

## **Summary of Laboratory Analytical Results Memorandum**

**To:** The Village of Tuckahoe  
Tuckahoe, New York

**From:** William A. Canavan, PG, LSRP  
HydroEnvironmental Solutions, Inc.

**Date:** December 14, 2016

**Re:** 109-125 Marbledale Road  
Tuckahoe, New York  
NYSDEC BCP Site No. C360143

HydroEnvironmental Solutions, Inc. (HES) has reviewed the laboratory analytical reports for the deep soil borings designated DB-1, DB-2, DB-3, DB-4 and DB-5. The attached tables summarize the laboratory results for the soil samples collected. The results are compared to their corresponding New York State Department of Environmental Conservation (NYSDEC) Commercial Soil Cleanup Objectives (CSCOs) in accordance with 6 NYCRR Part 375; which are the relevant standards for this site. Any highlighted concentration was detected above its respective NYSDEC-CSCOs. The location of the five deep soil borings are shown on **Figure 2**, a draft generalized site plan showing additional sampling locations required by the NYSDEC.



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109-125 Marbledale Road  
Tuckahoe, New York  
BCP Site No. C360143

Summary of Soil Quality Results - Deep Borings

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	DB-1-092816 (5-9ftbg)		DB-1-092916 (70-74ftbg)		DB-2-092716 (18-22 ftbg)		DB-2-092716 (67-72 ftbg)		DB-3-093016 (57-59 ftbg)		DB-3-100316 (75-77 ftbg)		DB-4-092916 (16-20ftbg)		DB-5-092916 (4-6ftbg)			
		1611136-01 9/28/2016 Soil		1611136-02 9/29/2016 Soil		161072-01 9/27/2016 Soil		161072-02 9/27/2016 Soil		16J0126-01 9/30/2016 Soil		16J0126-02 10/3/2016 Soil		1611136-03 9/29/2016 Soil		16J0026-01 9/29/2016 Soil			
		Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	
Volatile Organics, 8260 List	mg/Kg	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		
Dilution Factor		100		1		1		1		1		100		1		100		100	
1,1,1,2-Tetrachloroethane	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,1,1-Trichloroethane	500	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,1,2,2-Tetrachloroethane	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,1,2-Trichloroethane	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,1-Dichloroethane	240	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,1-Dichloroethylene	500	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,1-Dichloropropylene	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,2,3-Trichlorobenzene	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,2,3-Trichloropropane	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,2,4-Trichlorobenzene	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,2,4-Trimethylbenzene	190	0.30	U	0.0021	U	0.0046		0.016		0.0024	U	17	D	0.0078		0.0024	U		
1,2-Dibromo-3-chloropropane	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,2-Dibromoethane	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,2-Dichlorobenzene	500	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,2-Dichloroethane	30	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,2-Dichloropropane	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,3,5-Trimethylbenzene	190	0.30	U	0.0021	U	0.0020	U	0.0035	J	0.0024	U	0.33	JD	0.0025	J	0.0024	U		
1,3-Dichlorobenzene	280	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,3-Dichloropropane	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,4-Dichlorobenzene	130	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
1,4-Dioxane	130	6	U	0.043	U	0.041	U	0.050	U	0.047	U	5	U	0.043	U	0.047	U		
2,2-Dichloropropane	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
2-Butanone	500	0.49	JD	0.016		0.018		0.020		0.016		6.50	D	0.017		0.0025	J		
2-Chlorotoluene	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
4-Chlorotoluene	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
Acetone	500	1.30	D	0.085		0.070	B	0.059	B	0.067		0.50	U	0.095		0.54	JD		
Benzene	44	0.30	U	0.0021	U	0.0020	U	0.0025	J	0.0024	U	0.25	U	0.0021	U	0.0024	U		
Bromobenzene	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
Bromochloromethane	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
Bromodichloromethane	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
Bromoform	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
Bromomethane	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
Carbon tetrachloride	22	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
Chlorobenzene	500	0.39	JD	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
Chloroethane	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U		
Chloroform	350	0.30	U	0.0021</td															

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		1611136-01 9/28/2016 Soil		1611136-02 9/29/2016 Soil		161072-01 9/27/2016 Soil		161072-02 9/27/2016 Soil		16J0126-01 9/30/2016 Soil		16J0126-02 10/3/2016 Soil		1611136-03 9/29/2016 Soil		16J0026-01 9/29/2016 Soil	
		Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result
Methyl tert-butyl ether (MTBE)	500	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U
Methylene chloride	500	0.60	U	0.0043	U	0.0041	U	0.0050	U	0.0047	U	6.80	D	0.0043	U	0.0047	U
Naphthalene	500	0.30	U	0.0064	J	0.0020	U	0.036	B	0.0068	JB	2.50	BD	0.013	U	0.0024	U
n-Butylbenzene	500	0.30	U	0.0021	U	0.0020	U	0.0091		0.0047	J	5.30	D	0.0028	J	0.0024	U
n-Propylbenzene	500	0.30	U	0.0021	U	0.0020	U	0.025		0.012		17	D	0.0052		0.0024	U
o-Xylene	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0035	J
p- & m- Xylenes	~	0.60	U	0.0043	U	0.0041	U	0.0050	U	0.0047	U	0.50	U	0.0043	U	0.0083	J
p-Isopropyltoluene	~	0.30	U	0.0021	U	0.0020	U	0.0047	J	0.027		2.70	D	0.0021	U	0.0024	U
sec-Butylbenzene	500	0.30	U	0.0021	U	0.0022	J	0.012		0.0078		8.40	D	0.0021	U	0.0024	U
Styrene	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U
tert-Butylbenzene	500	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.92	D	0.0021	U	0.0024	U
Tetrachloroethylene	150	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0029	J
Toluene	500	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.53	D	0.0021	U	0.0024	U
trans-1,2-Dichloroethylene	500	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U
trans-1,3-Dichloropropylene	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U
Trichloroethylene	200	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.025	
Trichlorofluoromethane	~	19	D	0.018	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0063	U	0.0024	U
Vinyl acetate	~	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U
Vinyl Chloride	13	0.30	U	0.0021	U	0.0020	U	0.0025	U	0.0024	U	0.25	U	0.0021	U	0.0024	U
Xylenes, Total	500	0.89	U	0.0064	U	0.0061	U	0.0075	U	0.0071	U	0.75	U	0.0064	U	0.012	J
Semi-Volatiles, 8270 Target List	mg/Kg	mg/Kg	2	mg/Kg	2	mg/Kg	5	mg/Kg	5	mg/Kg	2	mg/Kg	20	mg/Kg	2	mg/Kg	2
Dilution Factor																	
1,2,4-Trichlorobenzene	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
1,2-Dichlorobenzene	500	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
1,3-Dichlorobenzene	280	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
1,4-Dichlorobenzene	130	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
2,4,5-Trichlorophenol	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
2,4,6-Trichlorophenol	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
2,4-Dichlorophenol	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
2,4-Dimethylphenol	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
2,4-Dinitrophenol	~	0.10	U	0.096	U	0.23	U	0.27	U	0.11	U	0.12	U	0.94	U	0.092	U
2,4-Dinitrotoluene	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
2,6-Dinitrotoluene	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
2-Chloronaphthalene	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
2-Chlorophenol	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
2-Methylnaphthalene	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.081	JD
2-Methylphenol	500	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
2-Nitroaniline	~	0.10	U	0.096	U	0.23	U	0.27	U	0.11	U	0.12	U	0.94	U	0.092	U
2-Nitrophenol	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
3- & 4-Methylphenols	~	0.41	D	0.048	U	0.11	U	0.1									

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		1611136-01 9/28/2016 Soil		1611136-02 9/29/2016 Soil		161072-01 9/27/2016 Soil		161072-02 9/27/2016 Soil		16J0126-01 9/30/2016 Soil		16J0126-02 10/3/2016 Soil		1611136-03 9/29/2016 Soil		16J0026-01 9/29/2016 Soil	
		Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result
4-Nitrophenol	~	0.10	U	0.096	U	0.23	U	0.27	U	0.11	U	0.12	U	0.94	U	0.092	U
Acenaphthene	500	0.052	U	0.048	U	0.16	JD	0.14	U	0.25	D	0.26	D	1.35	D	0.41	D
Acenaphthylene	500	0.052	U	0.048	U	0.36	D	0.14	U	0.054	U	0.058	U	0.47	U	0.22	D
Aniline	~	0.21	U	0.19	U	0.46	U	0.54	U	0.22	U	0.23	U	1.88	U	0.18	U
Anthracene	500	0.052	U	0.048	U	0.66	D	0.14	U	0.35	D	0.11	JD	3.08	D	1.50	D
Benzo(a)anthracene	5.6	0.094	JD	0.13	D	1.31	D	0.24	JD	0.73	D	0.10	JD	4.76	D	2.73	D
Benzo(a)pyrene	1	0.052	U	0.065	JD	0.16	JD	0.15	JD	0.72	D	0.090	JD	2.23	D	2.85	D
Benzo(b)fluoranthene	5.6	0.052	U	0.099	D	0.83	D	0.20	JD	0.60	D	0.088	JD	2.77	D	2.79	D
Benzo(g,h,i)perylene	500	0.052	U	0.069	JD	0.45	D	0.14	U	0.39	D	0.058	U	0.96	D	1.71	D
Benzo(k)fluoranthene	56	0.052	U	0.058	JD	0.74	D	0.14	U	0.57	D	0.080	JD	2.17	D	2.09	D
Benzyl alcohol	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
Benzyl butyl phthalate	~	0.11	D	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
Bis(2-chloroethoxy)methane	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
Bis(2-chloroethyl)ether	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
Bis(2-chloroisopropyl)ether	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
Bis(2-ethylhexyl)phthalate	~	0.60	D	0.048	U	0.11	U	0.23	JBD	0.95	D	1.10	D	0.47	U	0.046	U
Chrysene	56	0.096	JD	0.14	D	1.89	D	0.28	D	0.82	D	0.12	JD	3.56	D	2.84	D
Dibenzo(a,h)anthracene	0.56	0.052	U	0.048	U	0.14	JD	0.14	U	0.25	D	0.058	U	0.47	U	1.05	D
Dibenzofuran	350	0.052	U	0.048	U	0.11	U	0.14	U	0.18	D	0.12	D	0.99	D	0.30	D
Diethyl phthalate	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
Dimethyl phthalate	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
Di-n-butyl phthalate	~	0.076	JD	0.048	U	0.11	U	0.14	U	0.079	JD	0.058	U	0.47	U	0.70	D
Di-n-octyl phthalate	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
Fluoranthene	500	0.23	D	0.23	D	4.41	D	0.71	D	1.87	D	0.38	D	11	D	6.18	D
Fluorene	500	0.052	U	0.048	U	0.68	D	0.14	U	0.35	D	0.27	D	2.16	D	0.57	D
Hexachlorobenzene	6	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
Hexachlorobutadiene	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
Hexachlorocyclopentadiene	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
Hexachloroethane	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
Indeno(1,2,3-cd)pyrene	5.6	0.052	U	0.054	JD	0.35	D	0.14	U	0.38	D	0.058	U	0.99	D	1.66	D
Isophorone	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
Naphthalene	500	0.10	D	0.055	JD	0.11	U	0.28	D	0.062	JD	0.080	JD	0.47	U	0.072	JD
Nitrobenzene	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
N-Nitrosodimethylamine	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
N-nitroso-di-n-propylamine	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
N-Nitrosodiphenylamine	~	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
Pentachlorophenol	6.7	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
Phenanthrene	500	0.12	D	0.23	D	3.06	D	0.14	U	1.72	D	0.77	D	10.80	D	4.24	D
Phenol	500	0.052	U	0.048	U	0.11	U	0.14	U	0.054	U	0.058	U	0.47	U	0.046	U
Pyrene	500	0.20	D	0.30	D	3.59	D	0.62	D	1.43	D	0.24	D	9.13	D	4.14	D
Pyridine	~	0.21	U	0.19	U	0.46	U	0.54	U	0.22	U	0.23					

109-125 Marbledale Road  
Tuckahoe, New York  
BCP Site No. C360143

Summary of Soil Quality Results - Deep Borings

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	DB-1-092816 (5-9ftbg)		DB-1-092916 (70-74ftbg)		DB-2-092716 (18-22 ftbg)		DB-2-092716 (67-72 ftbg)		DB-3-093016 (57-59 ftbg)		DB-3-100316 (75-77 ftbg)		DB-4-092916 (16-20ftbg)		DB-5-092916 (4-6ftbg)		
		16I1136-01 9/28/2016 Soil		16I1136-02 9/29/2016 Soil		16I1072-01 9/27/2016 Soil		16I1072-02 9/27/2016 Soil		16J0126-01 9/30/2016 Soil		16J0126-02 10/3/2016 Soil		16I1136-03 9/29/2016 Soil		16J0026-01 9/29/2016 Soil		
		Compound	Result	Q	Result	Q												
alpha-BHC	3.4	0.0020	U	0.0019	U	0.0018	U	0.0022	U	0.0021	U	0.0023	U	0.0019	U	0.0018	U	
alpha-Chlordane	24	0.0020	U	0.0019	U	0.0018	U	0.0022	U	0.0021	U	0.0061	D	0.0019	U	0.0018	U	
beta-BHC	3	0.0020	U	0.0019	U	0.0018	U	0.0022	U	0.0021	U	0.0023	U	0.0019	U	0.0018	U	
Chlordane, total	~	0.041	U	0.038	U	0.036	U	0.043	U	0.043	U	0.078	D	0.037	U	0.036	U	
delta-BHC	500	0.0020	U	0.0019	U	0.0018	U	0.0022	U	0.0021	U	0.0023	U	0.0019	U	0.0018	U	
Dieldrin	1.4	0.0044	D	0.0019	U	0.0018	U	0.0022	U	0.0021	U	0.0023	U	0.0019	U	0.0018	U	
Endosulfan I	200	0.0020	U	0.0019	U	0.0018	U	0.0022	U	0.0021	U	0.0023	U	0.0019	U	0.0018	U	
Endosulfan II	200	0.0020	U	0.0019	U	0.0018	U	0.0022	U	0.0021	U	0.0023	U	0.0019	U	0.0018	U	
Endosulfan sulfate	200	0.0020	U	0.0019	U	0.0018	U	0.0022	U	0.0021	U	0.0023	U	0.0019	U	0.0018	U	
Endrin	89	0.0020	U	0.0019	U	0.0018	U	0.0022	U	0.0021	U	0.0023	U	0.0019	U	0.0018	U	
Endrin aldehyde	~	0.0020	U	0.0019	U	0.0018	U	0.0022	U	0.0021	U	0.0023	U	0.0019	U	0.0018	U	
Endrin ketone	~	0.0020	U	0.0019	U	0.0018	U	0.0022	U	0.0021	U	0.0023	U	0.0019	U	0.0018	U	
gamma-BHC (Lindane)	9.2	0.0020	U	0.0019	U	0.0018	U	0.0022	U	0.0021	U	0.0023	U	0.0019	U	0.0018	U	
gamma-Chlordane	~	0.0020	U	0.0019	U	0.0018	U	0.0022	U	0.0021	U	0.0083	D	0.0019	U	0.0018	U	
Heptachlor	15	0.0020	U	0.0019	U	0.0018	U	0.0022	U	0.0021	U	0.0023	U	0.0019	U	0.0018	U	
Heptachlor epoxide	~	0.0020	U	0.0019	U	0.0018	U	0.0022	U	0.0021	U	0.0023	U	0.0019	U	0.0018	U	
Methoxychlor	~	0.010	U	0.0095	U	0.0090	U	0.011	U	0.011	U	0.011	U	0.0093	U	0.0091	U	
Toxaphene	~	0.10	U	0.096	U	0.091	U	0.11	U	0.11	U	0.12	U	0.094	U	0.092	U	
<b>Metals, Target Analyte</b>	mg/Kg	mg/Kg																
<b>Dilution Factor</b>			100		100		1		100		1		1		1		1	
Aluminum	~	15,600		11,600		9,070		14,400		3,480	B	7,070	B	7,250		10,800		
Antimony	~	0.62	U	3.81		0.55	U	0.65	U	0.65	U	0.69	U	0.56	U	2.84		
Arsenic	16	16.10		5.12		2.90		5.46		1.41		6.51		7.35		4.60		
Barium	400	338		184		74.10		122		70.70		65.90		96.70		327		
Beryllium	590	0.12	U	0.12	U	0.11	U	0.13	U	0.13	U	0.14	U	0.11	U	0.11	U	
Cadmium	9.3	3.76		10.80		0.47		1.23		0.39	U	0.42	U	0.55		2.29		
Calcium	~	31,000		31,600		26,400		17,400		19,800		6,020		21,600		61,400		
Chromium	~	42		34.20		19.10		29.90		11.20		29.10		17.80		20.70		
Cobalt	~	14.70		11.80		8		8.34		3.68		5.49		7.50		6.59		
Copper	270	567		952		51.10		153		18.80		45.60		36.90		75.90		
Iron	~	152,000	D	97,800	D	20,800		61,700	D	12,000		26,300		22,400		15,600		
Lead	1000	855		674		53.60		414		2,100		101		123		236		
Magnesium	~	3,550		15,000		8,840		9,300		4,140		3,150		7,210		25,500		
Manganese	10000	974		658		222		401		154		164		249		263		
Nickel	310	48.70		47		18		104		9.79		20.70		15.80		27.60		
Potassium	~	2,350		1,710		2,490		1,120		770		767		1,800		2,050		
Selenium	1500	3.64		2.25		1.09	U	1.30	U	1.29	U	1.71		1.12	U	1.10	U	
Silver	1500	79.80		0.58	U	0.55	U	0.65	U	0.65	U	0.69	U	0.56	U	0.55	U	
Sodium	~	3,290		1,200		725		415		115		136		170		168		
Thallium	~	1.23	U	1.15	U	1.09	U	1.30	U	1.29	U	1.39	U	1.12	U	1.10	U	
Vanadium	~	26.90		32.70		42		23		14.40		25.60		32.50		32.90		
Zinc	10000	1,690		630		158		438		118		172		144		617		
<b>Mercury by 7473</b>	mg/Kg	mg/Kg																

109-125 Marbledale Road  
Tuckahoe, New York  
BCP Site No. C360143

Summary of Soil Quality Results - Deep Borings

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	DB-1-092816 (5-9ftbg)		DB-1-092916 (70-74ftbg)		DB-2-092716 (18-22 ftbg)		DB-2-092716 (67-72 ftbg)		DB-3-093016 (57-59 ftbg)		DB-3-100316 (75-77 ftbg)		DB-4-092916 (16-20ftbg)		DB-5-092916 (4-6ftbg)		
		16I1136-01 9/28/2016 Soil		16I1136-02 9/29/2016 Soil		16I1072-01 9/27/2016 Soil		16I1072-02 9/27/2016 Soil		16J0126-01 9/30/2016 Soil		16J0126-02 10/3/2016 Soil		16I1136-03 9/29/2016 Soil		16J0026-01 9/29/2016 Soil		
		Compound	Result	Q	Result	Q												
% Solids	~		81.20		86.60		91.50		76.90		77.30		72.10		89		90.90	
Herbicides, Target List	mg/Kg	mg/Kg	mg/Kg		mg/Kg													
Dilution Factor		1	1		1		1		1		1		1		1		1	
2,4,5-T	~	0.025	U	0.023	U	0.022	U	0.026	U	0.026	U	0.028	U	0.023	U	0.022	U	
2,4,5-TP (Silvex)	500	0.025	U	0.023	U	0.022	U	0.026	U	0.026	U	0.028	U	0.023	U	0.022	U	
2,4-D	~	0.025	U	0.023	U	0.022	U	0.026	U	0.026	U	0.028	U	0.023	U	0.022	U	
Polychlorinated Biphenyls (PCB)	mg/Kg	mg/Kg	mg/Kg		mg/Kg													
Dilution Factor		1	1		1		1		1		1		1		1		1	
Aroclor 1016	~	0.021	U	0.019	U	0.018	U	0.022	U	0.022	U	0.023	U	0.019	U	0.018	U	
Aroclor 1221	~	0.021	U	0.019	U	0.018	U	0.022	U	0.022	U	0.023	U	0.019	U	0.018	U	
Aroclor 1232	~	0.021	U	0.019	U	0.018	U	0.022	U	0.022	U	0.023	U	0.019	U	0.018	U	
Aroclor 1242	~	0.021	U	0.019	U	0.018	U	0.022	U	0.022	U	0.023	U	0.019	U	0.018	U	
Aroclor 1248	~	0.021	U	0.019	U	0.018	U	0.022	U	0.44		0.023	U	0.019	U	0.018	U	
Aroclor 1254	~	0.021	U	0.019	U	0.018	U	0.022	U	0.022	U	0.023	U	0.019	U	0.039		
Aroclor 1260	~	0.021	U	0.019	U	0.018	U	0.022	U	0.022	U	0.023	U	0.019	U	0.051		
Total PCBs	1	0.021	U	0.019	U	0.018	U	0.022	U	0.44		0.023	U	0.019	U	0.090		

**NOTES:**

Any Regulatory Exceedences are color coded by Regulation

**Q is the Qualifier Column with definitions as follows:**

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

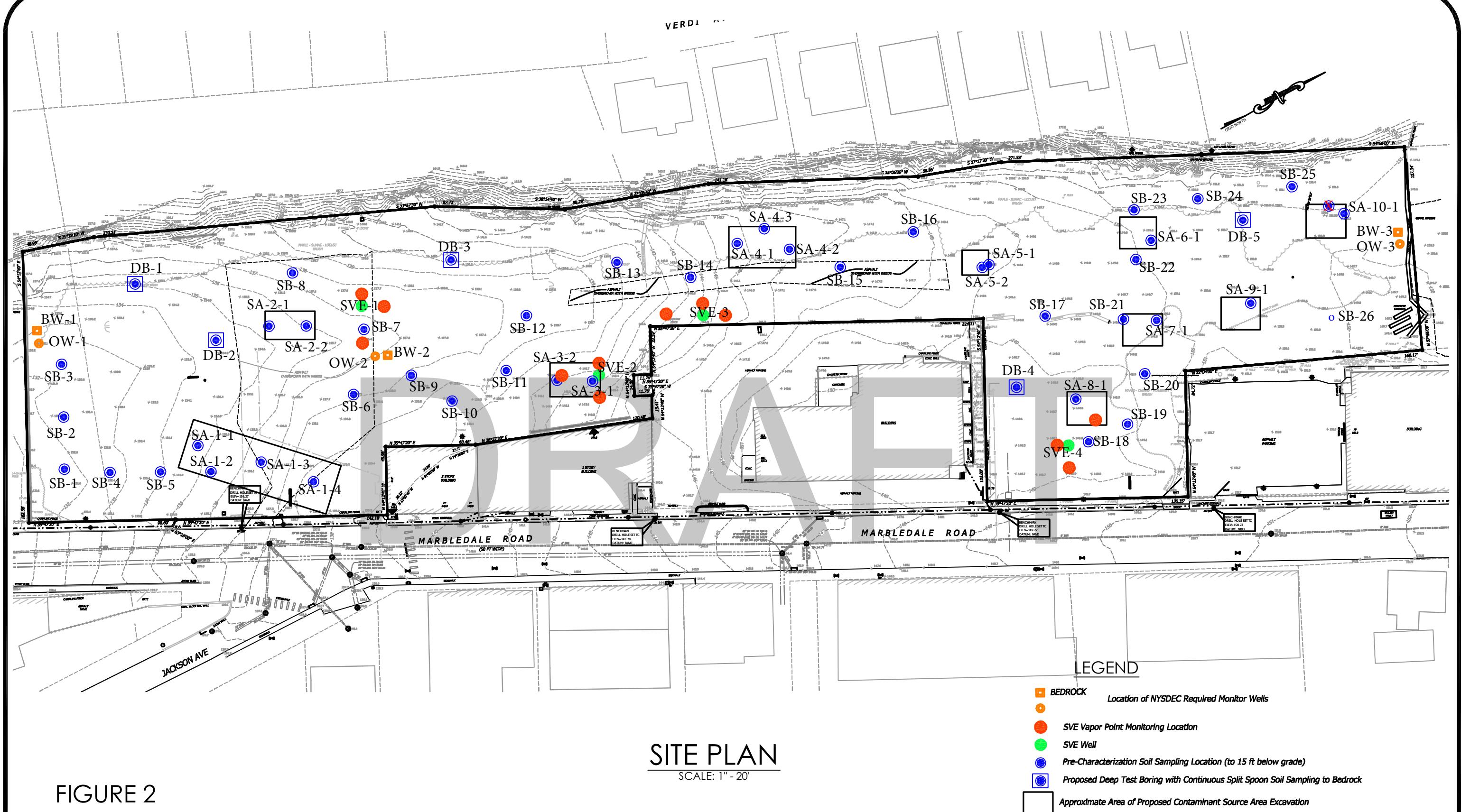
U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

~=this indicates that no regulatory limit has been established for this analyte



**Hydro Environmental  
SOLUTIONS, INC.**  
One Deans Bridge Road  
Somers, New York 10589

## **Summary of Laboratory Analytical Results Memorandum**

**To:** The Village of Tuckahoe  
Tuckahoe, New York

**From:** William A. Canavan, PG, LSRP  
HydroEnvironmental Solutions, Inc.

**Date:** December 14, 2016

**Re:** 109-125 Marbledale Road  
Tuckahoe, New York  
NYSDEC BCP Site No. C360143

HydroEnvironmental Solutions, Inc. (HES) has reviewed the laboratory analytical reports for the bedrock and overburden monitor well groundwater samples designated BW-1, OW-1, BW-2, OW-2, BW-3 and OW-3. The attached tables summarize the laboratory results for the groundwater samples collected. The results are compared to their corresponding New York State Department of Environmental Conservation (NYSDEC) Ambient Water Quality Standards (AWQS) in accordance with the Technical and Operational Guidance Series (TOGS) 1.1.1; which are the relevant standards for this site. Any highlighted concentration was detected above its respective NYSDEC-AWQS. The location of each monitor well can be found on **Figure 2**, a draft generalized site plan showing additional sampling locations required by the NYSDEC.



