	87-4-9874-72	87-4-9884-81	87-4-9894-90	87-4-9904-99	87-4-9914-108	87-4-9924-117	87-4-9934-126	87-4-9944-135
Sampling Date	& CP-51 T-1	& CP-51 T-1	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018
Matrix	Restricted Residential	GW	Soil	Soil	Soil	Soil										
Dilution Factor	Soil Cleanup	Soil Cleanup	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Semi-Volatile Organic Compounds (SVOCs) by 8270D	Criteria	Criteria	Result	Result	Result	Result										
3 & 4 Methylphenol	NA	NA	NR	NR	NR	NR										
Acenaphthene	100000	98000	44 J	46	NR	NR	NR	NR								
Acenaphthylene	100000	107000	43 J	NR	NR	NR	NR	17 J	11 J	29 J	NR	25 J	17 J	NR	23 J	
Anthracene	100000	100000	150 J	100 J	19 J	39 J	48 J	32 J	100 J	59 J	54 J	56 J	19 J	34 J		
Benz[a]anthracene	1000	1000	610	450	110	170	270	140	430	340	220	240	77	180		
Benz[a]pyrene	1000	22000	620	440	120	200	280	150	410	300	230	240	92	210		
Benz[b]fluoranthene	1000	1700	900	680	180	310	470	250	680	530	370	380	150	340		
Benz[g,h,i]perylene	100000	1000000	380	230 J	92 J	110 J	170 J	100 J	190 J	170 J	150 J	130 J	93 J	100 J		
Benz[k]fluoranthene	3900	1700	290	210	60	97	150	88	190	130	110	140	63	120		
Chrysene	3900	1000	680	510	120 J	200 J	320 J	160	520	410	260 J	280 J	89 J	220 J		
Dibenz(a,h)anthracene	330	1000000	71	50	NR	23 J	31 J	24 J	64	33 J	26 J	27 J	NR	NR		
Dibenzofuran	59000	6200	28 J	20 J	NR	NR	NR	NR	20 J	NR	NR J	12 J	NR	NR		
Fluoranthene	100000	1000000	1300	910	220 J	340 J	530	290 J	1000	730	440	440	140	330 J		
Fluorene	386000	NA	49 J	37 J	NR	11 J	16 J	NR	34 J	13 J	11 J	16 J	NR	NR		
Indeno[1,2,3-cd]pyrene	500	8200	410	260	91	130	200	110	230	200	170	150	95	110		
Naphthalene	100000	12000	47 J	35 J	NR	NR	17 J	10 J	35 J	11 J	21 J	21 J	NR	20 J		
Phenanthrene	100000	1000000	650	410	66 J	150 J	260 J	150 J	540	320 J	180 J	190 J	71 J	140 J		
Pyrene	100000	1000000	1100	850	200 J	320 J	480	260 J	840	680	390	420	130 J	320 J		
Total Conc	NA	NA	7352	5238	1278	2100	3259	1775	5312	3926	2857	2759	1019	2147		
Total Estimated Conc. (TICs)	SSSCO: 100000		4230	7230	2830	3300	1800	2120	3240	1810	4020	4660	3660	3320		

* : LCS or LCSD is outside acceptance limits.

J : Indicates an estimated value.

November 2018
 Former Clbro Petroleum Terminal Site
 Brownfield Cleanup Site C130153
 Island Park, New York

Table 3 (Cont'd)
 Results Summary for Semi-Volatile Organic Compounds (SVOCs) BY 8270D