*HydroEnvironmental*  
**SOLUTIONS, INC.**

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**109 - 125 Marbledale Road  
Tuckahoe, New York  
BCP Site No. C360143**

**Summary of Groundwater Quality Results - Bedrock and Overburden Wells**

Sample ID York ID Sampling Date Client Matrix	NYSDEC TOGS Standards and Guidance Values - GA	BW-1		OW-1		BW-2		OW-2		BW-3		OW-3		
		16K0989-01 11/22/2016 Water		16K0989-02 11/22/2016 Water		16K0935-01 11/21/2016 Water		16K0935-02 11/21/2016 Water		16K0870-01 11/18/2016 Water		16K0870-02 11/18/2016 Water		
		Compound	Result	Q	Result	Q								
Volatile Organics, 8260 List - Low Level	ug/L	ug/L	ug/L		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor		1	1		1	1	100	1	1	1	1	1	1	1
1,1,1,2-Tetrachloroethane	5	0.20	U	0.20										
1,1,1-Trichloroethane	5	0.20	U	0.20										
1,1,2,2-Tetrachloroethane	5	0.20	U	0.20										
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5	0.20	U	0.20										
1,1,2-Trichloroethane	1	0.20	U	0.20										
1,1-Dichloroethane	5	0.20	U	0.20										
1,1-Dichloroethylene	5	0.20	U	0.20	U	11		0.20	U	0.20	U	0.20	U	0.20
1,1-Dichloropropylene	5	0.20	U	0.20										
1,2,3-Trichlorobenzene	5	0.20	U	0.20										
1,2,3-Trichloropropane	0.04	0.20	U	0.20										
1,2,4,5-Tetramethylbenzene	~	0.58		0.57		5.70		0.27	J	0.28	J	0.20	J	0.20
1,2,4-Trichlorobenzene	5	0.20	U	0.20										
1,2,4-Trimethylbenzene	5	0.20	U	0.20	U	4		0.34	J	0.20	U	0.20	U	0.20
1,2-Dibromo-3-chloropropane	0.04	0.20	U	0.20										
1,2-Dibromoethane	5	0.20	U	0.20										
1,2-Dichlorobenzene	3	0.20	U	0.20										
1,2-Dichloroethane	0.6	0.20	U	0.20										
1,2-Dichloropropene	1	0.20	U	0.20										
1,3,5-Trimethylbenzene	5	0.20	U	0.20	U	2.10		0.20	U	0.20	U	0.20	U	0.20
1,3-Dichlorobenzene	3	0.20	U	0.20										
1,3-Dichloropropane	5	0.20	U	0.20										
1,4-Dichlorobenzene	3	0.20	U	0.20										
2,2-Dichloropropane	5	0.20	U	0.20										
2-Butanone	50	0.20	U	0.20										
2-Chlorotoluene	5	0.20	U	0.20										
2-Hexanone	50	0.20	U	0.20										
4-Chlorotoluene	5	0.20	U	0.20										
4-Methyl-2-pentanone	~	0.20	U	0.20										
Acetone	50	1.60	J	1	U	2.30	B	1.50	JB	3.90		1	U	
Benzene	1	0.20	U	0.20	U	5.30		0.20	U	0.20	U	0.20	U	0.20
Bromobenzene	5	0.20	U	0.20										
Bromochloromethane	5	0.20	U	0.20										
Bromodichloromethane	50	0.20	U	0.20										
Bromoform	50	0.20	U	0.20										
Bromomethane	5	0.20	U	0.20										
Carbon disulfide	~	0.20	U	0.20	U	6.30		0.20	U	0.20	U	0.20	U	0.20
Carbon tetrachloride	5	0.20	U	0.20										
Chlorobenzene	5	0.48	J	0.20	U	0.70		0.20	U	0.20	U	0.20	U	0.20
Chloroethane	5	0.20	U	0.20										
Chloroform	7	0.20	U	0.20	U	2		0.20	U	0.20	U	0.20	U	0.20
Chloromethane	5	0.20	U	0.20										

109 - 125 Marbledale Road  
 Tuckahoe, New York  
 BCP Site No. C360143

**Summary of Groundwater Quality Results - Bedrock and Overburden Wells**

Sample ID York ID Sampling Date Client Matrix	NYSDEC TOGS Standards and Guidance Values - GA	BW-1		OW-1		BW-2		OW-2		BW-3		OW-3	
		16K0989-01 11/22/2016 Water		16K0989-02 11/22/2016 Water		16K0935-01 11/21/2016 Water		16K0935-02 11/21/2016 Water		16K0870-01 11/18/2016 Water		16K0870-02 11/18/2016 Water	
		Compound	Result	Q	Result								
cis-1,2-Dichloroethylene	5	0.20	U	0.20	U	4,100	D	0.49	J	0.20	U	0.20	U
cis-1,3-Dichloropropylene	0.4	0.20	U										
Dibromochloromethane	50	0.20	U										
Dibromomethane	~	0.20	U										
Dichlorodifluoromethane	5	2		0.62		5.40		0.30	J	0.20	U	0.20	U
Ethyl Benzene	5	0.20	U	0.20	U	0.38	J	0.20	U	0.20	U	0.20	U
Hexachlorobutadiene	0.5	0.20	U										
Isopropylbenzene	5	0.79		0.20	U	3		0.52		0.20	U	0.20	U
Methyl tert-butyl ether (MTBE)	10	2.60		0.77		5		3.10		0.83		0.69	
Methylene chloride	5	1	U	1	U	1	U	1	U	1	U	1	U
Naphthalene	10	1	U	1	U	7.80		1	U	2		1	U
n-Butylbenzene	5	0.20	U	0.20	U	0.77		0.20	U	0.20	U	0.20	U
n-Propylbenzene	5	0.42	J	0.20	U	3.80		0.40	J	0.20	U	0.20	U
o-Xylene	5	0.20	U	0.20	U	0.52		0.20	U	0.20	U	0.20	U
p- & m- Xylenes	5	0.50	U	0.50	U	0.94	J	0.50	U	0.50	U	0.50	U
p-Diethylbenzene	~	0.20	U	0.20	U	2		0.20	U	0.20	U	0.20	U
p-Ethyltoluene	~	0.20	U	0.20	U	2.10		0.20	U	0.20	U	0.20	U
p-Isopropyltoluene	5	0.20	U	0.20	U	1.90		5.50		0.52		0.20	U
sec-Butylbenzene	5	0.27	J	0.20	U	0.64		0.22	J	0.20	U	0.20	U
Styrene	5	0.20	U										
tert-Butylbenzene	5	0.20	U	0.20	U	0.24	J	0.20	U	0.20	U	0.20	U
Tetrachloroethylene	5	0.29	J	0.22	J	6,000	D	2.30		0.20	U	0.20	U
Toluene	5	0.20	U	0.20	U	1.20		0.20	U	0.20	U	0.20	U
trans-1,2-Dichloroethylene	5	0.20	U	0.20	U	150		0.20	U	0.20	U	0.20	U
trans-1,3-Dichloropropylene	0.4	0.20	U										
Trichloroethylene	5	0.20	U	0.20	U	6,600	D	1.10		0.20	U	0.20	U
Trichlorofluoromethane	5	0.20	U										
Vinyl Chloride	2	0.20	U	0.20	U	490	D	0.43	J	0.20	U	0.20	U
Xylenes, Total	5	0.60	U	0.60	U	1.50		0.60	U	0.60	U	0.60	U
<b>Semi-Volatiles, 8270 List - low level</b>	ug/L	ug/L											
<b>Dilution Factor</b>		1		1		1		1		1		1	
1,2,4-Trichlorobenzene	5	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
1,2-Dichlorobenzene	3	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
1,3-Dichlorobenzene	3	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
1,4-Dichlorobenzene	3	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
2,4,5-Trichlorophenol	1	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
2,4,6-Trichlorophenol	1	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
2,4-Dichlorophenol	5	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
2,4-Dimethylphenol	50	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
2,4-Dinitrophenol	10	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
2,4-Dinitrotoluene	5	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
2,6-Dinitrotoluene	5	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
2-Chloronaphthalene	10	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U

**109 - 125 Marbledale Road  
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**Summary of Groundwater Quality Results - Bedrock and Overburden Wells**

Sample ID York ID Sampling Date Client Matrix	NYSDEC TOGS Standards and Guidance Values - GA	BW-1		OW-1		BW-2		OW-2		BW-3		OW-3	
		16K0989-01 11/22/2016 Water		16K0989-02 11/22/2016 Water		16K0935-01 11/21/2016 Water		16K0935-02 11/21/2016 Water		16K0870-01 11/18/2016 Water		16K0870-02 11/18/2016 Water	
		Compound	Result	Q	Result								
2-Chlorophenol	1	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
2-Methylnaphthalene	~	2.70	U	2.70	U	4.36	J	2.70	U	2.56	U	2.56	U
2-Methylphenol	1	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
2-Nitroaniline	5	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
2-Nitrophenol	1	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
3- & 4-Methylphenols	~	2.70	U	2.70	U	2.56	U	5.64		2.56	U	2.56	U
3,3'-Dichlorobenzidine	5	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
3-Nitroaniline	5	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
4,6-Dinitro-2-methylphenol	~	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
4-Bromophenyl phenyl ether	~	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
4-Chloro-3-methylphenol	1	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
4-Chloroaniline	5	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
4-Chlorophenyl phenyl ether	~	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
4-Nitroaniline	5	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
4-Nitrophenol	1	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
Acenaphthene	20	0.17		0.24		0.39		0.054		0.051		0.57	
Acenaphthylene	~	0.054	U	0.097		0.062		0.054		0.051		0.051	
Aniline	5	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
Anthracene	50	0.12		0.15		0.072		0.13		0.051		0.25	
Benzo(a)anthracene	0.002	0.054	U	0.054	U	0.051	U	0.054	U	0.051	U	0.051	U
Benzo(a)pyrene	0.002	0.054	U	0.054	U	0.051	U	0.054	U	0.051	U	0.051	U
Benzo(b)fluoranthene	0.002	0.054	U	0.054	U	0.051	U	0.054	U	0.051	U	0.051	U
Benzo(g,h,i)perylene	~	0.054	U	0.054	U	0.051	U	0.054	U	0.051	U	0.051	U
Benzo(k)fluoranthene	0.002	0.054	U	0.054	U	0.051	U	0.054	U	0.051	U	0.051	U
Benzyl alcohol	~	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
Benzyl butyl phthalate	50	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
Bis(2-chloroethoxy)methane	5	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
Bis(2-chloroethyl)ether	1	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
Bis(2-chloroisopropyl)ether	5	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
Bis(2-ethylhexyl)phthalate	5	0.54	U	0.54	U	0.51	U	0.54	U	0.51	U	0.51	U
Chrysene	0.002	0.054	U	0.054	U	0.051	U	0.054	U	0.051	U	0.051	U
Dibenzo(a,h)anthracene	~	0.054	U	0.054	U	0.051	U	0.054	U	0.051	U	0.051	U
Dibenzofuran	~	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
Diethyl phthalate	50	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
Dimethyl phthalate	50	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
Di-n-butyl phthalate	50	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
Di-n-octyl phthalate	50	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
Fluoranthene	50	0.054	U	0.23		0.051	U	0.11		0.051	U	0.23	
Fluorene	50	0.076		0.16		0.23		0.20		0.051	U	0.44	
Hexachlorobenzene	0.04	0.022	U	0.022	U	0.021	U	0.022	U	0.021	U	0.021	U
Hexachlorobutadiene	0.5	0.54	U	0.54	U	0.51	U	0.54	U	0.51	U	0.51	U
Hexachlorocyclopentadiene	5	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
Hexachloroethane	5	0.54	U	0.54	U	0.51	U	0.54	U	0.51	U	0.51	U
Indeno(1,2,3-cd)pyrene	0.002	0.054	U	0.054	U	0.051	U	0.054	U	0.051	U	0.051	U

**109 - 125 Marbledale Road  
Tuckahoe, New York  
BCP Site No. C360143**

**Summary of Groundwater Quality Results - Bedrock and Overburden Wells**

Sample ID York ID Sampling Date Client Matrix	NYSDEC TOGS Standards and Guidance Values - GA	BW-1		OW-1		BW-2		OW-2		BW-3		OW-3	
		16K0989-01 11/22/2016 Water		16K0989-02 11/22/2016 Water		16K0935-01 11/21/2016 Water		16K0935-02 11/21/2016 Water		16K0870-01 11/18/2016 Water		16K0870-02 11/18/2016 Water	
		Compound	Result	Q	Result								
Isophorone	50	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
Naphthalene	10	0.13		0.22		3.38		0.097		0.051		0.80	
Nitrobenzene	0.4	0.27	U	0.27	U	0.26	U	0.27	U	0.26	U	0.26	U
N-Nitrosodimethylamine	~	0.54	U	0.54	U	0.51	U	0.54	U	0.51	U	0.51	U
N-nitroso-di-n-propylamine	~	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
N-Nitrosodiphenylamine	50	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
Pentachlorophenol	1	0.27	U	0.27	U	0.26	U	0.27	U	0.26	U	0.26	U
Phenanthrene	50	0.054	U	0.42		0.082		0.34		0.051		0.80	
Phenol	1	3.01	J	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
Pyrene	50	0.054	U	0.17		0.051	U	0.054	J	0.051	U	0.14	
Pyridine	50	2.70	U	2.70	U	2.56	U	2.70	U	2.56	U	2.56	U
<b>Pesticides, 8081 target list</b>	ug/L	ug/L											
<b>Dilution Factor</b>		1		1		1		1		1		1	
4,4'-DDD	0.3	0.0044	U	0.0042	U	0.0043	U	0.054		0.0043	U	0.0042	U
4,4'-DDE	0.2	0.0044	U	0.0042	U	0.0043	U	0.055		0.0043	U	0.0042	U
4,4'-DDT	0.2	0.0044	U	0.0042	U	0.0043	U	0.0041	U	0.0043	U	0.0042	U
Aldrin	~	0.0044	U	0.0042	U	0.0043	U	0.0041	U	0.0043	U	0.0042	U
alpha-BHC	0.01	0.0044	U	0.0042	U	0.0043	U	0.0041	U	0.0043	U	0.0042	U
alpha-Chlordane	~	0.0044	U	0.0042	U	0.0043	U	0.0041	U	0.0043	U	0.0042	U
beta-BHC	0.04	0.0044	U	0.0042	U	0.0043	U	0.0041	U	0.0043	U	0.0042	U
Chlordane, total	0.05	0.022	U	0.021	U	0.022	U	0.021	U	0.022	U	0.021	U
delta-BHC	0.04	0.0044	U	0.0042	U	0.0043	U	0.0041	U	0.0043	U	0.0042	U
Dieldrin	0.004	0.0022	U	0.0021	U	0.0022	U	0.0021	U	0.0022	U	0.0021	U
Endosulfan I	~	0.0044	U	0.0042	U	0.0043	U	0.0041	U	0.0043	U	0.0042	U
Endosulfan II	~	0.0044	U	0.0042	U	0.0043	U	0.0041	U	0.0043	U	0.0042	U
Endosulfan sulfate	~	0.0044	U	0.0042	U	0.0043	U	0.0041	U	0.0043	U	0.0042	U
Endrin	~	0.0044	U	0.0042	U	0.0043	U	0.0041	U	0.0043	U	0.0042	U
Endrin aldehyde	5	0.011	U	0.011	U	0.011	U	0.010	U	0.011	U	0.011	U
Endrin ketone	5	0.011	U	0.011	U	0.011	U	0.010	U	0.011	U	0.011	U
gamma-BHC (Lindane)	0.05	0.0044	U	0.0042	U	0.0043	U	0.0041	U	0.0043	U	0.0042	U
gamma-Chlordane	~	0.011	U	0.011	U	0.011	U	0.010	U	0.011	U	0.011	U
Heptachlor	0.04	0.0044	U	0.0042	U	0.0043	U	0.0041	U	0.0043	U	0.0042	U
Heptachlor epoxide	0.03	0.0044	U	0.0042	U	0.0043	U	0.0041	U	0.0043	U	0.0042	U
Methoxychlor	35	0.0044	U	0.0042	U	0.0043	U	0.0041	U	0.0043	U	0.0042	U
Toxaphene	0.06	0.11	U	0.11	U	0.11	U	0.10	U	0.11	U	0.11	U
<b>Metals, Target Analyte</b>	ug/L	ug/L											
<b>Dilution Factor</b>		1		1		1		1		1		1	
Aluminum	~	56	U	86		93		8,090		172		10,700	
Antimony	3	6	U	6	U	6	U	6	U	6	U	6	U
Arsenic	25	4	U	4		4	U	11		4	U	4	U
Barium	1000	561		431		264		643		145		175	
Beryllium	3	1	U	1	U	1	U	1	U	1	U	1	U
Cadmium	5	3	U	3	U	3	U	3	U	3	U	3	U
Calcium	~	121,000		35,100		96,700		119,000		87,500		90,800	

109 - 125 Marbledale Road  
 Tuckahoe, New York  
 BCP Site No. C360143

**Summary of Groundwater Quality Results - Bedrock and Overburden Wells**

Sample ID York ID Sampling Date Client Matrix	NYSDEC TOGS Standards and Guidance Values - GA	BW-1 16K0989-01 Water		OW-1 16K0989-02 Water		BW-2 16K0935-01 Water		OW-2 16K0935-02 Water		BW-3 16K0870-01 Water		OW-3 16K0870-02 Water	
		Result	Q										
		Compound											
Chromium	50	6	U	6	U	6	U	33		6	U	13	
Cobalt	~	6	U	6	U	6	U	6		6	U	10	
Copper	200	3	U	3	U	9		121		12		37	
Iron	~	23,200		1,400		10,800		40,800		13,800		11,700	
Lead	25	3	U	3	U	3	U	684		3	U	17	
Magnesium	35000	57,200		23,300		33,600		68,200		28,700		33,000	
Manganese	300	119		38		306		599		820		1,660	
Nickel	100	9		9		11		30		8		20	
Potassium	~	49,500		40,700		31,500		56,400		11,700		13,000	
Selenium	10	11	U	11	U	11	U	11		11	U	11	
Silver	50	6	U	6	U	6	U	6		6	U	6	U
Sodium	20000	136,000		150,000		57,000		104,000		43,300		39,600	
Thallium	~	7		7		9		6		8		6	
Vanadium	~	11	U	11	U	11	U	52		11	U	20	
Zinc	2000	23		28		20		694		23		55	
<b>Metals, Target Analyte, Dissolved</b>	ug/L	ug/L											
Dilution Factor													
Aluminum	~	56	U										
Antimony	3	6	U	6	U	6	U	6	U	6	U	6	U
Arsenic	25	4	U	6	U	4	U	4	U	4	U	5	
Barium	1000	306		348		220		284		96		100	
Beryllium	3	1	U	1	U	1	U	1	U	1	U	1	U
Cadmium	5	3	U	3	U	3	U	3	U	3	U	3	U
Calcium	~	113,000		34,700		105,000		111,000		92,500		90,400	
Chromium	50	6	U	6	U	6	U	6	U	6	U	6	U
Cobalt	~	6	U	6	U	6	U	6	U	6	U	6	U
Copper	200	3	U	3	U	3	U	3	U	7		4	
Iron	~	5,190		179		2,640		15,000		373		91	
Lead	25	3	U	3	U	3	U	3	U	3	U	3	U
Magnesium	35000	54,700		22,500		38,000		69,000		31,500		32,500	
Manganese	300	114		34		341		452		853		1,520	
Nickel	100	11		9		9		8		6		7	
Potassium	~	46,900		41,200		33,500		55,900		13,300		12,000	
Selenium	10	11	U	11									
Silver	50	6	U	6	U	6	U	6	U	6	U	6	U
Sodium	20000	127,000		154,000		60,700		105,000		46,400		41,600	
Thallium	~	6	U	8		6		6		6		10	
Vanadium	~	11	U										
Zinc	2000	13		11		11		11		11		11	
<b>Mercury by 7473</b>	ug/L	ug/L											
Dilution Factor													
Mercury	0.7	0.20	U										
<b>Mercury by 7473, Dissolved</b>	ug/L	ug/L											