Sample ID	NY 375-6.8(b)	NY 375-6.8(b)	8270D											
			10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	SPW13-1.2	
Sampling Date	& CP-51 T-1	& CP-51 T-1	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	9/10/2018
Matrix	Restricted Residential	GW	Soil	Soil										
Dilution Factor	Soil Cleanup	Soil Cleanup	1	1	1	1	1	1	1	1	1	1	1	20
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Semi-Volatile Organic Compounds (SVOCs) by 8270D	Criteria	Criteria	Result	Result										
3 & 4 Methylphenol	NA	NA	NR	17 J	18 J	NR								
Acenaphthene	100000	98000	NR	NR	NR	NR	29 J	NR	NR	NR	67 J	41 J	NR	
Acenaphthylene	100000	107000	24 J	12 J	17 J	12 J	29 J	NR	NR	NR	32 J	23 J	NR	
Anthracene	100000	100000	34 J	20 J	24 J	49 J	120 J	NR	25 J	360 J	180 J	NR		
Benz[a]anthracene	1000	1000	140	92	140	160	370	49	110	1000	830	NR		
Benz[a]pyrene	1000	22000	160	110	150	150	280	76	120	810	680	NR		
Benz[b]fluoranthene	1000	1700	280	170	260	260	490	110	210	1400	1100	NR		
Benz[g,h,i]perylene	100000	1000000	130 J	79 J	110 J	98 J	140 J	120 J	91 J	300 J	310 J	NR		
Benz[k]fluoranthene	3900	1700	110	61	88	83	170	36	62	530	430	NR		
Chrysene	3900	1000	180 J	110 J	170 J	180 J	340 J	64 J	140 J	1200	840	NR		
Dibenz(a,h)anthracene	330	1000000	NR	NR	19 J	16 J	27 J	24 J	16 J	71	91	NR		
Dibenzofuran	59000	6200	NR	NR	NR	15 J	21 J	NR	NR	36 J	23 J	NR		
Fluoranthene	100000	1000000	270 J	170 J	250	350	790	78 J	210 J	2800	1700	NR		
Fluorene	386000	NA	NR	NR	NR	19 J	45 J	NR	10 J	73 J	38 J	NR		
Indeno[1,2,3-cd]pyrene	500	8200	140	80	110	100	160	120	91	390	340	NR		
Naphthalene	100000	12000	22 J	NR	13 J	15 J	NR	NR	12 J	24 J	60 J	NR		
Phenanthrene	100000	1000000	110 J	86 J	110 J	250 J	520	42 J	110 J	1100	650	NR		
Pyrene	100000	1000000	260 J	170 J	230 J	310 J	640	76 J	190 J	2400	1600	NR		
Total Conc	NA	NA	1860	1160	1691	2067	4171	795	1397	12610	8954	0,0		
Total Estimated Conc. (TICs)	SSSCO	100000	2740	2500	2120	2320	3360	1530	1970	8520	6610	5500		

* : LCS or LCSD is outside acceptance limits.

J : Indicates an estimated value.

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Table 4
 Results Summary for Pesticides BY 8081B

Sample ID			Pesticides BY 8081B											
	NY 375-6.8(b)	NY 375-6.8(b)	87-4-881-9-17'	87-4-882-4-26'	87-4-883-4-26'	87-4-884-4-26'	87-4-885-5-16'	87-4-886-5-16'	87-4-887-7-16'	87-4-888-7-16'	87-4-889-11-16'	87-4-890-2-16'	87-4-891-15-26'	87-4-892-15-26'
Sampling Date	& CP-51 T-1	& CP-51 T-1	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018
Matrix	Restricted Residential	GW	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Dilution Factor	Soil Cleanup	Soil Cleanup	1	1	1	1	1	1	1	1	1	1	1	1
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Pesticides by 8081B	Criteria	Criteria	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
4,4'-DDD		13000	14000	NR	NR	NR	NR							
4,4'-DDE		8900	17000	NR	3.6 J	3.7 J	3.8 J	5.3 J	4.7 J	14	NR	4.7 J	NR	7.5 J
4,4'-DDT		7900	136000	6.2	8.8	4.2 Jp	4.1 Jp	NR	7.8	NR	3.9 Jp	5.2 Jp	4.9 Jp	9.5
cis-Chlordane		4200	2900	14	9.5	NR	NR	13 p	23 p	NR	NR	NR	NR	28 p
Dieldrin		200	100	6.6	5.2	NR	NR	5.9	NR	NR	NR	NR	NR	5.8
Heptachlor		2100	380	NR	NR	NR	NR	NR	5.8 J	NR	NR	NR	NR	NR

J : Indicates an estimated value.

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



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Table 4 (Cont'd)
Results Summary for Pesticides BY 8081B

Sample ID	NY 375-6.8(b)	& CP-51 T-1	NY 375-6.8(b)							
			10/17/2018	10/17/2018	10/17/2018	DUP 1	10/17/2018	10/17/2018	10/17/2018	10/17/2018
Sampling Date		& CP-51 T-1	10/17/2018	10/17/2018	10/17/2018	DUP 1	10/17/2018	10/17/2018	10/17/2018	10/17/2018
Matrix	Restricted Residential	GW	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Dilution Factor	Soil Cleanup	Soil Cleanup	1	1	1	1	1	1	1	1
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Pesticides by 8081B	Criteria	Criteria	Result	Result	Result	Result	Result	Result	Result	Result
4,4'-DDD	13000	14000	NR	NR	5.4 Jp	NR	NR	NR	NR	NR
4,4'-DDE	8900	17000	5.7 J	3.7 J	4.4 J	2.0 Jp	3.8 J	10		
4,4'-DDT	7900	136000	6.7 J	5.7 J	6.2 Jp	6.2 Jp	5.5 Jp	NR		
cis-Chlordane	4200	2900	11 p	NR	NR	NR	NR	NR	81	
Dieldrin	200	100	2.9 p	NR	5.4	NR	NR	NR	27	
Heptachlor	2100	380	NR	NR	NR	NR	NR	NR	9.6	

J : Indicates an estimated value.

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



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Table 5
Results Summary for Polychlorinated Biphenyls (PCBs) by 8082A

Sample ID	NY 375-6.8(b) & CP-51 T-1	NY 375-6.8(b) & CP-51 T-1	8082A		8082A	
			10/17/2018	10/17/2018	8082A	8082A
Sampling Date						
Matrix	Restricted Residential	GW	Soil	Soil		
Dilution Factor	Soil Cleanup	Soil Cleanup	1	1		
Units	ug/kg	ug/kg	ug/kg	ug/kg		
Polychlorinated Biphenyls (PCBs) by 8082A	Criteria	Criteria	Result	Result		
Aroclor 1248	NA	NA	NR	790		
Aroclor 1254	NA	NA	350	NR		
Polychlorinated biphenyls, Total	1000	3200	350	790		

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 Table 6
 Results Summary for Metals by 6010D and Mercury by 7471B

Sample ID	NY 375-6.8(b) & CP-51 T-1	NY 375-6.8(b) & CP-51 T-1	Soil											
			87-4-881-4-17	87-4-881-4-17	87-4-882-4-26	87-4-882-4-26	87-4-883-4-35	87-4-883-4-35	87-4-883-4-35	87-4-883-4-35	87-4-883-4-35	87-4-883-4-35	87-4-883-4-35	87-4-883-4-35
Sampling Date	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018
Matrix	Restricted Residential	GW	Soil											
Dilution Factor	Soil Cleanup	1	4	1	4	1	4	1	4	1	4	1	4	1
Units	mg/kg	mg/kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Metals by 6010D	Criteria	Criteria	Result											
Arsenic	NA	16	NR	3.5	NR	3.2	NR	3.5	NR	2.8 J	NR	3.1 J	NR	2.9 J
Mercury by 7471B	0.81	0.73	0.093	NR	0.052	NR	0.064	NR	0.048	NR	0.049	NR	0.041	NR
Barium	400	820	NR	33.7 J	NR	30.3 J	NR	33.7 J	NR	30.1 J	NR	37.8 J	NR	31.3 J
Beryllium	72	47	NR	0.32 J	NR	0.17 J	NR	0.19 J	NR	0.20 J	NR	0.19 J	NR	0.19 J
Cadmium	4.3	7.5	NR	0.21 J	NR	0.23 J	NR	NR	NR	NR	NR	0.14 J	NR	0.19 J
Chromium	NA	NA	NR	14.1	NR	13.8	NR	15.1	NR	14.8	NR	20.3	NR	25.6
Copper	270	1720	NR	17.7	NR	12.6	NR	15.5	NR	13.8	NR	17.8	NR	22.1
Lead	400	450	NR	41.4	NR	50.1	NR	47.6	NR	42.5	NR	44.4	NR	67.2
Manganese	2000	2000	NR	108	NR	83.9	NR	118	NR	99.0	NR	111	NR	126
Nickel	310	130	NR	8.5	NR	6.3 J	NR	7.3 J	NR	6.4 J	NR	8.2 J	NR	7.8 J
Silver	180	8.3	NR	0.58 J	NR	0.75 J	NR	0.34 J						
Zinc	10000	2480	NR	51.7	NR	41.6	NR	51.8	NR	47.1	NR	53.1	NR	64.4

J : Sample result is greater than the MDL but below the CRDL



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Table 6 (Cont'd)