109 - 125 Marbledale Road  
 Tuckahoe, New York  
 BCP Site No. C360143

**Summary of Groundwater Quality Results - Bedrock and Overburden Wells**

Sample ID York ID Sampling Date Client Matrix	NYSDEC TOGS Standards and Guidance Values - GA	BW-1 16K0989-01 11/22/2016 Water		OW-1 16K0989-02 11/22/2016 Water		BW-2 16K0935-01 11/21/2016 Water		OW-2 16K0935-02 11/21/2016 Water		BW-3 16K0870-01 11/18/2016 Water		OW-3 16K0870-02 11/18/2016 Water		
		Compound	Result	Q	Result	Q								
		Dilution Factor	0.7	1 0.20	U									
Mercury		ug/L	ug/L											
Herbicides, Target List			1		1		1		1		1		1	
Dilution Factor			0.20	U	0.20									
2,4,5-T		35	5	U	5	U	5	U	5	U	5	U	5	
2,4,5-TP (Silvex)		0.26	5	U	5	U	5	U	5	U	5	U	5	
2,4-D		50	5	U	5	U	5	U	5	U	5	U	5	
Polychlorinated Biphenyls (PCB)		ug/L	ug/L											
Dilution Factor			1		1		1		1		1		1	
Aroclor 1016		~	0.056	U	0.053	U	0.054	U	0.051	U	0.056	U	0.053	
Aroclor 1221		~	0.056	U	0.053	U	0.054	U	0.051	U	0.056	U	0.053	
Aroclor 1232		~	0.056	U	0.053	U	0.054	U	0.051	U	0.056	U	0.053	
Aroclor 1242		~	0.056	U	0.053	U	0.054	U	0.051	U	0.056	U	0.053	
Aroclor 1248		~	0.056	U	0.053	U	0.054	U	0.051	U	0.056	U	0.053	
Aroclor 1254		~	0.056	U	0.053	U	0.054	U	0.051	U	0.056	U	0.053	
Aroclor 1260		~	0.056	U	0.053	U	0.054	U	0.051	U	0.056	U	0.053	
Total PCBs		0.09	0.056	U	0.053	U	0.054	U	0.051	U	0.056	U	0.053	

**NOTES:**

Any Regulatory Exceedences are color coded by Regulation

**Q is the Qualifier Column with definitions as follows:**

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

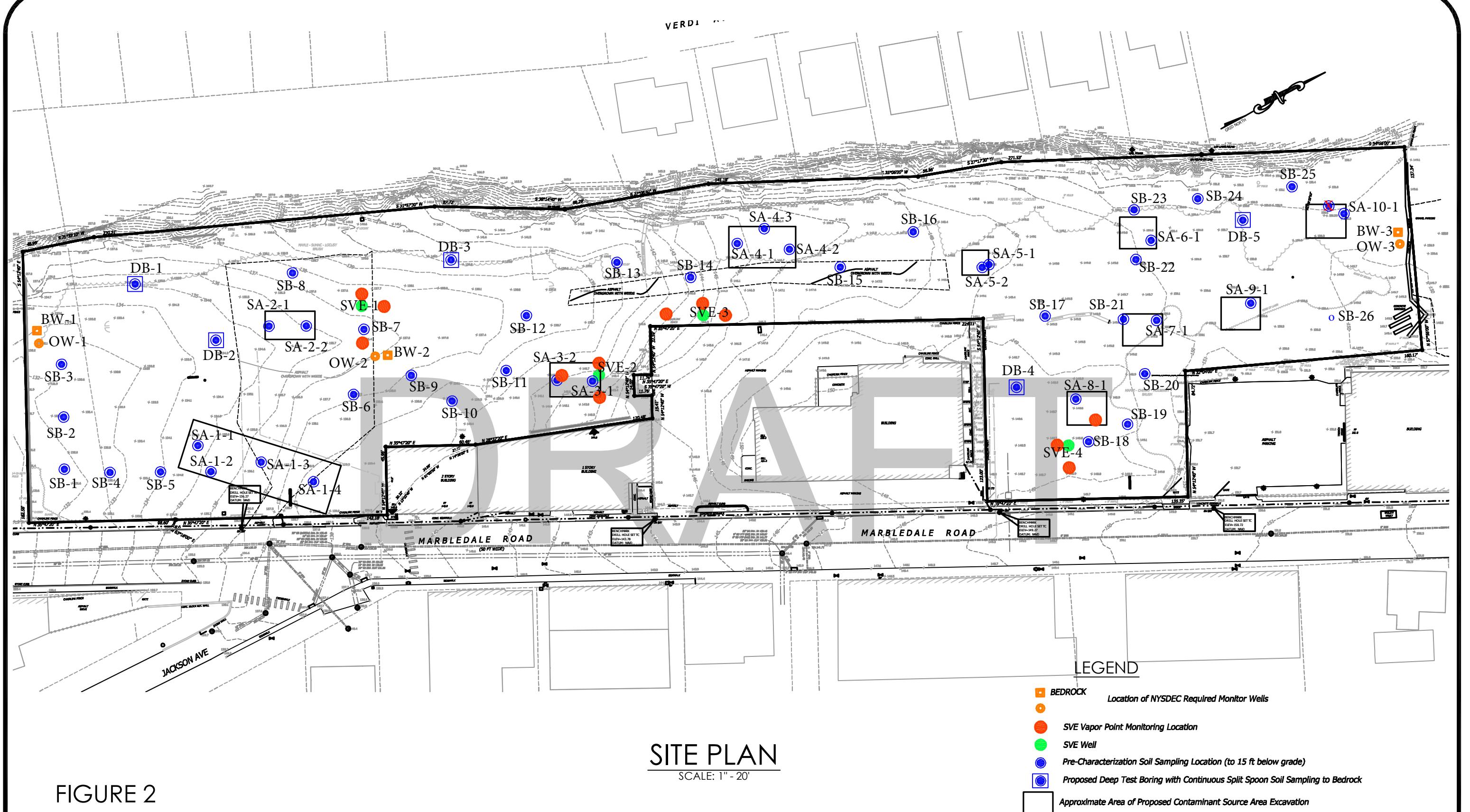
U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

~=this indicates that no regulatory limit has been established for this analyte



**Hydro Environmental  
SOLUTIONS, INC.**  
One Deans Bridge Road  
Somers, New York 10589

## **Summary of Laboratory Analytical Results Memorandum**

**To:** The Village of Tuckahoe  
Tuckahoe, New York

**From:** William A. Canavan, PG, LSRP  
HydroEnvironmental Solutions, Inc.

**Date:** December 14, 2016

**Re:** 109-125 Marbledale Road  
Tuckahoe, New York  
NYSDEC BCP Site No. C360143

HydroEnvironmental Solutions, Inc. (HES) has reviewed the laboratory analytical reports for the shallow soil borings designated SB-1 through SB-26. The attached tables summarize the lab results for the soil samples collected. The results are compared to their corresponding New York State Department of Environmental Conservation (NYSDEC) Commercial Soil Cleanup Objectives (CSCOs) in accordance with 6 NYCRR Part 375; which are the relevant standards for this site. Any highlighted concentration was detected above its respective NYSDEC-CSCOs. The shallow soil boring locations are shown on **Figure 2**, a draft generalized site plan showing additional sampling locations required by the NYSDEC.



*HydroEnvironmental*  
**SOLUTIONS, INC.**

One Deans Bridge Road      Somers, New York 10589  
(914) 276 - 2560      Fax: (914) 276 - 2664

109 - 125 Marbledale Road  
 Tuckahoe, New York  
 BCP Site No. C360143

Summary of Soil Quality Results -Shallow Borings 1 - 4

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-1-112216 (4-8 ftbg) 16K0985-01 11/22/2016 Soil		SB-2-112216 (8-12 ftbg) 16K0985-02 11/22/2016 Soil		SB-3-112216 (4-8 ftbg) 16K0985-03 11/22/2016 Soil		SB-4-112216 (1-4 ftbg) 16K0985-04 11/22/2016 Soil		
		Compound		Result	Q	Result	Q	Result	Q	
		mg/Kg	mg/Kg	1	U	1	U	1	U	
				0.0022		0.0035		0.0021		
Volatile Organics, 8260 List		mg/Kg	mg/Kg	~	0.0022	U	0.0035	U	0.0021	U
Dilution Factor				500	0.0022	U	0.0035	U	0.0021	U
1,1,1,2-Tetrachloroethane		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,1,1-Trichloroethane		500	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,1,2,2-Tetrachloroethane		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,1,2-Trichloroethane		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,1-Dichloroethane		240	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,1-Dichloroethylene		500	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,1-Dichloropropylene		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,2,3-Trichlorobenzene		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,2,3-Trichloropropane		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,2,4-Trichlorobenzene		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,2,4-Trimethylbenzene		190	0.0022	U	0.0022	U	0.014	U	0.0021	U
1,2-Dibromo-3-chloropropane		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,2-Dibromoethane		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,2-Dichlorobenzene		500	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,2-Dichloroethane		30	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,2-Dichloropropane		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,3,5-Trimethylbenzene		190	0.0022	U	0.0022	U	0.0042	J	0.0021	U
1,3-Dichlorobenzene		280	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,3-Dichloropropane		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,4-Dichlorobenzene		130	0.0022	U	0.0022	U	0.0035	U	0.0021	U
1,4-Dioxane		130	0.045	U	0.045	U	0.070	U	0.043	U
2,2-Dichloropropane		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
2-Butanone		500	0.0090		0.027				0.011	
2-Chlorotoluene		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
4-Chlorotoluene		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
Acetone		500	0.046		0.098				0.053	
Benzene		44	0.0022	U	0.0022	U	0.0035	U	0.0021	U
Bromobenzene		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
Bromochloromethane		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
Bromodichloromethane		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
Bromoform		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
Bromomethane		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
Carbon tetrachloride		22	0.0022	U	0.0022	U	0.0035	U	0.0021	U
Chlorobenzene		500	0.0022	U	0.0022	U	0.0035	U	0.0021	U
Chloroethane		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U
Chloroform		350	0.0022	U	0.0022	U	0.0035	U	0.0021	U
Chloromethane		~	0.0022	U	0.0022	U	0.0035	U	0.0021	U

Summary of Soil Quality Results -Shallow Borings 1 - 4

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-1-112216 (4-8 ftbg) 16K0985-01 11/22/2016 Soil		SB-2-112216 (8-12 ftbg) 16K0985-02 11/22/2016 Soil		SB-3-112216 (4-8 ftbg) 16K0985-03 11/22/2016 Soil		SB-4-112216 (1-4 ftbg) 16K0985-04 11/22/2016 Soil		
		Result	Q	Result	Q	Result	Q	Result	Q	
		500	0.0022	U	0.0035	U	0.0021	U	0.0026	U
		~	0.0022	U	0.0035	U	0.0021	U	0.0026	U
cis-1,2-Dichloroethylene		500	0.0022	U	0.0035	U	0.0021	U	0.0026	U
cis-1,3-Dichloropropylene		~	0.0022	U	0.0035	U	0.0021	U	0.0026	U
Dibromochloromethane		~	0.0022	U	0.0035	U	0.0021	U	0.0026	U
Dibromomethane		~	0.0022	U	0.0035	U	0.0021	U	0.0026	U
Dichlorodifluoromethane		~	0.0022	U	0.0035	U	0.0021	U	0.0026	U
Ethyl Benzene		390	0.0022	U	0.0035	U	0.0021	U	0.0026	U
Hexachlorobutadiene		~	0.0022	U	0.0035	U	0.0021	U	0.0026	U
Isopropylbenzene		~	0.0022	U	0.0065	J	0.0021	U	0.0026	U
Methyl tert-butyl ether (MTBE)		500	0.0022	U	0.0035	U	0.0021	U	0.0026	U
Methylene chloride		500	0.0045	U	0.0070	U	0.0043	U	0.0052	U
Naphthalene		500	0.0022	U	0.010	J	0.0061	J	0.0026	U
n-Butylbenzene		500	0.0022	U	0.0035	U	0.0021	U	0.0026	U
n-Propylbenzene		500	0.0022	U	0.0035	U	0.0021	U	0.0026	U
o-Xylene		~	0.0022	U	0.0035	U	0.0021	U	0.0026	U
p- & m- Xylenes		~	0.0045	U	0.0070	U	0.0043	U	0.0052	U
p-Isopropyltoluene		~	0.0022	U	0.0035	U	0.0021	U	0.0026	U
sec-Butylbenzene		500	0.0022	U	0.0062	J	0.0021	U	0.0026	U
Styrene		~	0.0022	U	0.0035	U	0.0021	U	0.0026	U
tert-Butylbenzene		500	0.0022	U	0.0057	J	0.0021	U	0.0034	J
Tetrachloroethylene		150	0.0022	U	0.0035	U	0.0021	U	0.0026	U
Toluene		500	0.0022	U	0.0035	U	0.0021	U	0.0026	U
trans-1,2-Dichloroethylene		500	0.0022	U	0.0035	U	0.0021	U	0.0026	U
trans-1,3-Dichloropropylene		~	0.0022	U	0.0035	U	0.0021	U	0.0026	U
Trichloroethylene		200	0.0022	U	0.0035	U	0.0021	U	0.0026	U
Trichlorofluoromethane		~	0.0022	U	0.0035	U	0.0021	U	0.0026	U
Vinyl acetate		~	0.0022	U	0.0035	U	0.0021	U	0.0026	U
Vinyl Chloride		13	0.0022	U	0.0035	U	0.0021	U	0.0026	U
Xylenes, Total		500	0.0067	U	0.010	U	0.0064	U	0.0077	U
Semi-Volatiles, 8270 Target List	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Dilution Factor			2	2	5	2				
1,2,4-Trichlorobenzene	~	0.050	U	0.062	U	0.050	U	0.052	U	
1,2-Dichlorobenzene	500	0.050	U	0.062	U	0.050	U	0.052	U	
1,3-Dichlorobenzene	280	0.050	U	0.062	U	0.050	U	0.052	U	
1,4-Dichlorobenzene	130	0.050	U	0.062	U	0.050	U	0.052	U	
2,4,5-Trichlorophenol	~	0.050	U	0.062	U	0.050	U	0.052	U	
2,4,6-Trichlorophenol	~	0.050	U	0.062	U	0.050	U	0.052	U	
2,4-Dichlorophenol	~	0.050	U	0.062	U	0.050	U	0.052	U	
2,4-Dimethylphenol	~	0.050	U	0.062	U	0.050	U	0.052	U	
2,4-Dinitrophenol	~	0.099	U	0.12	U	0.099	U	0.10	U	

Summary of Soil Quality Results -Shallow Borings 1 - 4

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-1-112216 (4-8 ftbg) 16K0985-01 11/22/2016 Soil		SB-2-112216 (8-12 ftbg) 16K0985-02 11/22/2016 Soil		SB-3-112216 (4-8 ftbg) 16K0985-03 11/22/2016 Soil		SB-4-112216 (1-4 ftbg) 16K0985-04 11/22/2016 Soil	
		Compound	Result	Q	Result	Q	Result	Q	Result
									Q
2,4-Dinitrotoluene		~	0.050	U	0.062	U	0.050	U	0.052
2,6-Dinitrotoluene		~	0.050	U	0.062	U	0.050	U	0.052
2-Chloronaphthalene		~	0.050	U	0.062	U	0.050	U	0.052
2-Chlorophenol		~	0.050	U	0.062	U	0.050	U	0.052
2-Methylnaphthalene		~	0.050	U	0.062	U	0.11	D	0.052
2-Methylphenol	500	0.050	U	0.062	U	0.050	U	0.052	U
2-Nitroaniline		~	0.099	U	0.12	U	0.099	U	0.10
2-Nitrophenol		~	0.050	U	0.062	U	0.050	U	0.052
3- & 4-Methylphenols		~	0.050	U	0.062	U	0.050	U	0.083
3,3'-Dichlorobenzidine		~	0.050	U	0.062	U	0.050	U	0.052
3-Nitroaniline		~	0.099	U	0.12	U	0.099	U	0.10
4,6-Dinitro-2-methylphenol		~	0.099	U	0.12	U	0.099	U	0.10
4-Bromophenyl phenyl ether		~	0.050	U	0.062	U	0.050	U	0.052
4-Chloro-3-methylphenol		~	0.050	U	0.062	U	0.050	U	0.052
4-Chloroaniline		~	0.050	U	0.062	U	0.050	U	0.052
4-Chlorophenyl phenyl ether		~	0.050	U	0.062	U	0.050	U	0.052
4-Nitroaniline		~	0.099	U	0.12	U	0.099	U	0.10
4-Nitrophenol		~	0.099	U	0.12	U	0.099	U	0.10
Acenaphthene	500	0.050	U	0.089	JD	0.19	D	0.052	U
Acenaphthylene	500	0.050	U	0.062	U	0.20	D	0.052	U
Aniline	~	0.20	U	0.25	U	0.20	U	0.21	U
Anthracene	500	0.050	U	0.33	D	0.60	D	0.052	U
Benzo(a)anthracene	5.6	0.050	U	0.46	D	1.54	D	0.052	U
Benzo(a)pyrene	1	0.050	U	0.30	D	<b>1.18</b>	D	0.052	U
Benzo(b)fluoranthene	5.6	0.050	U	0.25	D	1.05	D	0.052	U
Benzo(g,h,i)perylene	500	0.050	U	0.095	JD	0.38	D	0.052	U
Benzo(k)fluoranthene	56	0.050	U	0.36	D	1.06	D	0.052	U
Benzyl alcohol	~	0.050	U	0.062	U	0.050	U	0.052	U
Benzyl butyl phthalate	~	0.050	U	0.062	U	0.050	U	0.052	U
Bis(2-chloroethoxy)methane	~	0.050	U	0.062	U	0.050	U	0.052	U
Bis(2-chloroethyl)ether	~	0.050	U	0.062	U	0.050	U	0.052	U
Bis(2-chloroisopropyl)ether	~	0.050	U	0.062	U	0.050	U	0.052	U
Bis(2-ethylhexyl)phthalate	~	0.050	U	0.30	D	0.91	D	0.46	D
Chrysene	56	0.050	U	0.56	D	2.14	D	0.052	U
Dibenzo(a,h)anthracene	0.56	0.050	U	0.062	U	0.20	D	0.052	U
Dibenzofuran	350	0.050	U	0.15	D	0.15	D	0.052	U
Diethyl phthalate	~	0.050	U	0.062	U	0.050	U	0.052	U
Dimethyl phthalate	~	0.050	U	0.062	U	0.050	U	0.052	U
Di-n-butyl phthalate	~	0.050	U	0.062	U	0.050	U	0.052	U

Summary of Soil Quality Results -Shallow Borings 1 - 4

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-1-112216 (4-8 ftbg) 16K0985-01 11/22/2016 Soil		SB-2-112216 (8-12 ftbg) 16K0985-02 11/22/2016 Soil		SB-3-112216 (4-8 ftbg) 16K0985-03 11/22/2016 Soil		SB-4-112216 (1-4 ftbg) 16K0985-04 11/22/2016 Soil	
		Compound	Result	Q	Result	Q	Result	Q	Result
									Q
Di-n-octyl phthalate	~	0.050	U	0.062	U	0.050	U	0.052	U
Fluoranthene	500	0.050	U	1.46	D	4.25	D	0.11	D
Fluorene	500	0.050	U	0.32	D	0.39	D	0.052	U
Hexachlorobenzene	6	0.050	U	0.062	U	0.050	U	0.052	U
Hexachlorobutadiene	~	0.050	U	0.062	U	0.050	U	0.052	U
Hexachlorocyclopentadiene	~	0.050	U	0.062	U	0.050	U	0.052	U
Hexachloroethane	~	0.050	U	0.062	U	0.050	U	0.052	U
Indeno(1,2,3-cd)pyrene	5.6	0.050	U	0.10	JD	0.42	D	0.052	U
Isophorone	~	0.050	U	0.062	U	0.050	U	0.052	U
Naphthalene	500	0.050	U	0.062	U	0.19	D	0.052	U
Nitrobenzene	~	0.050	U	0.062	U	0.050	U	0.052	U
N-Nitrosodimethylamine	~	0.050	U	0.062	U	0.050	U	0.052	U
N-nitroso-di-n-propylamine	~	0.050	U	0.062	U	0.050	U	0.052	U
N-Nitrosodiphenylamine	~	0.050	U	0.062	U	0.050	U	0.052	U
Pentachlorophenol	6.7	0.050	U	0.062	U	0.050	U	0.052	U
Phenanthrene	500	0.050	U	1.74	D	2.80	D	0.052	U
Phenol	500	0.050	U	0.062	U	0.050	U	0.052	U
Pyrene	500	0.050	U	1.14	D	3.75	D	0.088	JD
Pyridine	~	0.20	U	0.25	U	0.20	U	0.21	U
<b>Pesticides, 8081 target list</b>	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>		5		5		5		5	
4,4'-DDD	92	0.0020	U	0.15	D	0.016	D	0.0021	U
4,4'-DDE	62	0.0020	U	0.026	D	0.0091	D	0.0021	U
4,4'-DDT	47	0.0020	U	0.0024	U	0.0026	D	0.0021	U
Aldrin	0.68	0.0020	U	0.0024	U	0.0020	U	0.0021	U
alpha-BHC	3.4	0.0020	U	0.0024	U	0.0020	U	0.0021	U
alpha-Chlordane	24	0.0020	U	0.0072	D	0.0020	U	0.0021	U
beta-BHC	3	0.0020	U	0.0024	U	0.0020	U	0.0021	U
Chlordane, total	~	0.039	U	0.065	D	0.039	U	0.041	U
delta-BHC	500	0.0020	U	0.0024	U	0.0020	U	0.0021	U
Dieldrin	1.4	0.0020	U	0.0024	U	0.0020	U	0.0021	U
Endosulfan I	200	0.0020	U	0.0024	U	0.0020	U	0.0021	U
Endosulfan II	200	0.0020	U	0.0024	U	0.0020	U	0.0021	U
Endosulfan sulfate	200	0.0020	U	0.0024	U	0.0020	U	0.0021	U
Endrin	89	0.0020	U	0.0024	U	0.0020	U	0.0021	U
Endrin aldehyde	~	0.0020	U	0.0024	U	0.0020	U	0.0021	U
Endrin ketone	~	0.0020	U	0.0024	U	0.0020	U	0.0021	U
gamma-BHC (Lindane)	9.2	0.0020	U	0.0024	U	0.0020	U	0.0021	U
gamma-Chlordane	~	0.0020	U	0.011	DP	0.0020	U	0.0021	U

Summary of Soil Quality Results -Shallow Borings 1 - 4

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-1-112216 (4-8 ftbg) 16K0985-01 11/22/2016 Soil		SB-2-112216 (8-12 ftbg) 16K0985-02 11/22/2016 Soil		SB-3-112216 (4-8 ftbg) 16K0985-03 11/22/2016 Soil		SB-4-112216 (1-4 ftbg) 16K0985-04 11/22/2016 Soil	
		Compound	Result	Q	Result	Q	Result	Q	Result
		Heptachlor	15	0.0020	U	0.0024	U	0.0020	U
		Heptachlor epoxide	~	0.0020	U	0.0024	U	0.0020	U
Metoxychlor	~	0.0098	U	0.012	U	0.0098	U	0.010	U
Toxaphene	~	0.099	U	0.12	U	0.099	U	0.10	U
<b>Metals, Target Analyte</b>	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>			1		100		1		100
Aluminum	~	7,690		16,900		12,700		16,100	
Antimony	~	0.59		0.74		0.59		11.80	
Arsenic	16	2.75		3.79		2.64		4.38	
Barium	400	97.80		470		112		1,170	
Beryllium	590	0.12		0.65		0.12		2.07	
Cadmium	9.3	0.95		7.79		0.36		8.02	
Calcium	~	20,600		27,300		2,970		28,200	
Chromium	~	17		44.30		21.70		75.40	
Cobalt	~	6.28		13.70		8.60		10.60	
Copper	270	112		1,080		29.10		512	
Iron	~	21,800		106,000	D	19,800		90,300	
Lead	1000	215		551		29.20		1,800	
Magnesium	~	6,020		4,360		3,810		3,100	
Manganese	10000	225		725		393		663	
Nickel	310	25.20		138		19		102	
Potassium	~	1,830		1,780		1,270		1,460	
Selenium	1500	1.18		1.48		1.19		1.25	
Silver	1500	0.59		0.74		0.59		0.62	
Sodium	~	407		2,250		286		2,010	
Thallium	~	1.18		1.48		1.19		1.25	
Vanadium	~	93.90		66		31.40		379	
Zinc	10000	195		1,150		89.50		2,250	D
<b>Mercury by 7473</b>	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>			1		1		1		1
Mercury	2.8	0.083		0.29		0.12		0.48	
<b>Total Solids</b>		%		%		%		%	
<b>Dilution Factor</b>		1		1		1		1	
% Solids	~	84.40		67.70		84.30		80.10	
<b>Herbicides, Target List</b>	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>		1		1		1		1	
2,4,5-T	~	0.024		0.030		0.024		0.025	
2,4,5-TP (Silvex)	500	0.024		0.030		0.024		0.025	
2,4-D	~	0.024		0.030		0.024		0.025	

Summary of Soil Quality Results -Shallow Borings 1 - 4

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-1-112216 (4-8 ftbg) 16K0985-01 11/22/2016 Soil		SB-2-112216 (8-12 ftbg) 16K0985-02 11/22/2016 Soil		SB-3-112216 (4-8 ftbg) 16K0985-03 11/22/2016 Soil		SB-4-112216 (1-4 ftbg) 16K0985-04 11/22/2016 Soil	
		Result	Q	Result	Q	Result	Q	Result	Q
Polychlorinated Biphenyls (PCB)	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor		1		1		1		1	
Aroclor 1016	~	0.020	U	0.025	U	0.020	U	0.021	U
Aroclor 1221	~	0.020	U	0.025	U	0.020	U	0.021	U
Aroclor 1232	~	0.020	U	0.025	U	0.020	U	0.021	U
Aroclor 1242	~	0.020	U	0.025	U	0.020	U	0.021	U
Aroclor 1248	~	0.020	U	0.025	U	0.020	U	0.021	U
Aroclor 1254	~	0.020	U	0.025	U	0.020	U	0.021	U
Aroclor 1260	~	0.020	U	0.025	U	0.020	U	0.021	U
Total PCBs	1	0.020	U	0.025	U	0.020	U	0.021	U

**NOTES:**

Any Regulatory Exceedences are color coded by Regulation

**Q is the Qualifier Column with definitions as follows:**

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

~=this indicates that no regulatory limit has been established for this analyte

Summary of Soil Quality Results -Shallow Borings 5 - 10

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-5-112316 (1-4 ftbg)		SB-6-112316 (8-12 ftbg)		SB-7-112316 (4-8 ftbg)		SB-8-112316 (12-15 ftbg)		SB-9-112316 (4-8 ftbg)		SB-10-112316 (8-11.95 ftbg)		
		16K1036-02 11/23/2016 Soil		16K1036-03 11/23/2016 Soil		16K1036-04 11/23/2016 Soil		16K1036-05 11/23/2016 Soil		16K1036-06 11/23/2016 Soil		16K1036-07 11/23/2016 Soil		
		Compound	Result	Q	Result	Q								
Volatile Organics, 8260 List	mg/Kg	mg/Kg	mg/Kg		mg/Kg									
Dilution Factor		1		1		1		1		1		1		1
1,1,1-Tetrachloroethane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,1,1-Trichloroethane	500	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,1,2,2-Tetrachloroethane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,1,2-Trichloroethane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,1-Dichloroethane	240	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,1-Dichloroethylene	500	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,1-Dichloropropylene	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,2,3-Trichlorobenzene	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,2,3-Trichloropropane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,2,4-Trichlorobenzene	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,2,4-Trimethylbenzene	190	0.0022	U	0.0025	U	0.062		0.0038	J	0.016		0.0025	U	
1,2-Dibromo-3-chloropropane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,2-Dibromoethane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,2-Dichlorobenzene	500	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,2-Dichloroethane	30	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,2-Dichloropropane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,3,5-Trimethylbenzene	190	0.0022	U	0.0025	U	0.012		0.0026	U	0.0079		0.0025	U	
1,3-Dichlorobenzene	280	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,3-Dichloropropane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,4-Dichlorobenzene	130	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
1,4-Dioxane	130	0.043	U	0.049	U	0.050	U	0.053	U	0.044	U	0.050	U	
2,2-Dichloropropane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
2-Butanone	500	0.018		0.0031	J	0.028		0.037		0.0076		0.0025	U	
2-Chlorotoluene	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
4-Chlorotoluene	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
Acetone	500	0.074		0.015		0.0050		0.15		0.049		0.038		
Benzene	44	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.012		0.023		
Bromobenzene	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
Bromochloromethane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
Bromodichloromethane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
Bromoform	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
Bromomethane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
Carbon tetrachloride	22	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
Chlorobenzene	500	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
Chloroethane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
Chloroform	350	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
Chloromethane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
cis-1,2-Dichloroethylene	500	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
cis-1,3-Dichloropropylene	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
Dibromochloromethane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
Dibromomethane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
Dichlorodifluoromethane	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0036	J	0.013		
Ethyl Benzene	390	0.0022	U	0.0025	U	0.0089		0.0026	U	0.0039	J	0.0025	U	
Hexachlorobutadiene	~	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
Isopropylbenzene	~	0.0022	U	0.0025	U	0.011		0.0026	U	0.0031	J	0.0049		
Methyl tert-butyl ether (MTBE)	500	0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U	
Methylene chloride	500	0.0043	U	0.0049	U	0.0050	U	0.0053	U	0.0044	U	0.0050	U	
Naphthalene	500</													

Summary of Soil Quality Results -Shallow Borings 5 - 10

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-5-112316 (1-4 ftbg) 16K1036-02 11/23/2016 Soil		SB-6-112316 (8-12 ftbg) 16K1036-03 11/23/2016 Soil		SB-7-112316 (4-8 ftbg) 16K1036-04 11/23/2016 Soil		SB-8-112316 (12-15 ftbg) 16K1036-05 11/23/2016 Soil		SB-9-112316 (4-8 ftbg) 16K1036-06 11/23/2016 Soil		SB-10-112316 (8-11.95 ftbg) 16K1036-07 11/23/2016 Soil		
		Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
		tert-Butylbenzene	500		0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U
Tetrachloroethylene	150		0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U
Toluene	500		0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0038	J	0.0025	U
trans-1,2-Dichloroethylene	500		0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U
trans-1,3-Dichloropropylene	~		0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U
Trichloroethylene	200		0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U
Trichlorofluoromethane	~		0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	U
Vinyl acetate	~		0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0093	
Vinyl Chloride	13		0.0022	U	0.0025	U	0.0025	U	0.0026	U	0.0022	U	0.0025	
Xylenes, Total	500		0.0065	U	0.0074	U	0.0074	U	0.0079	U	0.017		0.019	
<b>Semi-Volatiles, 8270 Target List</b>	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>			2		2		2		2		5		2	
1,2,4-Trichlorobenzene	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
1,2-Dichlorobenzene	500		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
1,3-Dichlorobenzene	280		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
1,4-Dichlorobenzene	130		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
2,4,5-Trichlorophenol	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
2,4,6-Trichlorophenol	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
2,4-Dichlorophenol	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
2,4-Dimethylphenol	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
2,4-Dinitrophenol	~		0.092	U	0.098	U	0.091	U	0.095	U	0.092	U	0.090	U
2,4-Dinitrotoluene	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
2,6-Dinitrotoluene	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
2-Chloronaphthalene	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
2-Chlorophenol	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
2-Methylnaphthalene	~		0.046	U	0.049	U	5.69	D	0.14	D	0.43	D	0.045	U
2-Methylphenol	500		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
2-Nitroaniline	~		0.092	U	0.098	U	0.091	U	0.095	U	0.092	U	0.090	U
2-Nitrophenol	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
3- & 4-Methylphenols	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
3,3'-Dichlorobenzidine	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
3-Nitroaniline	~		0.092	U	0.098	U	0.091	U	0.095	U	0.092	U	0.090	U
4,6-Dinitro-2-methylphenol	~		0.092	U	0.098	U	0.091	U	0.095	U	0.092	U	0.090	U
4-Bromophenyl phenyl ether	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
4-Chloro-3-methylphenol	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
4-Chloroaniline	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
4-Chlorophenyl phenyl ether	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
4-Nitroaniline	~		0.092	U	0.098	U	0.091	U	0.095	U	0.092	U	0.090	U
4-Nitrophenol	~		0.092	U	0.098	U	0.091	U	0.095	U	0.092	U	0.090	U
Acenaphthene	500		0.046	U	0.082	JD	0.29	D	0.29	D	1.10	D	0.045	U
Acenaphthylene	500		0.046	U	0.33	D	0.26	D	0.073	JD	0.31	D	0.045	U
Aniline	~		0.19	U	0.20	U	0.18	U	0.19	U	0.18	U	0.18	U
Anthracene	500		0.046	U	0.57	D	0.61	D	0.84	D	2.40	D	0.045	U
Benzo(a)anthracene	5.6		0.046	U	1.72	D	0.85	D	0.75	D	2.59	D	0.045	U
Benzo(a)pyrene	1		0.046	U	2	D	0.26	D	0.75	D	1.56	D	0.045	U
Benzo(b)fluoranthene	5.6		0.046	U	2.46	D	0.81	D	0.58	D	2.45	D	0.045	U
Benzo(g,h,i)perylene	500		0.046	U	1.28	D	0.52	D	0.47	D	1.64	D	0.045	U
Benzo(k)fluoranthene	56		0.046	U	1.97	D	0.95	D	0.67	D	2.39	D	0.045	U
Benzyl alcohol	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
Benzyl butyl phthalate	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
Bis(2-chloroethoxy)methane	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
Bis(2-chloroethyl)ether	~		0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U
Bis(2-chloroisopropyl)ether	~													

Summary of Soil Quality Results -Shallow Borings 5 - 10

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-5-112316 (1-4 ftbg) 16K1036-02 11/23/2016 Soil		SB-6-112316 (8-12 ftbg) 16K1036-03 11/23/2016 Soil		SB-7-112316 (4-8 ftbg) 16K1036-04 11/23/2016 Soil		SB-8-112316 (12-15 ftbg) 16K1036-05 11/23/2016 Soil		SB-9-112316 (4-8 ftbg) 16K1036-06 11/23/2016 Soil		SB-10-112316 (8-11.95 ftbg) 16K1036-07 11/23/2016 Soil			
		Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	
		Diethyl phthalate	~	0.046	U	0.049	U	0.046	U	0.39	D	0.046	U	0.045	U
Dimethyl phthalate	~	0.046	U	0.049	U	0.046	U	0.046	U	0.048	U	0.046	U	0.045	U
Di-n-butyl phthalate	~	0.046	U	0.049	U	0.046	U	0.046	U	0.048	U	0.046	U	0.045	U
Di-n-octyl phthalate	~	0.046	U	0.049	U	0.046	U	0.046	U	0.048	U	0.046	U	0.045	U
Fluoranthene	500	0.046	U	2.97	D	2.15	D	2.23	D	6.68	D	0.22	D		
Fluorene	500	0.046	U	0.11	D	0.49	D	0.40	D	1.78	D	0.045	U		
Hexachlorobenzene	6	0.046	U	0.11	D	0.046	U	0.048	U	0.046	U	0.045	U		
Hexachlorobutadiene	~	0.046	U	0.049	U	0.046	U	0.046	U	0.048	U	0.046	U	0.045	U
Hexachlorocyclopentadiene	~	0.046	U	0.049	U	0.046	U	0.046	U	0.048	U	0.046	U	0.045	U
Hexachloroethane	~	0.046	U	0.049	U	0.046	U	0.046	U	0.048	U	0.046	U	0.045	U
Indeno(1,2,3-cd)pyrene	5.6	0.046	U	1.07	D	0.46	D	0.39	D	1.29	D	0.045	U		
Isophorone	~	0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U		
Naphthalene	500	0.046	U	0.061	JD	1.93	D	0.079	JD	0.61	D	0.045	U		
Nitrobenzene	~	0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U		
N-Nitrosodimethylamine	~	0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U		
N-nitroso-di-n-propylamine	~	0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U		
N-Nitrosodiphenylamine	~	0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U		
Pentachlorophenol	6.7	0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U		
Phenanthrene	500	0.046	U	0.96	D	2.16	D	2.31	D	7.82	D	0.12	D		
Phenol	500	0.046	U	0.049	U	0.046	U	0.048	U	0.046	U	0.045	U		
Pyrene	500	0.046	U	2.30	D	1.55	D	1.52	D	6.29	D	0.24	D		
Pyridine	~	0.19	U	0.20	U	0.18	U	0.19	U	0.18	U	0.18	U		
<b>Pesticides, 8081 target list</b>	mg/Kg	mg/Kg	5	mg/Kg	5	mg/Kg	5	mg/Kg	5	mg/Kg	5	mg/Kg	5		
<b>Dilution Factor</b>															
4,4'-DDD	92	0.046	D	0.026	D	0.015	D	0.0019	U	0.034	D	0.0078	D		
4,4'-DDE	62	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0072	DP	0.0018	U		
4,4'-DDT	47	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U		
Aldrin	0.68	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U		
alpha-BHC	3.4	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U		
alpha-Chlordane	24	0.0018	U	0.0019	U	0.0070	D	0.012	D	0.0018	U	0.0018	U		
beta-BHC	3	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U		
Chlordane, total	~	0.037	U	0.039	U	0.060	D	0.094	D	0.036	U	0.036	U		
delta-BHC	500	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U		
Dieldrin	1.4	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U		
Endosulfan I	200	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U		
Endosulfan II	200	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U		
Endosulfan sulfate	200	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U		
Endrin	89	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U		
Endrin aldehyde	~	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U		
Endrin ketone	~	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U		
gamma-BHC (Lindane)	9.2	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U		
gamma-Chlordane	~	0.0018	U	0.0019	U	0.0073	D	0.018	D	0.0018	U	0.0018	U		
Heptachlor	15	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U		
Heptachlor epoxide	~	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U		
Methoxychlor	~	0.0091	U	0.0097	U	0.0090	U	0.0094	U	0.0091	U	0.0089	U		
Toxaphene	~	0.093	U	0.098	U	0.091	U	0.095	U	0.092	U	0.090	U		
<b>Metals, Target Analyte</b>	mg/Kg	mg/Kg	100	mg/Kg	1	mg/Kg	100	mg/Kg	1	mg/Kg	1	mg/Kg	1		
<b>Dilution Factor</b>															
Aluminum	~	10,800	16,700	13,200	9,100	7,430	2,580								
Antimony	~	31.50	0.59	0.55	13.30	0.55	0.54								
Arsenic	16	6.09	1.17	6.70	5.16	1.76	2.70								
Barium	400	328	456</td												

Summary of Soil Quality Results -Shallow Borings 5 - 10

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-5-112316 (1-4 ftbg) 16K1036-02 11/23/2016 Soil		SB-6-112316 (8-12 ftbg) 16K1036-03 11/23/2016 Soil		SB-7-112316 (4-8 ftbg) 16K1036-04 11/23/2016 Soil		SB-8-112316 (12-15 ftbg) 16K1036-05 11/23/2016 Soil		SB-9-112316 (4-8 ftbg) 16K1036-06 11/23/2016 Soil		SB-10-112316 (8-11.95 ftbg) 16K1036-07 11/23/2016 Soil		
		Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Copper		270	<b>682</b>	D	<b>618</b>		48.80		<b>323</b>		21		14.30	
Iron		~	70,000		134,000	D	20,000		45,200	D	12,000		6,240	
Lead		1000	<b>2,600</b>		631		63.30		683		23.40		17.40	
Magnesium		~	7,830		3,630		9,760		9,650		8,600		31,100	
Manganese		10000	594		1,080		317		561		308		126	
Nickel		310	61.70		52.70		24.50		106		14		8.29	
Potassium		~	1,760		1,920		4,020		1,310		1,350		491	
Selenium		1500	1.11	U	1.17	U	1.09	U	1.14	U	1.10	U	1.08	U
Silver		1500	0.55	U	0.59	U	0.55	U	25.10		0.55	U	0.54	U
Sodium		~	1,510		1,350		346		820		166		193	
Thallium		~	1.11	U	1.17	U	1.09	U	1.14	U	1.10	U	1.08	U
Vanadium		~	76.70		37		40		589		22.40		33.50	
Zinc		10000	874		1,590		97.20		1,070		39.20		20.10	
<b>Mercury by 7473</b>	mg/Kg	mg/Kg			mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>			1		1		1		1		1		1	
<b>Mercury</b>		2.8	0.15		0.077		0.16		0.53		0.069		0.044	
<b>Total Solids</b>			%		%		%		%		%		%	
<b>Dilution Factor</b>			1		1		1		1		1		1	
<b>% Solids</b>		~	90.20		85.20		91.50		87.70		91.10		92.50	
<b>Herbicides, Target List</b>	mg/Kg	mg/Kg			mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>			1		1		1		1		1		1	
2,4,5-T	~	0.022	U		0.024	U	0.022	U	0.023	U	0.022	U	0.022	U
2,4,5-TP (Silvex)	500	0.022	U		0.024	U	0.022	U	0.023	U	0.022	U	0.022	U
2,4-D	~	0.022	U		0.024	U	0.022	U	0.023	U	0.022	U	0.022	U
<b>Polychlorinated Biphenyls (PCB)</b>	mg/Kg	mg/Kg			mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>			1		1		1		1		1		1	
Aroclor 1016	~	0.019	U		0.020	U	0.018	U	0.019	U	0.018	U	0.018	U
Aroclor 1221	~	0.019	U		0.020	U	0.018	U	0.019	U	0.018	U	0.018	U
Aroclor 1232	~	0.019	U		0.020	U	0.018	U	0.019	U	0.018	U	0.018	U
Aroclor 1242	~	0.019	U		0.020	U	0.018	U	0.019	U	0.018	U	0.018	U
Aroclor 1248	~	0.019	U		0.020	U	0.018	U	0.15		0.018	U	0.018	U
Aroclor 1254	~	0.019	U		0.020	U	0.018	U	0.019	U	0.018	U	0.018	U
Aroclor 1260	~	0.019	U		0.020	U	0.018	U	0.044		0.018	U	0.018	U
Total PCBs	1	0.019	U		0.020	U	0.018	U	0.19		0.018	U	0.018	U

**NOTES:**

Any Regulatory Exceedences are color coded by Regulation

**Q is the Qualifier Column with definitions as follows:**

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

~=this indicates that no regulatory limit has been established for this analyte

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Summary of Soil Quality Results -Shallow Borings 5 - 10

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-11-112816 (0-4 ftbg)		SB-12-112816 (4-8 ftbg)		SB-13-112816 (4-8 ftbg)		SB-14-112816 (8-11.5 ftbg)		SB-15-112816 (0-4 ftbg)		
		16K1105-01 11/28/2016 Soil		16K1105-02 11/28/2016 Soil		16K1105-03 11/28/2016 Soil		16K1105-04 11/28/2016 Soil		16K1105-05 11/28/2016 Soil		
		Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Volatile Organics, 8260 List	mg/Kg	mg/Kg	mg/Kg		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Dilution Factor			1		1		1		1		1	
1,1,1,2-Tetrachloroethane	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,1,1-Trichloroethane	500	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,1,2,2-Tetrachloroethane	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,1,2-Trichloroethane	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,1-Dichloroethane	240	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,1-Dichloroethylene	500	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,1-Dichloropropylene	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,2,3-Trichlorobenzene	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,2,3-Trichloropropane	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,2,4-Trichlorobenzene	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,2,4-Trimethylbenzene	190	0.0040	J	0.0037	U	0.0026	J	0.013		0.0023	U	
1,2-Dibromo-3-chloropropane	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,2-Dibromoethane	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,2-Dichlorobenzene	500	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,2-Dichloroethane	30	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,2-Dichloropropane	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,3,5-Trimethylbenzene	190	0.0022	U	0.0037	U	0.0020	U	0.0064		0.0023	U	
1,3-Dichlorobenzene	280	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,3-Dichloropropane	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,4-Dichlorobenzene	130	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
1,4-Dioxane	130	0.044	U	0.074	U	0.040	U	0.049	U	0.045	U	
2,2-Dichloropropane	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
2-Butanone	500	0.0072		0.015		0.0057		0.0088		0.0023	U	
2-Chlorotoluene	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
4-Chlorotoluene	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
Acetone	500	0.033		0.074		0.034		0.12		0.0045	U	
Benzene	44	0.0057		J		0.0020	U	0.015		0.0023	U	
Bromobenzene	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
Bromochloromethane	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
Bromodichloromethane	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
Bromoform	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
Bromomethane	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
Carbon tetrachloride	22	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
Chlorobenzene	500	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
Chloroethane	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
Chloroform	350	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
Chloromethane	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
cis-1,2-Dichloroethylene	500	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
cis-1,3-Dichloropropylene	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
Dibromochloromethane	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
Dibromomethane	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
Dichlorodifluoromethane	~	0.024		0.0081		0.020		0.081		0.0023	U	
Ethyl Benzene	390	0.0022	U	0.0037	U	0.0020	U	0.0032	J	0.0023	U	
Hexachlorobutadiene	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U	
Isopropylbenzene	~	0.0022	U	0.0037	U	0.0020	U	0.0088		0.0023	U	
Methyl tert-butyl ether (MTBE)	500	0.0022		0.0037	U	0.0020	U	0.0025	U	0.0023	U	

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		16K1105-01 11/28/2016 Soil		16K1105-02 11/28/2016 Soil		16K1105-03 11/28/2016 Soil		16K1105-04 11/28/2016 Soil		16K1105-05 11/28/2016 Soil	
		Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result
Methylene chloride	500	0.0044	U	0.0074	U	0.0040	U	0.0049	U	0.0045	U
Naphthalene	500	0.064	B	0.0094	J	0.040		0.0025	U	0.0023	U
n-Butylbenzene	500	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U
n-Propylbenzene	500	0.0022	U	0.0037	U	0.0020	U	0.0082		0.0023	U
o-Xylene	~	0.0022	U	0.0037	U	0.0020	U	0.0032	J	0.0023	U
p- & m- Xylenes	~	0.0044	U	0.0074	U	0.0040	U	0.015		0.0045	U
p-Isopropyltoluene	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U
sec-Butylbenzene	500	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U
Styrene	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U
tert-Butylbenzene	500	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U
Tetrachloroethylene	150	0.0092		0.0037	U	0.0020	U	0.0025	U	0.0023	U
Toluene	500	0.051		0.0037	U	0.0020	U	0.15		0.0023	U
trans-1,2-Dichloroethylene	500	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U
trans-1,3-Dichloropropylene	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U
Trichloroethylene	200	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U
Trichlorofluoromethane	~	0.0022	U	0.0037	U	0.0051		0.0025	U	0.0023	U
Vinyl acetate	~	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U
Vinyl Chloride	13	0.0022	U	0.0037	U	0.0020	U	0.0025	U	0.0023	U
Xylenes, Total	500	0.0066	U	0.011	U	0.0059	U	0.019		0.0068	U
Semi-Volatiles, 8270 Target List	mg/Kg	mg/Kg									
Dilution Factor			10		2		2		10		2
1,2,4-Trichlorobenzene	~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
1,2-Dichlorobenzene	500	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
1,3-Dichlorobenzene	280	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
1,4-Dichlorobenzene	130	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
2,4,5-Trichlorophenol	~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
2,4,6-Trichlorophenol	~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
2,4-Dichlorophenol	~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
2,4-Dimethylphenol	~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
2,4-Dinitrophenol	~	0.44	U	0.093	U	0.094	U	0.095	U	0.091	U
2,4-Dinitrotoluene	~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
2,6-Dinitrotoluene	~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
2-Chloronaphthalene	~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
2-Chlorophenol	~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
2-Methylnaphthalene	~	0.30	JD	0.77	D	0.13	D	1.99	D	0.046	U
2-Methylphenol	500	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
2-Nitroaniline	~	0.44	U	0.093	U	0.094	U	0.095	U	0.091	U
2-Nitrophenol	~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
3- & 4-Methylphenols	~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
3,3'-Dichlorobenzidine	~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
3-Nitroaniline	~	0.44	U	0.093	U	0.094	U	0.095	U	0.091	U
4,6-Dinitro-2-methylphenol	~	0.44	U	0.093	U	0.094	U	0.095	U	0.091	U
4-Bromophenyl phenyl ether	~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
4-Chloro-3-methylphenol	~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
4-Chloroaniline	~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
4-Chlorophenyl phenyl ether	~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
4-Nitroaniline	~	0.44	U	0.093	U	0.094	U	0.095	U	0.091	U
4-Nitrophenol	~	0.44	U	0.093	U	0.094	U	0.095	U	0.091	U
Acenaphthene	500	1.23	D	0.45	D	0.17	D	3.66	D	0.046	U