Sample ID		NY 375-6.8(b)	NY 375-6.8(b)	BU-44-4889-1E-10'	BU-44-4889-1E-10'	BU-44-4889-1E-30'	BU-44-4889-1E-30'	BU-44-4889-1E-10'	BU-44-4889-1E-10'	BU-44-4889-1E-30'	BU-44-4889-1E-30'	BU-44-4889-1E-10'	BU-44-4889-1E-10'	BU-44-4889-1E-10'						
Sampling Date	& CP-51 T-1	& CP-51 T-1	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018						
Matrix	Restricted Residential	GW	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
Dilution Factor	Soil Cleanup	Soil Cleanup	1	4	1	4	1	4	1	4	1	4	1	4						
Units	mg/kg	mg/kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg						
Metals by 6010D	Criteria	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result						
Arsenic	NA	16	NR	3.6	NR	3.9	NR	2.9	J	NR	3.0	J	NR	3.2	NR	3.5				
Mercury by 7471B	0.61	0.73	0.054	NR	0.16	NR	0.058	NR	0.046	NR	0.043	NR	0.049	NR	NR	NR				
Barium	400	820	NR	41.8	J	NR	33.0	J	NR	27.1	J	NR	33.8	J	NR	36.9	J	NR	32.1	J
Beryllium	72	47	NR	0.20	J	NR	0.23	J	NR	0.18	J	NR	0.20	J	NR	0.20	J	NR	0.21	J
Cadmium	4.3	7.5	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.14	J	NR	NR	NR	NR	NR	NR	NR
Chromium	NA	NA	NR	13.8	NR	17.7	NR	15.9	NR	21.2	NR	NR	16.9	NR	NR	13.9	NR	NR	NR	NR
Copper	270	1720	NR	20.3	NR	15.3	NR	13.2	NR	17.5	NR	NR	16.7	NR	NR	14.6	NR	NR	NR	NR
Lead	400	450	NR	59.1	NR	47.7	NR	34.1	NR	41.0	NR	NR	41.7	NR	NR	40.0	NR	NR	NR	NR
Manganese	2000	2000	NR	152	NR	120	NR	95.6	NR	241	NR	NR	104	NR	NR	118	NR	NR	NR	NR
Nickel	310	130	NR	10.3	NR	8.0	J	NR	7.1	J	NR	7.9	J	NR	7.0	J	NR	7.7	J	NR
Silver	180	8.3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Zinc	10000	2480	NR	50.6	NR	47.7	NR	41.4	NR	51.8	NR	NR	49.1	NR	NR	45.3	NR	NR	NR	NR

J : Sample result is greater than the MDL but below the CRDL

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Table 6 (Cont'd)
 Results Summary for Metals by 6010D and Mercury by 7471B

Sample ID	NY 375-6.8(b)	NY 375-6.8(b)	Soil Cleanup Criteria													
			10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018		
Sampling Date	& CP-51 T-1	& CP-51 T-1	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	
Matrix	Restricted Residential	GW	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	
Dilution Factor	Soil Cleanup	Soil Cleanup	1	4	1	4	1	4	1	4	1	4	1	4	1	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Metals by 6010D	Criteria	Criteria	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	
Arsenic	NA	16	NR	4.7	NR	3.2	NR	3.2	NR	3.0	NR	2.9	J	NR	2.7 J	
Mercury by 7471B	0.81	0.73	0.066	NR	0.043	NR	0.049	NR	0.050	NR	0.054	NR	0.038	NR	NR	
Barium	400	820	NR	68.7	NR	43.3	NR	28.5	J	NR	35.0	J	NR	28.2	J	
Beryllium	72	47	NR	0.28	J	NR	0.19	J	NR	0.19	J	NR	0.20	J	NR	
Cadmium	4.3	7.5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Chromium	NA	NA	NR	17.2	NR	20.4	NR	11.4	NR	17.4	NR	13.8	NR	18.6	NR	
Copper	270	1720	NR	18.6	NR	15.4	NR	12.9	NR	16.0	NR	13.8	NR	16.4	NR	
Lead	400	450	NR	49.7	NR	38.3	NR	34.1	NR	74.7	NR	39.0	NR	96.0	NR	
Manganese	2000	2000	NR	170	NR	121	NR	97.1	NR	135	NR	101	NR	104	NR	
Nickel	310	130	NR	10.7	J	NR	10.3	NR	6.2	J	NR	7.7	J	NR	8.0	J
Silver	180	8.3	NR	NR	NR	NR	NR	0.20	J	NR	NR	NR	NR	NR	NR	
Zinc	10000	2480	NR	59.5	NR	45.1	NR	48.1	NR	46.3	NR	43.6	NR	44.2	NR	

J : Sample result is greater than the MDL but below the CRDL



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Table 6 (Cont'd)
Results Summary for Metals by 6010D and Mercury by 7471B

Sample ID	NY 375-6.8(b)	NY 375-6.8(b)	87-4-511-4-16	87-4-511-4-16	87-4-512-16-26	87-4-512-16-26	887-412 (E-16)	887-412 (E-16)	PPC at Harbor 1-F-Blank ¹
Sampling Date	8 & CP-51 T-1	& CP-51 T-1	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018
Matrix	Restricted Residential	GW	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Dilution Factor	Soil Cleanup	Soil Cleanup	1	4	1	4	1	1	4
Units	mg/kg	mg/kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Metals	Criteria	Criteria	Result	Result	Result	Result	Result	Result	Result
Arsenic	NA	16	NR	3.2	NR	5.4	NR	3.6	NR
Mercury by 7471B	0.81	0.73	0.050	NR	0.099	NR	0.083	NR	NR
Barium	400	820	NR	32.4 J	NR	54.1 J	NR	36.4 J	NR
Beryllium	72	47	NR	0.21 J	NR	0.65	NR	0.31 J	NR
Cadmium	4.3	7.5	NR	0.15 J	NR	0.35 J	NR	0.45 J	NR
Chromium	NA	NA	NR	21.1	NR	23.3	NR	20.0	12.7
Copper	270	1720	NR	22.1	NR	39.9	NR	19.2	NR
Lead	400	450	NR	42.2	NR	67.1	NR	52.7	NR
Manganese	2000	2000	NR	110	NR	199	NR	96.9	68.8
Nickel	310	130	NR	8.2	NR	19.6	NR	7.0 J	2.8 J
Silver	180	8.3	NR	NR	0.73 J	NR	1.4 J	NR	
Zinc	10000	2480	NR	66.0	NR	143	NR	55.2	NR

J : Sample result is greater than the MDL but below the CRDL.

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Table 7
 Results Summary for Chromium by 7196A and Cyanide by 9012B

Sample ID	NY 375-6.B(b)	NY 375-6.B(b)	814-8814-17	814-8824-26	814-8844-32	814-8844-36	814-8844-38	814-8844-39	814-8844-45	814-8844-46	814-8844-47	814-8844-48	814-8844-49	814-8844-50	814-8844-51	814-8844-52	814-8844-53	814-8844-54
Sampling Date	& CP-51 T-1	& CP-51 T-1	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	
Matrix	Restricted Residential	GW	Soil															
Dilution Factor	Soil Cleanup	Soil Cleanup																
Units	mg/kg	mg/kg																
Chromium and Cyanide	Criteria	Criteria	Result															
Chromium, trivalent - mg/Kg		180	NA	14.1	13.8	15.1	14.8	20.3	25.6	13.8	17.3	15.9	21.2	16.9	13.9			
Cr (VI) - mg/Kg		110	19	NR	0.37 J	NR	NR	NR	NR	NR								
Cyanide, Total - mg/Kg			NA	NA	0.24 J	0.21 J	NR	NR	0.31 J	0.19 J	NR	0.22 J	0.23 J	0.28 J	NR	0.26		

J : Sample result is greater than the MDL but below the CRDL



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Table 7 (Cont'd)
Results Summary for Chromium by 7196A and Cyanide by 9012B

Sample ID	NY 375-6.8(b)	NY 375-6.8(b)	83-44-0808-10-30	83-44-0808-10-18	83-44-0808-10-16	DMP-1	83-44-0808-10-10	83-44-0808-10-30	83-44-0808-10-16	87-00-0114-10-30	87-00-0124-10-30	827-912 (P-47)
Sampling Date	& CP-51 T-1	& CP-51 T-1	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018
Matrix	Restricted Residential	GW	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Dilution Factor	Soil Cleanup	Soil Cleanup										
Units	mg/kg	mg/kg										
Chromium and Cyanide	Criteria	Criteria	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Chromium, Invalent - mg/Kg	180	NA	17.2	20.4	11.4	17.4	13.8	18.8	21.1	22.7	20.0	
Cr (VI) - mg/Kg	110	19	NR	NR	NR	NR	NR	NR	NR	0.80 J	NR	
Cyanide, Total - mg/Kg	NA	NA	0.29 J	NR	NR	NR	0.23 J	0.36 J	0.20 J	0.64 J	0.34 J	J

J : Sample result is greater than the MDL but below the CRDL.