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Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-11-112816 (0-4 ftbg)		SB-12-112816 (4-8 ftbg)		SB-13-112816 (4-8 ftbg)		SB-14-112816 (8-11.5 ftbg)		SB-15-112816 (0-4 ftbg)		
		16K1105-01 11/28/2016 Soil		16K1105-02 11/28/2016 Soil		16K1105-03 11/28/2016 Soil		16K1105-04 11/28/2016 Soil		16K1105-05 11/28/2016 Soil		
		Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Acenaphthylene		500	0.22	U	0.085	JD	0.055	JD	0.50	D	0.21	D
Aniline		~	0.88	U	0.19	U	0.19	U	0.19	U	0.18	U
Anthracene		500	2.55	D	0.66	D	0.39	D	5.14	D	0.27	D
Benzo(a)anthracene		5.6	3.98	D	0.48	D	0.59	D	5.72	D	0.82	D
Benzo(a)pyrene		1	4.55	D	0.48	D	0.68	D	2.39	D	1.21	D
Benzo(b)fluoranthene		5.6	3.89	D	0.40	D	0.51	D	3.21	D	1.35	D
Benzo(g,h,i)perylene		500	2.54	D	0.26	D	0.36	D	2.54	D	0.84	D
Benzo(k)fluoranthene		56	4.25	D	0.42	D	0.63	D	2.85	D	1.10	D
Benzyl alcohol		~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
Benzyl butyl phthalate		~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
Bis(2-chloroethoxy)methane		~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
Bis(2-chloroethyl)ether		~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
Bis(2-chloroisopropyl)ether		~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
Bis(2-ethylhexyl)phthalate		~	0.90	D	0.23	D	0.12	D	0.33	D	0.12	D
Chrysene		56	3.82	D	0.51	D	0.59	D	4.81	D	0.89	D
Dibeno(a,h)anthracene		0.56	1.27	D	0.15	D	0.14	D	1.26	D	0.35	D
Dibenzofuran		350	0.79	D	0.40	D	0.14	D	2.81	D	0.046	U
Diethyl phthalate		~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
Dimethyl phthalate		~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
Di-n-butyl phthalate		~	0.22	U	0.047	U	0.047	U	0.10	D	0.046	U
Di-n-octyl phthalate		~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
Fluoranthene		500	7.45	D	1.20	D	1.26	D	12.20	D	1.54	D
Fluorene		500	1.11	D	0.54	D	0.21	D	6.74	D	0.046	U
Hexachlorobenzene		6	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
Hexachlorobutadiene		~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
Hexachlorocyclopentadiene		~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
Hexachloroethane		~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
Indeno(1,2,3-cd)pyrene		5.6	2.28	D	0.23	D	0.33	D	2.25	D	0.65	D
Isophorone		~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
Naphthalene		500	0.64	D	1.01	D	0.33	D	0.47	D	0.046	U
Nitrobenzene		~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
N-Nitrosodimethylamine		~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
N-nitroso-di-n-propylamine		~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
N-Nitrosodiphenylamine		~	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
Pentachlorophenol		6.7	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
Phenanthrene		500	6.63	D	1.83	D	1.06	D	13.50	D	0.63	D
Phenol		500	0.22	U	0.047	U	0.047	U	0.048	U	0.046	U
Pyrene		500	6.44	D	0.95	D	0.94	D	10.70	D	1.36	D
Pyridine		~	0.88	U	0.19	U	0.19	U	0.19	U	0.18	U
<b>Pesticides, 8081 target list</b>	mg/Kg	mg/Kg										
<b>Dilution Factor</b>			5		5		5		5		5	
4,4'-DDD	92	0.0037	D	0.0048	DP	0.0019	U	0.0019	U	0.039	D	
4,4'-DDE	62	0.0017	U	0.0020	D	0.0019	U	0.0019	U	0.018	DP	
4,4'-DDT	47	0.0017	U	0.0048	D	0.0019	U	0.0019	U	0.064	D	
Aldrin	0.68	0.0017	U	0.0018	U	0.0019	U	0.0019	U	0.0018	U	
alpha-BHC	3.4	0.0017	U	0.0018	U	0.0019	U	0.0019	U	0.0018	U	
alpha-Chlordane	24	0.0017	U	0.0018	U	0.0019	U	0.0019	U	0.038	DP	
beta-BHC	3	0.0017	U	0.0018	U	0.0019	U	0.0019	U	0.0018	U	
Chlordane, total	~	0.035	U	0.037	U	0.037	U	0.038	U	0.21	DP	

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		Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result
delta-BHC	500	0.0017	U	0.0018	U	0.0019	U	0.0019	U	0.0018	U
Dieldrin	1.4	0.0017	U	0.0018	U	0.0019	U	0.0019	U	0.0018	U
Endosulfan I	200	0.0017	U	0.0018	U	0.0019	U	0.0019	U	0.0018	U
Endosulfan II	200	0.0017	U	0.0018	U	0.0019	U	0.0019	U	0.0018	U
Endosulfan sulfate	200	0.0017	U	0.0018	U	0.0019	U	0.0019	U	0.0018	U
Endrin	89	0.0017	U	0.0018	U	0.0019	U	0.0019	U	0.0018	U
Endrin aldehyde	~	0.0017	U	0.0018	U	0.0019	U	0.0019	U	0.0018	U
Endrin ketone	~	0.0017	U	0.0018	U	0.0019	U	0.0019	U	0.0018	U
gamma-BHC (Lindane)	9.2	0.0017	U	0.0018	U	0.0019	U	0.0019	U	0.0018	U
gamma-Chlordane	~	0.0017	U	0.0018	U	0.0019	U	0.0019	U	0.027	D
Heptachlor	15	0.0017	U	0.0018	U	0.0019	U	0.0019	U	0.0054	D
Heptachlor epoxide	~	0.0017	U	0.0018	U	0.0019	U	0.0019	U	0.0018	U
Methoxychlor	~	0.0087	U	0.0092	U	0.0093	U	0.0094	U	0.0090	U
Toxaphene	~	0.088	U	0.093	U	0.094	U	0.095	U	0.091	U
<b>Metals, Target Analyte</b>	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Dilution Factor			1		1		1		1		
Aluminum	~	7,350	U	7,060	U	8,820	U	6,690	U	9,760	
Antimony	~	0.53	U	0.56	U	0.56	U	0.57	U	0.55	
Arsenic	16	2.25		1.59		2.66		3.14		3.65	
Barium	400	44.70		59.40		49.80		55.80		99.50	
Beryllium	590	0.11	U	0.11	U	0.11	U	0.11	U	0.11	
Cadmium	9.3	0.35		0.37		0.34		0.40		0.53	
Calcium	~	49,800		14,100		15,700		20,900		44,100	
Chromium	~	12.90		19.70		16.10		17.40		18.30	
Cobalt	~	6.17		6.35		7.73		6		8.88	
Copper	270	24		30.20		32.10		27		27.70	
Iron	~	13,100		14,600		15,200		10,800		16,200	
Lead	1000	41.30		70.70		19.10		54.50		36.80	
Magnesium	~	24,700		5,940		6,740		10,400		20,500	
Manganese	10000	242		170		290		217		223	
Nickel	310	14		14.40		14.90		15.80		16.70	
Potassium	~	1,530		1,610		1,430		1,380		2,740	
Selenium	1500	1.05	U	1.11	U	1.45		1.14		1.09	
Silver	1500	0.53	U	0.56	U	0.56	U	0.57	U	0.55	
Sodium	~	190		211		239		188		250	
Thallium	~	1.05	U	1.11	U	1.12	U	1.14	U	1.09	
Vanadium	~	27.50		31.70		27.50		32.80		38.20	
Zinc	10000	41.70		50.50		45.50		60.40		56.70	
<b>Mercury by 7473</b>	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Dilution Factor			1		1		1		1		
Mercury	2.8	0.050		0.094		0.079		0.096		0.066	
<b>Total Solids</b>		%		%		%		%		%	
Dilution Factor		1		1		1		1		1	
% Solids	~	94.80		89.90		89.20		87.60		91.80	
<b>Herbicides, Target List</b>	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Dilution Factor			1		1		1		1		
2,4,5-T	~	0.021	U	0.022	U	0.022	U	0.023	U	0.022	
2,4,5-TP (Silvex)	500	0.021	U	0.022	U	0.022	U	0.023	U	0.022	
2,4-D	~	0.021	U	0.022	U	0.022	U	0.023	U	0.022	

Summary of Soil Quality Results -Shallow Borings 5 - 10

Sample ID	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-11-112816 (0-4 ftbg)		SB-12-112816 (4-8 ftbg)		SB-13-112816 (4-8 ftbg)		SB-14-112816 (8-11.5 ftbg)		SB-15-112816 (0-4 ftbg)	
		16K1105-01 11/28/2016 Soil	16K1105-02 11/28/2016 Soil	16K1105-03 11/28/2016 Soil	16K1105-04 11/28/2016 Soil	16K1105-05 11/28/2016 Soil	16K1105-05 11/28/2016 Soil				
Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	
Polychlorinated Biphenyls (PCB)	mg/Kg	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg		
Dilution Factor		1	1		1		1		1		
Aroclor 1016	~	0.018	U	0.019	U	0.019	U	0.019	U	0.018	
Aroclor 1221	~	0.018	U	0.019	U	0.019	U	0.019	U	0.018	
Aroclor 1232	~	0.018	U	0.019	U	0.019	U	0.019	U	0.018	
Aroclor 1242	~	0.018	U	0.019	U	0.019	U	0.019	U	0.018	
Aroclor 1248	~	0.018	U	0.019	U	0.019	U	0.019	U	0.018	
Aroclor 1254	~	0.018	U	0.10		0.019	U	0.019	U	0.70	
Aroclor 1260	~	0.018	U	0.019	U	0.019	U	0.019	U	0.018	
Total PCBs	1	0.018	U	0.10		0.019	U	0.019	U	0.70	

**NOTES:**

Any Regulatory Exceedences are color coded by Regulation

**Q is the Qualifier Column with definitions as follows:**

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

~=this indicates that no regulatory limit has been established for this analyte

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Summary of Soil Quality Results -Shallow Borings 16 - 21

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-16-120116 (12-14.25 ftbg)		SB-17-120116 (0-2.25 ftbg)		SB-18-120116 (12-15 ftbg)		SB-19-120116 (0-4 ftbg)		SB-20-120116 (0-4 ftbg)		SB-21-120116 (0-4.9 ftbg)		
		16L0102-01 12/1/2016 Soil		16L0102-02 12/1/2016 Soil		16L0102-03 12/1/2016 Soil		16L0102-04 12/1/2016 Soil		16L0102-05 12/1/2016 Soil		16L0102-06 12/1/2016 Soil		
		Compound	Result	Q	Result	Q								
Volatile Organics, 8260 List	mg/Kg	mg/Kg			mg/Kg									
Dilution Factor			1		1		1		1		1		1	
1,1,1,2-Tetrachloroethane	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,1,1-Trichloroethane	500	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,1,2,2-Tetrachloroethane	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,1,2-Trichloroethane	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,1-Dichloroethane	240	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,1-Dichloroethylene	500	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,1-Dichloropropylene	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,2,3-Trichlorobenzene	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,2,3-Trichloropropane	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,2,4-Trichlorobenzene	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,2,4-Trimethylbenzene	190	0.047			0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,2-Dibromo-3-chloropropane	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,2-Dibromoethane	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,2-Dichlorobenzene	500	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,2-Dichloroethane	30	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,2-Dichloropropane	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,3,5-Trimethylbenzene	190	0.023			0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,3-Dichlorobenzene	280	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,3-Dichloropropane	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,4-Dichlorobenzene	130	0.023			0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
1,4-Dioxane	130	0.049	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.053	U
2,2-Dichloropropane	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
2-Butanone	500	0.040			0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
2-Chlorotoluene	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
4-Chlorotoluene	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Acetone	500	0.16			0.0049	U	0.0052	U	0.0055	U	0.0046	U	0.011	
Benzene	44	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Bromobenzene	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Bromochloromethane	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Bromodichloromethane	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Bromoform	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Bromomethane	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Carbon tetrachloride	22	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Chlorobenzene	500	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Chloroethane	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Chloroform	350	0.89	E		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Chloromethane	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
cis-1,2-Dichloroethylene	500	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
cis-1,3-Dichloropropylene	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Dibromochloromethane	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Dibromomethane	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Dichlorodifluoromethane	~	0.015			0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Ethyl Benzene	390	0.0092			0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Hexachlorobutadiene	~	0.0025	U		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Isopropylbenzene	~	0.0025	J		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Methyl tert-butyl ether (MTBE)	500	0.0025	U</											

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Summary of Soil Quality Results -Shallow Borings 16 - 21

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-16-120116 (12-14.25 ftbg)		SB-17-120116 (0-2.25 ftbg)		SB-18-120116 (12-15 ftbg)		SB-19-120116 (0-4 ftbg)		SB-20-120116 (0-4 ftbg)		SB-21-120116 (0-4.9 ftbg)	
		16L0102-01 12/1/2016 Soil		16L0102-02 12/1/2016 Soil		16L0102-03 12/1/2016 Soil		16L0102-04 12/1/2016 Soil		16L0102-05 12/1/2016 Soil		16L0102-06 12/1/2016 Soil	
		Compound	Result	Q	Result								
sec-Butylbenzene	500	0.0029	J	0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Styrene	~	0.0025	U	0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
tert-Butylbenzene	500	0.0025	U	0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Tetrachloroethylene	150	0.0025	U	0.0024	U	0.0077		0.0028	U	0.0023	U	0.0026	U
Toluene	500	0.017		0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
trans-1,2-Dichloroethylene	500	0.0025	U	0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
trans-1,3-Dichloropropylene	~	0.0025	U	0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Trichloroethylene	200	0.0025	U	0.0024	U	0.0026	U	0.015		0.0023	U	0.0026	U
Trichlorofluoromethane	~	0.0025	U	0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Vinyl acetate	~	0.0025	U	0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Vinyl Chloride	13	0.0025	U	0.0024	U	0.0026	U	0.0028	U	0.0023	U	0.0026	U
Xylenes, Total	500	0.023		0.0073	U	0.0078	U	0.0083	U	0.0068	U	0.0079	U
<b>Semi-Volatiles, 8270 Target List</b>	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
<b>Dilution Factor</b>			5	2	2	2	2	2	2	2	2	2	5
1,2,4-Trichlorobenzene	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
1,2-Dichlorobenzene	500	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
1,3-Dichlorobenzene	280	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
1,4-Dichlorobenzene	130	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
2,4,5-Trichlorophenol	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
2,4,6-Trichlorophenol	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
2,4-Dichlorophenol	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
2,4-Dimethylphenol	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
2,4-Dinitrophenol	~	0.25	U	0.094	U	0.10	U	0.092	U	0.090	U	0.23	U
2,4-Dinitrotoluene	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
2,6-Dinitrotoluene	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
2-Chloronaphthalene	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
2-Chlorophenol	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
2-Methylnaphthalene	~	0.24	JD	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
2-Methylphenol	500	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
2-Nitroaniline	~	0.25	U	0.094	U	0.10	U	0.092	U	0.090	U	0.23	U
2-Nitrophenol	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
3- & 4-Methylphenols	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
3,3'-Dichlorobenzidine	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
3-Nitroaniline	~	0.25	U	0.094	U	0.10	U	0.092	U	0.090	U	0.23	U
4,6-Dinitro-2-methylphenol	~	0.25	U	0.094	U	0.10	U	0.092	U	0.090	U	0.23	U
4-Bromophenyl phenyl ether	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
4-Chloro-3-methylphenol	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
4-Chloroaniline	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
4-Chlorophenyl phenyl ether	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
4-Nitroaniline	~	0.25	U	0.094	U	0.10	U	0.092	U	0.090	U	0.23	U
4-Nitrophenol	~	0.25	U	0.094	U	0.10	U	0.092	U	0.090	U	0.23	U
Acenaphthene	500	0.30	D	0.047	U	0.051	U	0.046	U	0.045	U	0.28	D
Acenaphthylene	500	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Aniline	~	0.51	U	0.19	U	0.21	U	0.19	U	0.18	U	0.46	U
Anthracene	500	0.49	D	0.080	JD	0.051	U	0.046	U	0.13	D	1.05	D
Benzo(a)anthracene	5.6	0.69	D	0.25	D	0.13	D	0.046	U	0.31	D	1.85	D
Benzo(a)pyrene	1	0.35	D	0.12	D	0.085	JD	0.046	U	0.13	D	0.87	D
Benzo(b)fluoranthene	5.6	0.36	D	0.11	D	0.073	JD	0.046	U	0.17	D	0.87	D
Benzo(g,h,i)perylene	500	0.15	JD	0.066	JD	0.051	U	0.046	U	0.054	JD	0.47	D
Benzo(k)fluoranthene	56	0.41	D	0.15	D	0.097	JD	0.046	U	0.094	D	1.08	D
Benzyl alcohol	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Benzyl butyl phthalate	~	2.59	D	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Bis(2-chloroethoxy)methane	~	0.13	U	0.047	U	0.							

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Summary of Soil Quality Results -Shallow Borings 16 - 21

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-16-120116 (12-14.25 ftbg)		SB-17-120116 (0-2.25 ftbg)		SB-18-120116 (12-15 ftbg)		SB-19-120116 (0-4 ftbg)		SB-20-120116 (0-4 ftbg)		SB-21-120116 (0-4.9 ftbg)	
		16L0102-01 12/1/2016 Soil		16L0102-02 12/1/2016 Soil		16L0102-03 12/1/2016 Soil		16L0102-04 12/1/2016 Soil		16L0102-05 12/1/2016 Soil		16L0102-06 12/1/2016 Soil	
		Compound	Result	Q	Result								
Chrysene	56	0.90	D	0.32	D	0.14	D	0.046	U	0.23	D	2.51	D
Dibenzo(a,h)anthracene	0.56	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.27	D
Dibenzofuran	350	0.20	JD	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Diethyl phthalate	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Dimethyl phthalate	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Di-n-butyl phthalate	~	0.94	D	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Di-n-octyl phthalate	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Fluoranthene	500	2.08	D	0.66	D	0.29	D	0.046	U	0.47	D	5.46	D
Fluorene	500	0.38	D	0.047	U	0.051	U	0.046	U	0.045	U	0.28	D
Hexachlorobenzene	6	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Hexachlorobutadiene	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Hexachlorocyclopentadiene	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Hexachloroethane	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Indeno(1,2,3-cd)pyrene	5.6	0.13	U	0.056	JD	0.051	U	0.046	U	0.056	JD	0.43	D
Isophorone	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Naphthalene	500	0.31	D	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Nitrobenzene	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
N-Nitrosodimethylamine	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
N-nitroso-di-n-propylamine	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
N-Nitrosodiphenylamine	~	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Pentachlorophenol	6.7	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Phenanthrene	500	1.99	D	0.24	D	0.21	D	0.046	U	0.14	D	3.22	D
Phenol	500	0.13	U	0.047	U	0.051	U	0.046	U	0.045	U	0.11	U
Pyrene	500	1.85	D	0.58	D	0.24	D	0.046	U	0.43	D	4.45	D
Pyridine	~	0.51	U	0.19	U	0.21	U	0.19	U	0.18	U	0.46	U
<b>Pesticides, 8081 target list</b>	mg/Kg	mg/Kg		mg/Kg	mg/Kg		mg/Kg	mg/Kg		mg/Kg	mg/Kg		mg/Kg
<b>Dilution Factor</b>			5		5		5		5		5		5
4,4'-DDD	92	0.0056	D	0.0021	D	0.0020	U	0.0018	U	0.0020	D	0.0076	D
4,4'-DDE	62	0.0043	D	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0058	D
4,4'-DDT	47	0.0026	D	0.0023	D	0.0020	U	0.0018	U	0.0047	D	0.0091	D
Aldrin	0.68	0.0020	U	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0018	U
alpha-BHC	3.4	0.0020	U	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0049	D
alpha-Chlordane	24	0.0020	U	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0097	D
beta-BHC	3	0.0020	U	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0018	U
Chlordane, total	~	0.040	U	0.037	U	0.041	U	0.037	U	0.036	U	0.11	DP
delta-BHC	500	0.0020	U	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0018	U
Diieldrin	1.4	0.0020	U	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0024	D
Endosulfan I	200	0.0020	U	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0018	U
Endosulfan II	200	0.0020	U	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0018	U
Endosulfan sulfate	200	0.0020	U	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0018	U
Endrin	89	0.0020	U	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0018	U
Endrin aldehyde	~	0.0020	U	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0018	U
Endrin ketone	~	0.0020	U	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0018	U
gamma-BHC (Lindane)	9.2	0.0020	U	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0018	U
gamma-Chlordane	~	0.0020	U	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0081	D
Heptachlor	15	0.0020	U	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0018	U
Heptachlor epoxide	~	0.0020	U	0.0019	U	0.0020	U	0.0018	U	0.0018	U	0.0018	U
Methoxychlor	~	0.0100	U	0.0093	U	0.010	U	0.0091	U	0.0089	U	0.0090	U
Toxaphene	~	0.10	U	0.095	U	0.10	U	0.092	U	0.090	U	0.091	U
<b>Metals, Target Analyte</b>	mg/Kg	mg/Kg		mg/Kg	mg/Kg		mg/Kg	mg/Kg		mg/Kg	mg/Kg		mg/Kg
<b>Dilution Factor</b>			1		1		1		1		1		1
Aluminum	~	6,310		12,200		16,100		7,330		6,620		8,940	
Antimony	~	0.61	U	0.57	U	0.61	U	0.55	U	0.54	U	0.55	U
Arsenic	16	4.15		1.90		2.69		2.54					

Summary of Soil Quality Results -Shallow Borings 16 - 21

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-16-120116 (12-14.25 ftbg)		SB-17-120116 (0-2.25 ftbg)		SB-18-120116 (12-15 ftbg)		SB-19-120116 (0-4 ftbg)		SB-20-120116 (0-4 ftbg)		SB-21-120116 (0-4.9 ftbg)		
		16L0102-01 12/1/2016 Soil		16L0102-02 12/1/2016 Soil		16L0102-03 12/1/2016 Soil		16L0102-04 12/1/2016 Soil		16L0102-05 12/1/2016 Soil		16L0102-06 12/1/2016 Soil		
		Compound	Result	Q	Result	Q								
Cadmium	9.3		3.54		0.34	U	0.37	U	0.33	U	0.36		0.42	
Calcium	~		17,700		8,080		6,210		44,200		29,200		23,400	
Chromium	~		20.50		21.20		20		11.70		12.50		20.30	
Cobalt	~		6.16		12.70		9.27		4.89		6.28		8.60	
Copper	270		42.70		27.20		13.70		10.80		21.40		74	
Iron	~		17,000		21,100		16,500		8,950		11,900		14,300	
Lead	1000		163		30.30		17.50		6.12		34.50		45.30	
Magnesium	~		5,730		7,710		7,780		26,800		15,100		11,900	
Manganese	10000		225		340		690		215		200		213	
Nickel	310		20.20		22.50		18.10		10.90		13.60		17.50	
Potassium	~		1,120		3,210		1,320		803		1,400		2,590	
Selenium	1500		1.21	U	1.13	U	1.23	U	1.11	U	1.08	U	1.09	U
Silver	1500		0.61	U	0.57	U	0.61	U	0.55	U	0.54	U	0.55	U
Sodium	~		225		169		153		115		141		181	
Thallium	~		1.21	U	1.13	U	1.23	U	1.11	U	1.08	U	1.09	U
Vanadium	~		23.70		40.50		27.20		16.10		40.10		28	
Zinc	10000		125		76		66.90		30.40		43		51.40	
<b>Mercury by 7473</b>	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor			1		1		1		1		1		1	
Mercury	2.8		0.72		0.054		0.067		0.033	U	0.071		0.060	
Total Solids			%		%		%		%		%		%	
Dilution Factor			1		1		1		1		1		1	
% Solids	~		82.70		88.40		81.40		90.40		92.60		91.60	
Herbicides, Target List	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor			1		1		1		1		1		1	
2,4,5-T	~		0.024	U	0.023	U	0.025	U	0.022	U	0.022	U	0.022	U
2,4,5-TP (Silvex)	500		0.024	U	0.023	U	0.025	U	0.022	U	0.022	U	0.022	U
2,4-D	~		0.024	U	0.023	U	0.025	U	0.022	U	0.022	U	0.022	U
<b>Polychlorinated Biphenyls (PCB)</b>	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor			1		1		1		1		1		1	
Aroclor 1016	~		0.020	U	0.019	U	0.021	U	0.018	U	0.018	U	0.018	U
Aroclor 1221	~		0.020	U	0.019	U	0.021	U	0.018	U	0.018	U	0.018	U
Aroclor 1232	~		0.020	U	0.019	U	0.021	U	0.018	U	0.018	U	0.018	U
Aroclor 1242	~		0.020	U	0.019	U	0.021	U	0.018	U	0.018	U	0.018	U
Aroclor 1248	~		0.020	U	0.019	U	0.021	U	0.018	U	0.018	U	0.018	U
Aroclor 1254	~		0.020	U	0.019	U	0.021	U	0.018	U	0.018	U	0.018	U
Aroclor 1260	~		0.020	U	0.019	U	0.021	U	0.018	U	0.018	U	0.066	
Total PCBs	1		0.020	U	0.019	U	0.021	U	0.018	U	0.018	U	0.066	

**NOTES:**

Any Regulatory Exceedences are color coded by Regulation

**Q is the Qualifier Column with definitions as follows:**

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

~=this indicates that no regulatory limit has been established for this analyte

109 - 125 Marbledale Road  
Tuckahoe, New York  
BCP Site No. C360143

Summary of Soil Quality Results -Shallow Borings 22 - 26

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-22-120116 (12-15 ftbg)		SB-23-120116 (4-8 ftbg)		SB-24-120216 (4-8 ftbg)		SB-25-120216 (0-4 ftbg)		SB-26-120216 (0-4 ftbg)	
		16L0102-07 12/1/2016 Soil		16L0102-08 12/1/2016 Soil		16L0140-01 12/2/2016 Soil		16L0140-02 12/2/2016 Soil		16L0140-03 12/2/2016 Soil	
		Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result
Volatile Organics, 8260 List	mg/Kg	mg/Kg			mg/Kg		mg/Kg		mg/Kg		mg/Kg
Dilution Factor			1		1		1		1		1
1,1,1,2-Tetrachloroethane	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,1,1-Trichloroethane	500	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,1,2,2-Tetrachloroethane	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,1,2-Trichloroethane	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,1-Dichloroethane	240	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,1-Dichloroethylene	500	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,1-Dichloropropylene	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,2,3-Trichlorobenzene	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,2,3-Trichloropropane	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,2,4-Trichlorobenzene	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,2,4-Trimethylbenzene	190	0.0030	J	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,2-Dibromo-3-chloropropane	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,2-Dibromoethane	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,2-Dichlorobenzene	500	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,2-Dichloroethane	30	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,2-Dichloropropane	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,3,5-Trimethylbenzene	190	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,3-Dichlorobenzene	280	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,3-Dichloropropane	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,4-Dichlorobenzene	130	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
1,4-Dioxane	130	0.048	U	0.054	U	0.047	U	0.041	U	0.044	U
2,2-Dichloropropane	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
2-Butanone	500	0.0043	J	0.0088	U	0.0035	J	0.0020	U	0.0022	U
2-Chlorotoluene	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
4-Chlorotoluene	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Acetone	500	0.019		0.061		0.029		0.0067	J	0.0044	U
Benzene	44	0.0074		0.0027		0.0024		0.0020	U	0.0022	U
Bromobenzene	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Bromochloromethane	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Bromodichloromethane	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Bromoform	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Bromomethane	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Carbon tetrachloride	22	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Chlorobenzene	500	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Chloroethane	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Chloroform	350	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Chloromethane	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
cis-1,2-Dichloroethylene	500	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
cis-1,3-Dichloropropylene	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Dibromochloromethane	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Dibromomethane	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Dichlorodifluoromethane	~	0.0040	J	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Ethyl Benzene	390	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Hexachlorobutadiene	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Isopropylbenzene	~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Methyl tert-butyl ether (MTBE)	500	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Methylene chloride	500	0.0048	U	0.0054	U	0.0047	U	0.0041	U	0.0044	U
Naphthalene	500	0.14	B	0.051	B	0.0028	JB	0.0020	U	0.046	B
n-Butylbenzene	500	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
n-Propylbenzene	500	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
o-Xylene	~	0.0038	J	0.0027	U	0.0024	U	0.0020	U	0.0022	U
p- & m- Xylenes	~	0.0048	U	0.0054	U	0.0047	U	0.0041	U	0.0044	U

Summary of Soil Quality Results -Shallow Borings 22 - 26

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-22-120116 (12-15 ftbg) 16L0102-07 12/1/2016 Soil		SB-23-120116 (4-8 ftbg) 16L0102-08 12/1/2016 Soil		SB-24-120216 (4-8 ftbg) 16L0140-01 12/2/2016 Soil		SB-25-120216 (0-4 ftbg) 16L0140-02 12/2/2016 Soil		SB-26-120216 (0-4 ftbg) 16L0140-03 12/2/2016 Soil		
		Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	
p-Isopropyltoluene		~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
sec-Butylbenzene		500	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Styrene		~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
tert-Butylbenzene		500	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Tetrachloroethylene		150	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Toluene		500	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
trans-1,2-Dichloroethylene		500	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
trans-1,3-Dichloropropylene		~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Trichloroethylene		200	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Trichlorofluoromethane		~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Vinyl acetate		~	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Vinyl Chloride		13	0.0024	U	0.0027	U	0.0024	U	0.0020	U	0.0022	U
Xylenes, Total		500	0.0072	U	0.0081	U	0.0071	U	0.0061	U	0.0066	U
<b>Semi-Volatiles, 8270 Target List</b>	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor			2		2		2		2		20	
1,2,4-Trichlorobenzene		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
1,2-Dichlorobenzene		500	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
1,3-Dichlorobenzene		280	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
1,4-Dichlorobenzene		130	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
2,4,5-Trichlorophenol		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
2,4,6-Trichlorophenol		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
2,4-Dichlorophenol		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
2,4-Dimethylphenol		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
2,4-Dinitrophenol		~	0.097	U	0.089	U	0.092	U	0.094	U	0.091	U
2,4-Dinitrotoluene		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
2,6-Dinitrotoluene		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
2-Chloronaphthalene		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
2-Chlorophenol		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
2-Methylnaphthalene		~	0.28	D	0.045	U	0.046	U	0.047	U	0.79	D
2-Methylphenol		500	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
2-Nitroaniline		~	0.097	U	0.089	U	0.092	U	0.094	U	0.091	U
2-Nitrophenol		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
3- & 4-Methylphenols		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
3,3'-Dichlorobenzidine		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
3-Nitroaniline		~	0.097	U	0.089	U	0.092	U	0.094	U	0.091	U
4,6-Dinitro-2-methylphenol		~	0.097	U	0.089	U	0.092	U	0.094	U	0.091	U
4-Bromophenyl phenyl ether		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
4-Chloro-3-methylphenol		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
4-Chloroaniline		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
4-Chlorophenyl phenyl ether		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
4-Nitroaniline		~	0.097	U	0.089	U	0.092	U	0.094	U	0.091	U
4-Nitrophenol		~	0.097	U	0.089	U	0.092	U	0.094	U	0.091	U
Acenaphthene		500	0.049	U	0.061	JD	0.046	U	0.047	U	1.88	D
Acenaphthylene		500	0.049	U	0.053	JD	0.046	U	0.047	U	0.072	JD
Aniline		~	0.20	U	0.18	U	0.18	U	0.19	U	0.18	U
Anthracene		500	0.58	D	0.21	D	0.43	D	0.047	U	5.88	D
Benzo(a)anthracene		5.6	0.24	D	0.15	D	0.49	D	0.047	U	5.77	D
Benzo(a)pyrene		1	0.17	D	0.17	D	0.63	D	0.047	U	1.34	D
Benzo(b)fluoranthene		5.6	0.19	D	0.15	D	0.53	D	0.047	U	1.61	D
Benzo(g,h,i)perylene		500	0.072	JD	0.23	D	0.13	D	0.047	U	0.57	D
Benzo(k)fluoranthene		56	0.14	D	0.21	D	0.59	D	0.047	U	1.38	D
Benzyl alcohol		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
Benzyl butyl phthalate		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
Bis(2-chloroethoxy)methane		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
Bis(2-chloroethyl)ether		~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U

109 - 125 Marbledale Road  
Tuckahoe, New York  
BCP Site No. C360143

Summary of Soil Quality Results -Shallow Borings 22 - 26

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-22-120116 (12-15 ftbg) 16L0102-07 12/1/2016 Soil		SB-23-120116 (4-8 ftbg) 16L0102-08 12/1/2016 Soil		SB-24-120216 (4-8 ftbg) 16L0140-01 12/2/2016 Soil		SB-25-120216 (0-4 ftbg) 16L0140-02 12/2/2016 Soil		SB-26-120216 (0-4 ftbg) 16L0140-03 12/2/2016 Soil	
		Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
		Compound									
Bis(2-chloroisopropyl)ether	~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
Bis(2-ethylhexyl)phthalate	~	0.049	U	0.045	U	0.046	U	0.047	U	0.084	JD
Chrysene	56	0.20	D	0.55	D	0.41	D	0.047	U	3.96	D
Dibenzo(a,h)anthracene	0.56	0.049	U	0.10	D	0.046	U	0.047	U	0.078	JD
Dibenzofuran	350	0.049	U	0.045	U	0.046	U	0.047	U	1.40	D
Diethyl phthalate	~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
Dimethyl phthalate	~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
Di-n-butyl phthalate	~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
Di-n-octyl phthalate	~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
Fluoranthene	500	0.39	D	0.79	D	0.83	D	0.047	U	16	D
Fluorene	500	0.12	D	0.081	JD	0.046	U	0.047	U	2.59	D
Hexachlorobenzene	6	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
Hexachlorobutadiene	~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
Hexachlorocyclopentadiene	~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
Hexachloroethane	~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
Indeno(1,2,3-cd)pyrene	5.6	0.067	JD	0.16	D	0.14	D	0.047	U	0.65	D
Isophorone	~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
Naphthalene	500	0.49	D	0.045	U	0.046	U	0.047	U	2.44	D
Nitrobenzene	~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
N-Nitrosodimethylamine	~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
N-nitroso-di-n-propylamine	~	0.049	U	0.045	U	0.30	D	0.047	U	0.046	U
N-Nitrosodiphenylamine	~	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
Pentachlorophenol	6.7	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
Phenanthrene	500	0.62	D	0.74	D	0.46	D	0.047	U	18.60	D
Phenol	500	0.049	U	0.045	U	0.046	U	0.047	U	0.046	U
Pyrene	500	0.40	D	0.62	D	0.80	D	0.047	U	15.60	D
Pyridine	~	0.20	U	0.18	U	0.18	U	0.19	U	0.18	U
<b>Pesticides, 8081 target list</b>	mg/Kg	mg/Kg	5	mg/Kg	5	mg/Kg	5	mg/Kg	5	mg/Kg	5
<b>Dilution Factor</b>											
4,4'-DDD	92	0.0019	U	0.016	D	0.0018	U	0.0019	U	0.0028	D
4,4'-DDE	62	0.0019	U	0.0053	D	0.0018	U	0.0019	U	0.0033	D
4,4'-DDT	47	0.0019	U	0.0052	D	0.0018	U	0.0019	U	0.0057	D
Aldrin	0.68	0.0019	U	0.0018	U	0.0018	U	0.0019	U	0.0018	U
alpha-BHC	3.4	0.0019	U	0.0018	U	0.0018	U	0.0019	U	0.0018	U
alpha-Chlordane	24	0.0019	U	0.0083	D	0.0018	U	0.0019	U	0.013	DP
beta-BHC	3	0.0019	U	0.0018	U	0.0018	U	0.0019	U	0.0018	U
Chlordane, total	~	0.039	U	0.076	D	0.036	U	0.037	U	0.036	U
delta-BHC	500	0.0019	U	0.0018	U	0.0018	U	0.0019	U	0.0018	U
Dieldrin	1.4	0.0019	U	0.0018	U	0.0018	U	0.0019	U	0.0018	U
Endosulfan I	200	0.0019	U	0.0018	U	0.0018	U	0.0019	U	0.0018	U
Endosulfan II	200	0.0019	U	0.0018	U	0.0018	U	0.0019	U	0.0018	U
Endosulfan sulfate	200	0.0019	U	0.0018	U	0.0018	U	0.0019	U	0.0018	U
Endrin	89	0.0019	U	0.0018	U	0.0018	U	0.0019	U	0.0018	U
Endrin aldehyde	~	0.0019	U	0.0018	U	0.0018	U	0.0019	U	0.0018	U
Endrin ketone	~	0.0019	U	0.0018	U	0.0018	U	0.0019	U	0.0018	U
gamma-BHC (Lindane)	9.2	0.0019	U	0.0018	U	0.0018	U	0.0019	U	0.0018	U
gamma-Chlordane	~	0.0019	U	0.0071	DP	0.0018	U	0.0019	U	0.0094	D
Heptachlor	15	0.0019	U	0.0018	U	0.0018	U	0.0019	U	0.0018	U
Heptachlor epoxide	~	0.0019	U	0.0018	U	0.0018	U	0.0019	U	0.0018	U
Methoxychlor	~	0.0096	U	0.0088	U	0.0091	U	0.0093	U	0.0090	U
Toxaphene	~	0.098	U	0.089	U	0.092	U	0.095	U	0.091	U
<b>Metals, Target Analyte</b>	mg/Kg	mg/Kg	1	mg/Kg	1	mg/Kg	1	mg/Kg	1	mg/Kg	1
<b>Dilution Factor</b>											
Aluminum	~	11,100	U	8,230	U	10,000	U	7,020	U	7,970	U
Antimony	~	0.58	U	0.54	U	0.55	U	0.57	U	0.55	U

109 - 125 Marbledale Road  
Tuckahoe, New York  
BCP Site No. C360143

Summary of Soil Quality Results -Shallow Borings 22 - 26

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB-22-120116 (12-15 ftbg) 16L0102-07 12/1/2016 Soil		SB-23-120116 (4-8 ftbg) 16L0102-08 12/1/2016 Soil		SB-24-120216 (4-8 ftbg) 16L0140-01 12/2/2016 Soil		SB-25-120216 (0-4 ftbg) 16L0140-02 12/2/2016 Soil		SB-26-120216 (0-4 ftbg) 16L0140-03 12/2/2016 Soil	
		Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result
Arsenic		16	2.66		4.45		2.72		2.07		2.25
Barium		400	111		62.60		60.30		43.70		89.40
Beryllium		590	0.12	U	0.11	U	0.11	U	0.11	U	0.11
Cadmium		9.3	0.44		0.53		0.46		0.34		0.33
Calcium		~	6,750		29,000		22,400		3,830		10,400
Chromium		~	20.70		17.50		19.30		13.40		15.10
Cobalt		~	8.81		7.42		7.24		5.99		6.78
Copper		270	27.10		34.40		25.70		17.20		26.20
Iron		~	15,000		15,700		14,500		12,400		12,600
Lead		1000	85		65.10		34.80		20.90		36.30
Magnesium		~	5,880		10,900		12,700		3,390		5,380
Manganese		10000	221		250		285		227		258
Nickel		310	17.40		15.60		16.30		12.70		15.30
Potassium		~	2,540		1,600		1,810		1,020		1,370
Selenium		1500	1.17	U	1.07	U	1.19		1.13		1.09
Silver		1500	0.58	U	0.54	U	0.55	U	0.57	U	0.55
Sodium		~	185		193		166		164		176
Thallium		~	1.17	U	1.07	U	1.10	U	1.13	U	1.09
Vanadium		~	29		30.70		35.70		18.50		26.60
Zinc		10000	87.10		62.90		58.30		35.50		64.20
Mercury by 7473	mg/Kg		mg/kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg
Dilution Factor			1		1		1		1		1
Mercury		2.8	0.23		0.10		0.10		0.062		0.085
Total Solids			%		%		%		%		%
Dilution Factor			1		1		1		1		1
% Solids		~	85.60		93.50		90.70		88.30		91.70
Herbicides, Target List	mg/Kg		mg/kg		mg/Kg		mg/Kg		mg/kg		mg/kg
Dilution Factor			1		1		1		1		1
2,4,5-T	~	0.023	U		0.021	U	0.022	U	0.023	U	0.022
2,4,5-TP (Silvex)	500	0.023	U		0.021	U	0.022	U	0.023	U	0.022
2,4-D	~	0.023	U		0.021	U	0.022	U	0.023	U	0.022
Polychlorinated Biphenyls (PCB)	mg/Kg		mg/kg		mg/Kg		mg/Kg		mg/kg		mg/kg
Dilution Factor			1		1		1		1		1
Aroclor 1016	~	0.020	U		0.018	U	0.018	U	0.019	U	0.018
Aroclor 1221	~	0.020	U		0.018	U	0.018	U	0.019	U	0.018
Aroclor 1232	~	0.020	U		0.018	U	0.018	U	0.019	U	0.018
Aroclor 1242	~	0.020	U		0.018	U	0.018	U	0.019	U	0.018
Aroclor 1248	~	0.020	U		0.018	U	0.018	U	0.019	U	0.018
Aroclor 1254	~	0.020	U		0.018	U	0.018	U	0.019	U	0.018
Aroclor 1260	~	0.020	U		0.018	U	0.018	U	0.019	U	0.018
Total PCBs	1	0.020	U		0.018	U	0.018	U	0.019	U	0.018

**NOTES:**

Any Regulatory Exceedences are color coded by Regulation

**Q is the Qualifier Column with definitions as follows:**

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

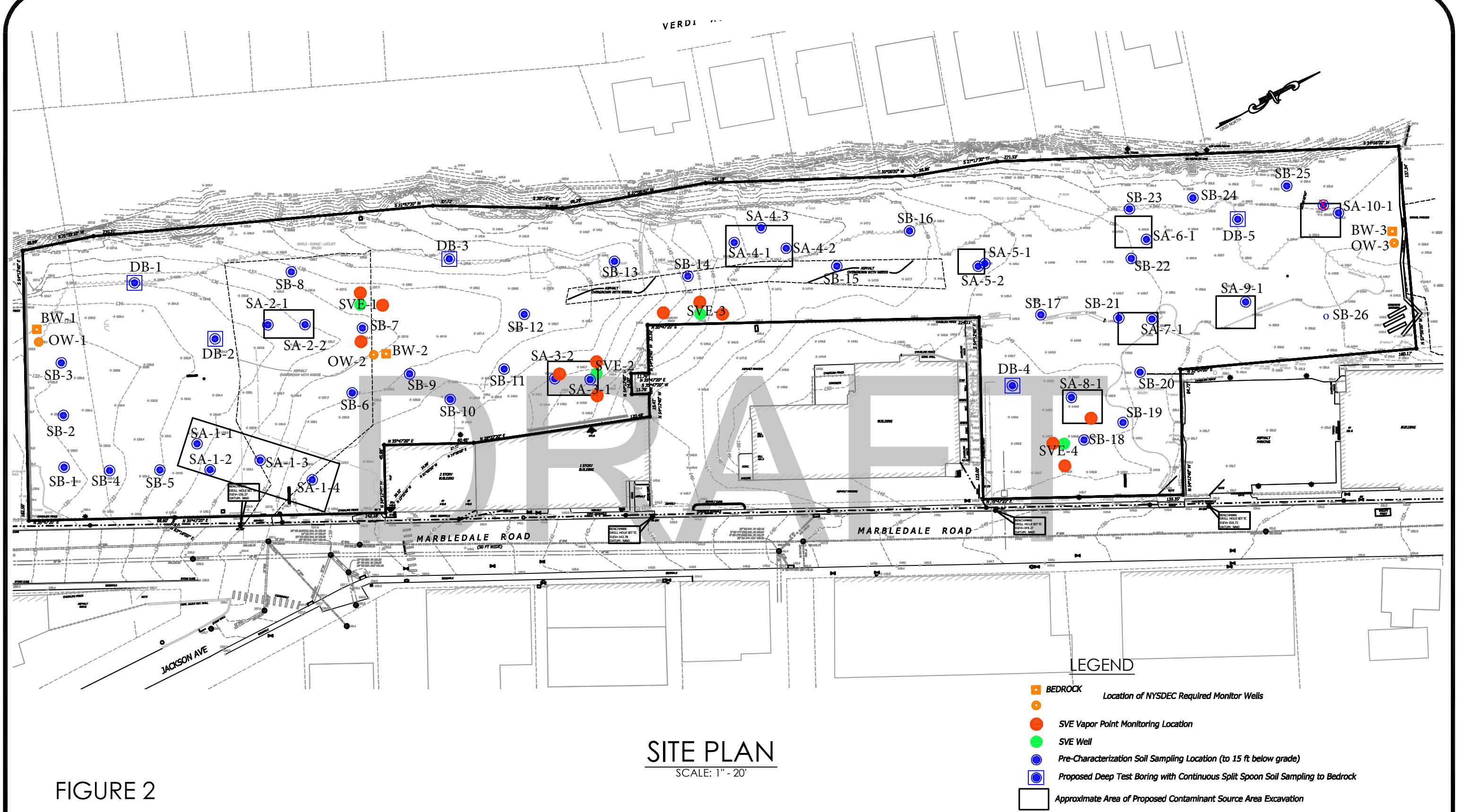
U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

~=this indicates that no regulatory limit has been established for this analyte



**Hydro Environmental  
SOLUTIONS, INC.**  
One Deans Bridge Road  
Somers, New York 10589

## **Summary of Laboratory Analytical Results Memorandum**

**To:** The Village of Tuckahoe  
Tuckahoe, New York

**From:** William A. Canavan, PG, LSRP  
HydroEnvironmental Solutions, Inc.

**Date:** December 14, 2016

**Re:** 109-125 Marbledale Road  
Tuckahoe, New York  
NYSDEC BCP Site No. C360143

HydroEnvironmental Solutions, Inc. (HES) has reviewed the laboratory analytical reports for the source area soil borings. Soil samples were collected from source areas SA-1 through SA-10. The attached tables summarize the lab results for the soil samples collected. The results are compared to their corresponding New York State Department of Environmental Conservation (NYSDEC) Commercial Soil Cleanup Objectives (CSCOs) in accordance with 6 NYCRR Part 375; which are the relevant standards for this site. Any highlighted concentration was detected above its respective NYSDEC-CSCOs. The source area soil sampling locations are shown on **Figure 2**, a draft generalized site plan showing additional sampling locations required by the NYSDEC.



*HydroEnvironmental*  
**SOLUTIONS, INC.**

One Deans Bridge Road      Somers, New York 10589  
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109 - 125 Marbledale Road  
Tuckahoe, New York  
BCP Site No. C360143

**Summary of Soil Quality Results - Source Areas 1 - 3**

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-1-1 (8-10.1 ftbg)		SA-1-2 (7-8 ftbg)		SA-1-3 (4.5-8 ftbg)		SA-1-4 (2-3 ftbg)		SA-2-1 (7-8 ftbg)		SA-2-2 (12-15 ftbg)		SA-3-1 (9-11.4 ftbg)		SA-3-2 (14-15 ftbg)		
		16K0416-01 11/7/2016 Soil		16K0416-02 11/7/2016 Soil		16K0416-03 11/7/2016 Soil		16K0416-04 11/7/2016 Soil		16K0416-05 11/8/2016 Soil		16K0416-06 11/8/2016 Soil		16K0416-07 11/8/2016 Soil		16K0416-08 11/8/2016 Soil		
		Compound	Result	Q	Result	Q												
		Volatile Organics, 8260 List	mg/Kg		mg/Kg	U	mg/Kg	U										
1,1,1,2-Tetrachloroethane			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,1,1-Trichloroethane			500		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,1,2,2-Tetrachloroethane			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,1,2-Trichloroethane			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,1-Dichloroethane			240		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,1-Dichloroethylene			500		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,1-Dichloropropylene			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,2,3-Trichlorobenzene			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,2,3-Trichloropropane			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,2,4-Trichlorobenzene			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,2,4-Trimethylbenzene			190		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,2-Dibromo-3-chloropropane			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,2-Dibromoethane			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,2-Dichlorobenzene			500		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,2-Dichloroethane			30		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,2-Dichloropropane			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,3,5-Trimethylbenzene			190		0.0038	U	0.0099		0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,3-Dichlorobenzene			280		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,3-Dichloropropane			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,4-Dichlorobenzene			130		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
1,4-Dioxane			130		0.076	U	0.054	U	0.052	U	0.044	U	0.057	U	0.049	U	0.038	U
2,2-Dichloropropane			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
2-Butanone			500		0.010		0.020		0.062		0.025		0.023		0.035		0.0019	U
2-Chlorotoluene			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
4-Chlorotoluene			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
Acetone			500		0.045		0.074		0.16		0.084		0.083		0.11		0.014	U
Benzene			44		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
Bromobenzene			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
Bromochloromethane			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
Bromodichloromethane			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
Bromoform			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
Bromomethane			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
Carbon tetrachloride			22		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
Chlorobenzene			500		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
Chloroethane			~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
Chloroform			350		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U
Chloromethane			~		0.0038	U	0.0027	U	0.									

109 - 125 Marbledale Road  
 Tuckahoe, New York  
 BCP Site No. C360143

Summary of Soil Quality Results - Source Areas 1 - 3

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-1-1 (8-10.1 ftbg)		SA-1-2 (7-8 ftbg)		SA-1-3 (4.5-8 ftbg)		SA-1-4 (2-3 ftbg)		SA-2-1 (7-8 ftbg)		SA-2-2 (12-15 ftbg)		SA-3-1 (9-11.4 ftbg)		SA-3-2 (14-15 ftbg)				
		16K0416-01 11/7/2016 Soil		16K0416-02 11/7/2016 Soil		16K0416-03 11/7/2016 Soil		16K0416-04 11/7/2016 Soil		16K0416-05 11/8/2016 Soil		16K0416-06 11/8/2016 Soil		16K0416-07 11/8/2016 Soil		16K0416-08 11/8/2016 Soil				
		Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q		
		cis-1,3-Dichloropropylene	~		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U
Dibromochloromethane		~			0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U
Dibromomethane		~			0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U
Dichlorodifluoromethane		~			0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0043		0.0028	U
Ethyl Benzene	390		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.011			
Hexachlorobutadiene		~			0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U
Isopropylbenzene		~			0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0051	J
Methyl tert-butyl ether (MTBE)	500		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U		
Methylene chloride	500		0.0076	U	0.0054	U	0.0052	U	0.0044	U	0.0057	U	0.0049	U	0.0038	U	0.0057	U		
Naphthalene	500		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U		
n-Butylbenzene	500		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U		
n-Propylbenzene	500		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.012			
o-Xylene		~	0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.022			
p- & m- Xylenes		~	0.0076	U	0.0054	U	0.0052	U	0.0044	U	0.0057	U	0.0049	U	0.0038	U	0.046			
p-Isopropyltoluene		~	0.0038	U	0.0031	J	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U		
sec-Butylbenzene	500		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U		
Styrene		~	0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U		
tert-Butylbenzene	500		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U		
Tetrachloroethylene	150		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U		
Toluene	500		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0071			
trans-1,2-Dichloroethylene	500		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U		
trans-1,3-Dichloropropylene		~	0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U		
Trichloroethylene	200		0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U		
Trichlorofluoromethane		~	0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U		
Vinyl acetate		~	0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U		
Vinyl Chloride		13	0.0038	U	0.0027	U	0.0026	U	0.0022	U	0.0028	U	0.0025	U	0.0019	U	0.0028	U		
Xylenes, Total	500		0.011	U	0.0081	U	0.0078	U	0.0066	U	0.0085	U	0.0074	U	0.0057	U	0.068			
<b>Semi-Volatiles, 8270 Target List</b>		mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg			
1,2,4-Trichlorobenzene		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U		
1,2-Dichlorobenzene	500		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U		
1,3-Dichlorobenzene	280		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U		
1,4-Dichlorobenzene	130		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U		
2,4,5-Trichlorophenol		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U		
2,4,6-Trichlorophenol		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U		
2,4-Dichlorophenol		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U		
2,4-Dimethylphenol		~	0.051	U	0.049</															

Summary of Soil Quality Results - Source Areas 1 - 3

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-1-1 (8-10.1 ftbg)		SA-1-2 (7-8 ftbg)		SA-1-3 (4.5-8 ftbg)		SA-1-4 (2-3 ftbg)		SA-2-1 (7-8 ftbg)		SA-2-2 (12-15 ftbg)		SA-3-1 (9-11.4 ftbg)		SA-3-2 (14-15 ftbg)		
		16K0416-01 11/7/2016 Soil		16K0416-02 11/7/2016 Soil		16K0416-03 11/7/2016 Soil		16K0416-04 11/7/2016 Soil		16K0416-05 11/8/2016 Soil		16K0416-06 11/8/2016 Soil		16K0416-07 11/8/2016 Soil		16K0416-08 11/8/2016 Soil		
		Compound	Result	Q	Result	Q	Result	Q										
		2-Chloronaphthalene	~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045
2-Chlorophenol		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
2-Methylnaphthalene		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
2-Methylphenol		500	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
2-Nitroaniline		~	0.10	U	0.098	U	0.091	U	0.096	U	0.098	U	0.097	U	0.94	U	0.089	U
2-Nitrophenol		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
3- & 4-Methylphenols		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
3,3'-Dichlorobenzidine		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
3-Nitroaniline		~	0.10	U	0.098	U	0.091	U	0.096	U	0.098	U	0.097	U	0.94	U	0.089	U
4,6-Dinitro-2-methylphenol		~	0.10	U	0.098	U	0.091	U	0.096	U	0.098	U	0.097	U	0.94	U	0.089	U
4-Bromophenyl phenyl ether		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
4-Chloro-3-methylphenol		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
4-Chloroaniline		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
4-Chlorophenyl phenyl ether		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
4-Nitroaniline		~	0.10	U	0.098	U	0.091	U	0.096	U	0.098	U	0.097	U	0.94	U	0.089	U
4-Nitrophenol		~	0.10	U	0.098	U	0.091	U	0.096	U	0.098	U	0.097	U	0.94	U	0.089	U
Acenaphthene		500	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Acenaphthylene		500	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	2.71	D	0.045	U
Aniline		~	0.20	U	0.20	U	0.18	U	0.19	U	0.20	U	0.20	U	1.88	U	0.18	U
Anthracene		500	0.051	U	0.049	U	0.046	U	0.048	U	0.066	JD	0.049	U	8.27	D	0.045	U
Benzo(a)anthracene		5.6	0.051	U	0.049	U	0.046	U	0.078	JD	0.11	D	0.068	JD	<b>18.80</b>	D	0.045	U
Benzo(a)pyrene		1	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	<b>8.58</b>	D	0.045	U
Benzo(b)fluoranthene		5.6	0.051	U	0.049	U	0.046	U	0.067	JD	0.078	JD	0.049	U	<b>9.11</b>	D	0.045	U
Benzo(g,h,i)perylene		500	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	2.06	D	0.045	U
Benzo(k)fluoranthene		56	0.051	U	0.049	U	0.046	U	0.048	U	0.071	JD	0.049	U	6.79	D	0.045	U
Benzyl alcohol		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Benzyl butyl phthalate		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Bis(2-chloroethoxy)methane		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Bis(2-chloroethyl)ether		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Bis(2-chloroisopropyl)ether		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Bis(2-ethylhexyl)phthalate		~	0.25	D	0.22	D	0.046	U	0.065	JD	0.074	JD	0.46	D	0.47	U	0.045	U
Chrysene		56	0.051	U	0.049	U	0.046	U	0.091	JD	0.13	D	0.072	JD	14.70	D	0.045	U
Dibenzo(a,h)anthracene		0.56	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	<b>0.94</b>	JD	0.045	U
Dibenzofuran		350	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Diethyl phthalate		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Dimethyl phthalate		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Di-n-butyl phthalate		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Di-n-octyl phthalate		~	0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Fluoranthene		500	0.051	U														

109 - 125 Marbledale Road  
 Tuckahoe, New York  
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Summary of Soil Quality Results - Source Areas 1 - 3

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-1-1 (8-10.1 ftbg)		SA-1-2 (7-8 ftbg)		SA-1-3 (4.5-8 ftbg)		SA-1-4 (2-3 ftbg)		SA-2-1 (7-8 ftbg)		SA-2-2 (12-15 ftbg)		SA-3-1 (9-11.4 ftbg)		SA-3-2 (14-15 ftbg)			
		16K0416-01 11/7/2016 Soil		16K0416-02 11/7/2016 Soil		16K0416-03 11/7/2016 Soil		16K0416-04 11/7/2016 Soil		16K0416-05 11/8/2016 Soil		16K0416-06 11/8/2016 Soil		16K0416-07 11/8/2016 Soil		16K0416-08 11/8/2016 Soil			
		Compound	Result	Q	Result	Q													
		Fluorene	500		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	2.23	D	
Hexachlorobenzene		6		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Hexachlorobutadiene		~		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Hexachlorocyclopentadiene		~		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Hexachloroethane		~		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Indeno(1,2,3-cd)pyrene		5.6		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	2.37	D	0.045	U
Isophorone		~		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Naphthalene		500		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Nitrobenzene		~		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
N-Nitrosodimethylamine		~		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
N-nitroso-di-n-propylamine		~		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
N-Nitrosodiphenylamine		~		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Pentachlorophenol		6.7		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Phenanthrene		500		0.051	U	0.049	U	0.046	U	0.074	JD	0.27	D	0.096	JD	30	D	0.064	JD
Phenol		500		0.051	U	0.049	U	0.046	U	0.048	U	0.049	U	0.049	U	0.47	U	0.045	U
Pyrene		500		0.051	U	0.049	U	0.046	U	0.12	D	0.27	D	0.12	D	30.60	D	0.18	D
Pyridine		~		0.20	U	0.20	U	0.18	U	0.19	U	0.20	U	0.20	U	1.88	U	0.18	U
<b>Pesticides, 8081 target list</b>		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
4,4'-DDD		92		0.0020	U	0.0019	U	0.0018	U	0.0019	U	0.013	D	0.0019	U	0.0019	U	0.0026	U
4,4'-DDE		62		0.0020	U	0.0019	U	0.0018	U	0.013	DP	0.013	D	0.0061	D	0.0019	U	0.0026	U
4,4'-DDT		47		0.0020	U	0.0019	U	0.0018	U	0.0026	D	0.0019	U	0.0019	U	0.0019	U	0.0026	U
Aldrin		0.68		0.0020	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0026	U
alpha-BHC		3.4		0.0020	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0026	U
alpha-Chlordane		24		0.0074	D	0.0019	U	0.0018	U	0.0019	U	0.0019	U	0.032	D	0.0019	U	0.0026	U
beta-BHC		3		0.0020	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0026	U
Chlordane, total		~		0.071	D	0.039	U	0.036	U	0.038	U	0.039	U	0.23	D	0.037	U	0.053	U
delta-BHC		500		0.0020	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0026	U
Dieldrin		1.4		0.0020	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0026	U
Endosulfan I		200		0.0020	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0026	U
Endosulfan II		200		0.0020	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0026	U
Endosulfan sulfate		200		0.0020	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0026	U
Endrin		89		0.0020	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0026	U
Endrin aldehyde		~		0.0020	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0026	U
Endrin ketone		~		0.0020	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0026	U
gamma-BHC (Lindane)		9.2		0.0020	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0026	U
gamma-Chlordane		~		0.012	D	0.0019	U	0.0018	U	0.0019	U	0.0019	U	0.041	D	0.0019	U	0.0026	U
Heptachlor		15		0.0020	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0026	U
Heptachlor epoxide		~		0.0020	U	0.0													

Summary of Soil Quality Results - Source Areas 1 - 3

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-1-1 (8-10.1 ftbg) 16K0416-01 11/7/2016 Soil		SA-1-2 (7-8 ftbg) 16K0416-02 11/7/2016 Soil		SA-1-3 (4.5-8 ftbg) 16K0416-03 11/7/2016 Soil		SA-1-4 (2-3 ftbg) 16K0416-04 11/7/2016 Soil		SA-2-1 (7-8 ftbg) 16K0416-05 11/8/2016 Soil		SA-2-2 (12-15 ftbg) 16K0416-06 11/8/2016 Soil		SA-3-1 (9-11.4 ftbg) 16K0416-07 11/8/2016 Soil		SA-3-2 (14-15 ftbg) 16K0416-08 11/8/2016 Soil		
		Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
		Toxaphene	~	0.10	U	0.098	U	0.091	U	0.096	U	0.098	U	0.098	U	0.094	U	0.13
<b>Metals, Target Analyte</b>	mg/Kg	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Aluminum	~	13,600	11,500		11,100		5,540		21,400		10,800		6,350		3,860			
Antimony	~	63.90	0.59	U	0.55	U	0.58	U	2.92		0.58	U	0.56	U	0.53	U		
Arsenic	16	6.30	4.44		1.26		3.02		6.03		1.17	U	1.29		1.07	U		
Barium	400	544	534		81.30		90.60		418		351		30.50		33.70			
Beryllium	590	0.79	0.12	U	0.11	U	0.12	U	0.21		0.12	U	0.11	U	0.11	U		
Cadmium	9.3	3.19	2.61		0.44		0.97		2.51		3.49		0.34	U	0.32	U		
Calcium	~	41,900	16,600		28,000		34,700		17,400		24,700		52,100		15,200			
Chromium	~	59	43.20		20.80		12.80		36.40		35.10		9.88		10.90			
Cobalt	~	14.50	11.60		12.60		5.10		8.83		11.40		4.91		3.50			
Copper	270	1,470	494		69.70		79.10		562		1,310		59.50		50.60			
Iron	~	149,000	D	93,500	D	17,300		13,800		108,000	D	153,000	D	8,690		7,180		
Lead	1000	4,800	D	944		26.40		130		883		523		19.40		12.50		
Magnesium	~	4,490	3,990		19,600		10,300		2,420		3,250		29,000		2,720			
Manganese	10000	882	510		163		122		576		714		180		117			
Nickel	310	46.80	68.90		29.20		14.60		41.30		41.30		10.70		9.11			
Potassium	~	1,640	2,600		4,450		968		1,180		945		1,160		1,130			
Selenium	1500	2.35	1.23		1.09	U	1.15	U	1.18	U	2.76		1.13	U	1.07	U		
Silver	1500	0.61	0.59	U	0.55	U	0.58	U	0.59	U	0.58	U	0.56	U	0.53	U		
Sodium	~	2,450	1,900		131		103		2,020		1,960		126		298			
Thallium	~	1.22	1.18	U	1.09	U	1.15	U	1.18	U	1.17	U	1.13	U	1.07	U		
Vanadium	~	42	178		34.50		24.40		49.80		31.70		20.70		20.20			
Zinc	10000	1,600	1,090		200		160		1,130		1,560		40.30		22.10			
<b>Mercury by 7473</b>	mg/Kg	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Mercury	2.8	0.41	1.25		0.089		0.25		0.43		0.68		0.40		0.037			
<b>Total Solids</b>	%	%	%		%		%		%		%		%		%		%	
% Solids	~	82	85		91.60		86.80		85		85.60		88.90		93.70			
<b>Herbicides, Target List</b>	mg/Kg	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
2,4,5-T	~	0.024	U	0.024	U	0.022	U	0.023	U	0.024	U	0.023	U	0.023	U	0.021	U	
2,4,5-TP (Silvex)	500	0.024	U	0.024	U	0.022	U	0.023	U	0.024	U	0.023	U	0.023	U	0.021	U	
2,4-D	~	0.024	U	0.024	U	0.022	U	0.023	U	0.024	U	0.023	U	0.023	U	0.021	U	
<b>Polychlorinated Biphenyls (PCB)</b>	mg/Kg	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Aroclor 1016	~	0.020	U	0.020	U	0.018	U	0.019	U	0.020	U	0.020	U	0.019	U	0.018	U	
Aroclor 1221	~	0.020	U	0.020	U	0.018	U	0.019	U	0.020	U	0.020	U	0.019	U	0.018	U	
Aroclor 1232	~	0.020	U	0.020	U	0.018	U	0.019	U	0.020	U	0.020	U	0.019	U	0.018	U	
Aroclor 1242	~	0.020	U	0.020	U	0.018	U	0.019	U	0.020	U	0.020	U	0.019	U	0.018	U	
Aroclor 1248	~	0.020	U	0.020	U	0.018	U	0.019	U	0.020	U	0.020	U	0.019	U	0.018	U	
Aroclor 1254	~	0.020	U	0.051		0.018	U	0.019	U	0.020	U	0.020	U	0.019	U	0.018	U	

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Summary of Soil Quality Results - Source Areas 1 - 3

Sample ID	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-1-1 (8-10.1 ftbg) 16K0416-01 11/7/2016 Soil		SA-1-2 (7-8 ftbg) 16K0416-02 11/7/2016 Soil		SA-1-3 (4.5-8 ftbg) 16K0416-03 11/7/2016 Soil		SA-1-4 (2-3 ftbg) 16K0416-04 11/7/2016 Soil		SA-2-1 (7-8 ftbg) 16K0416-05 11/8/2016 Soil		SA-2-2 (12-15 ftbg) 16K0416-06 11/8/2016 Soil		SA-3-1 (9-11.4 ftbg) 16K0416-07 11/8/2016 Soil		SA-3-2 (14-15 ftbg) 16K0416-08 11/8/2016 Soil		
York ID		Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Aroclor 1260		~	0.020	U	0.020	U	0.018	U	0.019	U	0.020	U	0.020	U	0.019	U	0.018	U
Total PCBs		1	0.020	U	0.051	U	0.018	U	0.019	U	0.020	U	0.020	U	0.019	U	0.018	U

NOTES:

Any Regulatory Exceedences are color coded by Regulation

**Q is the Qualifier Column with definitions as follows:**

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

~=this indicates that no regulatory limit has been established for this analyte

DRAFT

Summary of Soil Quality Results - Source Area 4

Sample ID York ID Sampling Date Client Matrix	NYSDEC Pt 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-4-3 (4-8 ftbg) 16K0471-01 11/9/2016 Soil		SA-4-2 (0-4 ftbg) 16K0471-02 11/9/2016 Soil		SA-4-1 (8-12 ftbg) 16K0471-03 11/9/2016 Soil	
		Compound	Result	Q	Result	Q	Result
		Volatile Organics, 8260 List	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor							
1,1,1,2-Tetrachloroethane	~	100	0.33	U	0.22	U	1
1,1,1-Trichloroethane	500	0.33	0.33	U	0.22	U	0.0027
1,1,2,2-Tetrachloroethane	~	0.33	0.33	U	0.22	U	0.0027
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	~	0.33	0.33	U	0.22	U	0.0027
1,1,2-Trichloroethane	~	0.33	0.33	U	0.22	U	0.0027
1,1-Dichloroethane	240	0.33	0.33	U	0.22	U	0.0027
1,1-Dichloroethylene	500	0.33	0.33	U	0.22	U	0.0027
1,1-Dichloropropylene	~	0.33	0.33	U	0.22	U	0.0027
1,2,3-Trichlorobenzene	~	0.33	0.33	U	0.22	U	0.0027
1,2,3-Trichloropropane	~	0.48	0.48	JD	0.22	U	0.0027
1,2,4-Trichlorobenzene	~	0.33	0.33	U	0.22	U	0.0027
1,2,4-Trimethylbenzene	190	0.33	0.33	U	0.53	D	0.0027
1,2-Dibromo-3-chloropropane	~	0.33	0.33	U	0.22	U	0.0027
1,2-Dibromoethane	~	0.33	0.33	U	0.22	U	0.0027
1,2-Dichlorobenzene	500	0.33	0.33	U	0.22	U	0.0027
1,2-Dichloroethane	30	0.33	0.33	U	0.22	U	0.0027
1,2-Dichloropropane	~	0.33	0.33	U	0.22	U	0.0027
1,3,5-Trimethylbenzene	190	0.33	0.33	U	0.24	JD	0.0027
1,3-Dichlorobenzene	280	0.33	0.33	U	0.22	U	0.0027
1,3-Dichloropropane	~	0.33	0.33	U	0.22	U	0.0027
1,4-Dichlorobenzene	130	0.33	0.33	U	0.22	U	0.0027
1,4-Dioxane	130	6.50	6.50	U	4.50	U	0.055
2,2-Dichloropropane	~	0.33	0.33	U	0.22	U	0.0027
2-Butanone	500	0.33	0.33	U	0.22	U	0.026
2-Chlorotoluene	~	0.33	0.33	U	0.22	U	0.0027
4-Chlorotoluene	~	0.33	0.33	U	0.22	U	0.0027
Acetone	500	0.70	0.70	JBD	0.64	JBD	0.11
Benzene	44	0.33	0.33	U	0.22	U	0.0027
Bromobenzene	~	0.33	0.33	U	0.22	U	0.0027
Bromochloromethane	~	0.33	0.33	U	0.22	U	0.0027
Bromodichloromethane	~	0.33	0.33	U	0.22	U	0.0027
Bromoform	~	0.33	0.33	U	0.22	U	0.0027
Bromomethane	~	0.33	0.33	U	0.22	U	0.0027
Carbon tetrachloride	22	0.33	0.33	U	0.22	U	0.0027
Chlorobenzene	500	0.33	0.33	U	0.22	U	0.0027
Chloroethane	~	0.33	0.33	U	0.22	U	0.0027
Chloroform	350	0.33	0.33	U	0.22	U	0.0027
Chloromethane	~	0.33	0.33	U	0.22	U	0.0027

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Summary of Soil Quality Results - Source Area 4

Sample ID York ID Sampling Date Client Matrix	NYSDEC Pt 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-4-3 (4-8 ftbg) 16K0471-01 11/9/2016 Soil		SA-4-2 (0-4 ftbg) 16K0471-02 11/9/2016 Soil		SA-4-1 (8-12 ftbg) 16K0471-03 11/9/2016 Soil	
		Compound	Result	Q	Result	Q	Result
cis-1,2-Dichloroethylene	500	0.33	U	1.40	D	0.0027	U
cis-1,3-Dichloropropylene	~	0.33	U	0.22	U	0.0027	U
Dibromochloromethane	~	0.33	U	0.22	U	0.0027	U
Dibromomethane	~	0.33	U	0.22	U	0.0027	U
Dichlorodifluoromethane	~	0.33	U	0.22	U	0.016	
Ethyl Benzene	390	0.33	U	0.22	U	0.0027	U
Hexachlorobutadiene	~	0.33	U	0.22	U	0.0027	U
Isopropylbenzene	~	0.33	U	0.22	U	0.0027	U
Methyl tert-butyl ether (MTBE)	500	0.33	U	0.22	U	0.0027	U
Methylene chloride	500	0.65	U	0.45	U	0.0055	U
Naphthalene	500	8.40	BD	0.90	BD	0.017	B
n-Butylbenzene	500	0.33	U	0.22	U	0.0027	U
n-Propylbenzene	500	0.33	U	0.22	U	0.0027	U
o-Xylene	~	0.33	U	0.22	U	0.0027	U
p- & m- Xylenes	~	0.65	U	0.45	U	0.0055	U
p-Isopropyltoluene	~	0.33	U	0.27	JD	0.0027	U
sec-Butylbenzene	500	0.33	U	0.22	U	0.0027	U
Styrene	~	0.33	U	0.22	U	0.0027	U
tert-Butylbenzene	500	0.33	U	0.22	U	0.0027	U
Tetrachloroethylene	150	0.33	U	2.90	D	0.0027	U
Toluene	500	0.46	JD	0.38	JD	0.0027	U
trans-1,2-Dichloroethylene	500	0.33	U	0.22	U	0.0027	U
trans-1,3-Dichloropropylene	~	0.33	U	0.22	U	0.0027	U
Trichloroethylene	200	0.33	U	0.27	JD	0.0027	U
Trichlorofluoromethane	~	0.33	U	0.22	U	0.0027	U
Vinyl acetate	~	0.33	U	0.22	U	0.0027	U
Vinyl Chloride	13	0.33	U	0.22	U	0.0027	U
Xylenes, Total	500	0.98	U	0.67	U	0.0082	U
<b>Semi-Volatiles, 8270 Target List</b>	mg/Kg	mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>		2		5		5	
1,2,4-Trichlorobenzene	~	0.065	U	0.12	U	0.12	U
1,2-Dichlorobenzene	500	0.065	U	0.12	U	0.12	U
1,3-Dichlorobenzene	280	0.065	U	0.12	U	0.12	U
1,4-Dichlorobenzene	130	0.065	U	0.12	U	0.12	U
2,4,5-Trichlorophenol	~	0.065	U	0.12	U	0.12	U
2,4,6-Trichlorophenol	~	0.065	U	0.12	U	0.12	U
2,4-Dichlorophenol	~	0.065	U	0.12	U	0.12	U
2,4-Dimethylphenol	~	0.065	U	0.12	U	0.12	U
2,4-Dinitrophenol	~	0.13	U	0.23	U	0.25	U

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Summary of Soil Quality Results - Source Area 4

Sample ID York ID Sampling Date Client Matrix	NYSDEC Pt 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-4-3 (4-8 ftbg) 16K0471-01 11/9/2016 Soil		SA-4-2 (0-4 ftbg) 16K0471-02 11/9/2016 Soil		SA-4-1 (8-12 ftbg) 16K0471-03 11/9/2016 Soil	
		Compound	Result	Q	Result	Q	Result
2,4-Dinitrotoluene	~		0.065	U	0.12	U	0.12
2,6-Dinitrotoluene	~		0.065	U	0.12	U	0.12
2-Chloronaphthalene	~		0.065	U	0.12	U	0.12
2-Chlorophenol	~		0.065	U	0.12	U	0.12
2-Methylnaphthalene	~		0.065	U	0.12	U	0.12
2-Methylphenol	500		0.065	U	0.12	U	0.12
2-Nitroaniline	~		0.13	U	0.23	U	0.25
2-Nitrophenol	~		0.065	U	0.12	U	0.12
3- & 4-Methylphenols	~		0.065	U	0.12	U	0.12
3,3'-Dichlorobenzidine	~		0.065	U	0.12	U	0.12
3-Nitroaniline	~		0.13	U	0.23	U	0.25
4,6-Dinitro-2-methylphenol	~		0.13	U	0.23	U	0.25
4-Bromophenyl phenyl ether	~		0.065	U	0.12	U	0.12
4-Chloro-3-methylphenol	~		0.065	U	0.12	U	0.12
4-Chloroaniline	~		0.065	U	0.12	U	0.12
4-Chlorophenyl phenyl ether	~		0.065	U	0.12	U	0.12
4-Nitroaniline	~		0.13	U	0.23	U	0.25
4-Nitrophenol	~		0.13	U	0.23	U	0.25
Acenaphthene	500		0.065	U	0.12	U	0.12
Acenaphthylene	500		0.065	U	0.12	U	0.12
Aniline	~		0.26	U	0.46	U	0.50
Anthracene	500		0.065	U	0.12	U	0.27
Benzo(a)anthracene	5.6		0.10	JD	0.13	JD	0.21
Benzo(a)pyrene	1		0.065	U	0.12	U	0.14
Benzo(b)fluoranthene	5.6		0.065	U	0.12	U	0.19
Benzo(g,h,i)perylene	500		0.065	U	0.12	U	0.12
Benzo(k)fluoranthene	56		0.065	U	0.12	U	0.12
Benzyl alcohol	~		0.065	U	0.12	U	0.12
Benzyl butyl phthalate	~		0.065	U	0.12	U	0.12
Bis(2-chloroethoxy)methane	~		0.065	U	0.12	U	0.12
Bis(2-chloroethyl)ether	~		0.065	U	0.12	U	0.12
Bis(2-chloroisopropyl)ether	~		0.065	U	0.12	U	0.12
Bis(2-ethylhexyl)phthalate	~		0.065	U	0.12	U	0.40
Chrysene	56		0.13	JD	0.22	JD	0.25
Dibeno(a,h)anthracene	0.56		0.065	U	0.12	U	0.12
Dibenzofuran	350		0.065	U	0.12	U	0.12
Diethyl phthalate	~		0.065	U	0.12	U	0.12
Dimethyl phthalate	~		0.065	U	0.12	U	0.12
Di-n-butyl phthalate	~		0.065	U	0.12	U	0.12

Summary of Soil Quality Results - Source Area 4

Sample ID York ID Sampling Date Client Matrix	NYSDEC Pt 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-4-3 (4-8 ftbg) 16K0471-01 11/9/2016 Soil		SA-4-2 (0-4 ftbg) 16K0471-02 11/9/2016 Soil		SA-4-1 (8-12 ftbg) 16K0471-03 11/9/2016 Soil	
		Compound	Result	Q	Result	Q	Result
Di-n-octyl phthalate	~	0.065	U	0.12	U	0.12	U
Fluoranthene	500	0.17	D	0.37	D	0.41	D
Fluorene	500	0.065	U	0.12	U	0.12	U
Hexachlorobenzene	6	0.065	U	0.12	U	0.12	U
Hexachlorobutadiene	~	0.065	U	0.12	U	0.12	U
Hexachlorocyclopentadiene	~	0.065	U	0.12	U	0.12	U
Hexachloroethane	~	0.065	U	0.12	U	0.12	U
Indeno(1,2,3-cd)pyrene	5.6	0.065	U	0.12	U	0.12	U
Isophorone	~	0.065	U	0.12	U	0.12	U
Naphthalene	500	0.065	U	0.12	U	1.39	D
Nitrobenzene	~	0.065	U	0.12	U	0.12	U
N-Nitrosodimethylamine	~	0.065	U	0.12	U	0.12	U
N-nitroso-di-n-propylamine	~	0.065	U	0.12	U	0.12	U
N-Nitrosodiphenylamine	~	0.065	U	0.12	U	0.12	U
Pentachlorophenol	6.7	0.065	U	0.12	U	0.12	U
Phenanthrene	500	0.079	JD	0.43	D	0.29	D
Phenol	500	0.065	U	0.12	U	0.12	U
Pyrene	500	0.17	D	0.33	D	0.42	D
Pyridine	~	0.26	U	0.46	U	0.50	U
<b>Pesticides, 8081 target list</b>	mg/Kg	mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>		5		5		5	
4,4'-DDD	92	0.0026	U	0.0018	U	0.0055	DP
4,4'-DDE	62	0.0026	U	0.0018	U	0.0020	U
4,4'-DDT	47	0.0026	U	0.0018	U	0.0020	U
Aldrin	0.68	0.0026	U	0.0018	U	0.0020	U
alpha-BHC	3.4	0.0026	U	0.0018	U	0.0020	U
alpha-Chlordane	24	0.0026	U	0.0018	U	0.0020	U
beta-BHC	3	0.0026	U	0.0018	U	0.0020	U
Chlordane, total	~	0.052	U	0.037	U	0.039	U
delta-BHC	500	0.0026	U	0.0018	U	0.0020	U
Dieldrin	1.4	0.0026	U	0.0018	U	0.0062	D
Endosulfan I	200	0.0026	U	0.0018	U	0.0020	U
Endosulfan II	200	0.0026	U	0.0018	U	0.0020	U
Endosulfan sulfate	200	0.0026	U	0.0018	U	0.0020	U
Endrin	89	0.0026	U	0.0018	U	0.0020	U
Endrin aldehyde	~	0.0026	U	0.0018	U	0.0060	D
Endrin ketone	~	0.0026	U	0.0018	U	0.0020	U
gamma-BHC (Lindane)	9.2	0.0026	U	0.0018	U	0.0020	U
gamma-Chlordane	~	0.0026	U	0.0018	U	0.0020	U

Summary of Soil Quality Results - Source Area 4

Sample ID York ID Sampling Date Client Matrix	NYSDEC Pt 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-4-3 (4-8 ftbg) 16K0471-01 11/9/2016 Soil		SA-4-2 (0-4 ftbg) 16K0471-02 11/9/2016 Soil		SA-4-1 (8-12 ftbg) 16K0471-03 11/9/2016 Soil	
		Compound	Result	Q	Result	Q	Result
		Heptachlor	15	0.0026	U	0.0018	U
		Heptachlor epoxide	~	0.0026	U	0.0018	U
Methoxychlor	~	0.013	U	0.0091	U	0.0098	U
Toxaphene	~	0.13	U	0.093	U	0.099	U
<b>Metals, Target Analyte</b>	mg/Kg	mg/Kg	mg/Kg		mg/Kg		mg/Kg
Dilution Factor			1		1		1
Aluminum	~	5,150		6,560		6,890	
Antimony	~	0.78		0.64		0.59	
Arsenic	16	1.96		1.88		1.61	
Barium	400	130		49.50		48.20	
Beryllium	590	0.16	U	0.11	U	0.12	U
Cadmium	9.3	1.31		1.87		1.12	
Calcium	~	16,800		34,700		32,900	
Chromium	~	25.80		24.70		16.50	
Cobalt	~	6.88		6.42		8.77	
Copper	270	31.30		35.80		53.90	
Iron	~	11,300		12,800		16,400	
Lead	1000	110		50.70		38.70	
Magnesium	~	5,150		18,000		16,700	
Manganese	10000	154		199		200	
Nickel	310	17		19.40		15.70	
Potassium	~	1,090		1,210		1,350	
Selenium	1500	1.56	U	1.11	U	1.19	U
Silver	1500	0.78	U	0.55	U	0.59	U
Sodium	~	115		199		180	
Thallium	~	1.56	U	1.11	U	1.19	U
Vanadium	~	19.60		39.40		36.20	
Zinc	10000	392		327		250	
<b>Mercury by 7473</b>	mg/Kg	mg/Kg	mg/Kg		mg/Kg		mg/Kg
Dilution Factor			1		1		1
Mercury	2.8	0.20		0.18		0.092	
<b>Total Solids</b>		%		%		%	
Dilution Factor		1		1		1	
% Solids	~	64.10		90.20		84.20	
<b>Herbicides, Target List</b>	mg/Kg	mg/Kg	mg/Kg		mg/Kg		mg/Kg
Dilution Factor		1		1		1	
2,4,5-T	~	0.031	U	0.022	U	0.024	U
2,4,5-TP (Silvex)	500	0.031	U	0.022	U	0.024	U
2,4-D	~	0.031	U	0.022	U	0.024	U

Summary of Soil Quality Results - Source Area 4

Sample ID York ID Sampling Date Client Matrix	NYSDEC Pt 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-4-3 (4-8 ftbg) 16K0471-01 11/9/2016 Soil		SA-4-2 (0-4 ftbg) 16K0471-02 11/9/2016 Soil		SA-4-1 (8-12 ftbg) 16K0471-03 11/9/2016 Soil	
		Compound	Result	Q	Result	Q	Result
Polychlorinated Biphenyls (PCB)	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor		1	1	1	1	1	1
Aroclor 1016	~	0.026	U	0.019	U	0.020	U
Aroclor 1221	~	0.026	U	0.019	U	0.020	U
Aroclor 1232	~	0.026	U	0.019	U	0.020	U
Aroclor 1242	~	0.026	U	0.019	U	0.020	U
Aroclor 1248	~	0.026	U	0.019	U	0.040	
Aroclor 1254	~	0.062		0.019	U	0.040	
Aroclor 1260	~	0.026	U	0.019	U	0.020	U
Total PCBs	1	0.062		0.019	U	0.080	

**NOTES:**

Any Regulatory Exceedences are color coded by Regulation

**Q is the Qualifier Column with definitions as follows:**

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

~=this indicates that no regulatory limit has been established for this analyte

Summary of Soil Quality Results - Source Areas 5 - 6

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-5-1 (4-6.75 ftbg) 16K0548-01 11/10/2016 3:00:00 PM Soil		SA-5-2 (8-12 ftbg) 16K0548-02 11/10/2016 3:00:00 PM Soil		SA-6-1 (12-15 ftbg) 16K0548-03 11/10/2016 3:00:00 PM Soil	
		Result	Q	Result	Q	Result	Q
		Compound		Compound		Compound	
		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Volatile Organics, 8260 - Comprehensive</b>							
<b>Dilution Factor</b>							
1,1,1,2-Tetrachloroethane		~	0.0025	1	0.0026	1	0.0023
1,1,1-Trichloroethane		500	0.0025	U	0.0026	U	0.0023
1,1,2,2-Tetrachloroethane		~	0.0025	U	0.0026	U	0.0023
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		~	0.0025	U	0.0026	U	0.0023
1,1,2-Trichloroethane		~	0.0025	U	0.0026	U	0.0023
1,1-Dichloroethane		240	0.0025	U	0.0026	U	0.0023
1,1-Dichloroethylene		500	0.0025	U	0.0026	U	0.0023
1,2,3-Trichlorobenzene		~	0.0025	U	0.0026	U	0.0023
1,2,3-Trichloropropane		~	0.0025	U	0.0026	U	0.0023
1,2,4-Trichlorobenzene		~	0.0025	U	0.0026	U	0.0023
1,2,4-Trimethylbenzene		190	0.0025	U	0.0026	U	0.0023
1,2-Dibromo-3-chloropropane		~	0.0025	U	0.0026	U	0.0023
1,2-Dibromoethane		~	0.0025	U	0.0026	U	0.0023
1,2-Dichlorobenzene		500	0.0025	U	0.0026	U	0.0023
1,2-Dichloroethane		30	0.0025	U	0.0026	U	0.0023
1,2-Dichloropropane		~	0.0025	U	0.0026	U	0.0023
1,3,5-Trimethylbenzene		190	0.0025	U	0.0026	U	0.0023
1,3-Dichlorobenzene		280	0.0025	U	0.0026	U	0.0023
1,4-Dichlorobenzene		130	0.0025	U	0.0026	U	0.0023
1,4-Dioxane		130	0.050	U	0.051	U	0.045
2-Butanone		500	0.012		0.0056		0.0055
2-Hexanone		~	0.0025	U	0.0026	U	0.0023
4-Methyl-2-pentanone		~	0.0025	U	0.0026	U	0.0023
Acetone		500	0.092		0.032		0.035
Acrolein		~	0.0050	U	0.0051	U	0.0045
Acrylonitrile		~	0.0025	U	0.0026	U	0.0023
Benzene		44	0.0025	U	0.070		0.0023
Bromochloromethane		~	0.0025	U	0.0026	U	0.0023
Bromodichloromethane		~	0.0025	U	0.0026	U	0.0023
Bromoform		~	0.0025	U	0.0026	U	0.0023
Bromomethane		~	0.0025	U	0.0026	U	0.0023
Carbon disulfide		~	0.0025	U	0.0026	U	0.0023
Carbon tetrachloride		22	0.0025	U	0.0026	U	0.0023
Chlorobenzene		500	0.0025	U	0.0026	U	0.0023
Chloroethane		~	0.0025	U	0.0026	U	0.0023
Chloroform		350	0.0025	U	0.0026	U	0.0023
Chloromethane		~	0.0025	U	0.0026	U	0.0023
cis-1,2-Dichloroethylene		500	0.0025	U	0.0026	U	0.0023

Summary of Soil Quality Results - Source Areas 5 - 6

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-5-1 (4-6.75 ftbg) 16K0548-01 11/10/2016 3:00:00 PM Soil		SA-5-2 (8-12 ftbg) 16K0548-02 11/10/2016 3:00:00 PM Soil		SA-6-1 (12-15 ftbg) 16K0548-03 11/10/2016 3:00:00 PM Soil	
		Result	Q	Result	Q	Result	Q
		Compound					
cis-1,3-Dichloropropylene	~	0.0025	U	0.0026	U	0.0023	U
Cyclohexane	~	0.0025	U	0.0026	U	0.0023	U
Dibromochloromethane	~	0.0025	U	0.0026	U	0.0023	U
Dibromomethane	~	0.0025	U	0.0026	U	0.0023	U
Dichlorodifluoromethane	~	0.0025	U	0.0026	J	0.0023	U
Ethyl Benzene	390	0.0025	U	0.0026	U	0.0023	U
Hexachlorobutadiene	~	0.0025	U	0.0026	U	0.0023	U
Isopropylbenzene	~	0.0025	U	0.0026	U	0.0023	U
Methyl acetate	~	0.0025	U	0.0026	U	0.0023	U
Methyl tert-butyl ether (MTBE)	500	0.0025	U	0.0026	U	0.0023	U
Methylcyclohexane	~	0.0025	U	0.0026	U	0.0023	U
Methylene chloride	500	0.0050	U	0.0051	U	0.0045	U
n-Butylbenzene	500	0.0025	U	0.0026	U	0.0023	U
n-Propylbenzene	500	0.0025	U	0.0026	U	0.0023	U
o-Xylene	~	0.0025	U	0.0026	U	0.0023	U
p- & m- Xylenes	~	0.0050	U	0.0051	U	0.0045	U
p-Isopropyltoluene	~	0.0025	U	0.0026	U	0.0023	U
sec-Butylbenzene	500	0.0025	U	0.0026	U	0.0023	U
Styrene	~	0.0025	U	0.0026	U	0.0023	U
tert-Butyl alcohol (TBA)	~	0.0025	U	0.0026	U	0.0023	U
tert-Butylbenzene	500	0.0025	U	0.0026	U	0.0023	U
Tetrachloroethylene	150	0.0025	U	0.0026	U	0.0023	U
Toluene	500	0.0025	U	0.0028	J	0.0023	U
trans-1,2-Dichloroethylene	500	0.0025	U	0.0026	U	0.0023	U
trans-1,3-Dichloropropylene	~	0.0025	U	0.0026	U	0.0023	U
Trichloroethylene	200	0.0025	U	0.0026	U	0.0023	U
Trichlorofluoromethane	~	0.0038	J	0.011		0.0023	U
Vinyl Chloride	13	0.0025	U	0.0026	U	0.0023	U
Xylenes, Total	500	0.0074	U	0.0077	U	0.0068	U
Semi-Volatiles, 8270 - Comprehensive	mg/Kg	mg/Kg		mg/Kg		mg/Kg	
Dilution Factor		2		2		2	
1,1'-Biphenyl	~	0.045	U	0.046	U	0.045	U
1,2,4,5-Tetrachlorobenzene	~	0.089	U	0.091	U	0.091	U
1,2,4-Trichlorobenzene	~	0.045	U	0.046	U	0.045	U
1,2-Dichlorobenzene	500	0.045	U	0.046	U	0.045	U
1,2-Diphenylhydrazine (as Azobenzene)	~	0.045	U	0.046	U	0.045	U
1,3-Dichlorobenzene	280	0.045	U	0.046	U	0.045	U
1,4-Dichlorobenzene	130	0.045	U	0.046	U	0.045	U
2,3,4,6-Tetrachlorophenol	~	0.089	U	0.091	U	0.091	U
2,4,5-Trichlorophenol	~	0.045	U	0.046	U	0.045	U

Summary of Soil Quality Results - Source Areas 5 - 6

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-5-1 (4-6.75 ftbg) 16K0548-01 11/10/2016 3:00:00 PM Soil		SA-5-2 (8-12 ftbg) 16K0548-02 11/10/2016 3:00:00 PM Soil		SA-6-1 (12-15 ftbg) 16K0548-03 11/10/2016 3:00:00 PM Soil		
		Result	Q	Result	Q	Result	Q	
		~	0.045	U	0.046	U	0.045	U
		~	0.045	U	0.046	U	0.045	U
2,4,6-Trichlorophenol		~	0.045	U	0.046	U	0.045	U
2,4-Dichlorophenol		~	0.045	U	0.046	U	0.045	U
2,4-Dimethylphenol		~	0.045	U	0.046	U	0.045	U
2,4-Dinitrophenol		~	0.089	U	0.091	U	0.091	U
2,4-Dinitrotoluene		~	0.045	U	0.046	U	0.045	U
2,6-Dinitrotoluene		~	0.045	U	0.046	U	0.045	U
2-Chloronaphthalene		~	0.045	U	0.046	U	0.045	U
2-Chlorophenol		~	0.045	U	0.046	U	0.045	U
2-Methylnaphthalene		~	0.045	U	0.046	U	0.24	D
2-Methylphenol	500	0.045	U	0.046	U	0.045	U	
2-Nitroaniline		~	0.089	U	0.091	U	0.091	U
2-Nitrophenol		~	0.045	U	0.046	U	0.045	U
3- & 4-Methylphenols		~	0.045	U	0.046	U	0.045	U
3,3'-Dichlorobenzidine		~	0.045	U	0.046	U	0.045	U
3-Nitroaniline		~	0.089	U	0.091	U	0.091	U
4,6-Dinitro-2-methylphenol		~	0.089	U	0.091	U	0.091	U
4-Bromophenyl phenyl ether		~	0.045	U	0.046	U	0.045	U
4-Chloro-3-methylphenol		~	0.045	U	0.046	U	0.045	U
4-Chloroaniline		~	0.045	U	0.046	U	0.045	U
4-Chlorophenyl phenyl ether		~	0.045	U	0.046	U	0.045	U
4-Nitroaniline		~	0.089	U	0.091	U	0.091	U
4-Nitrophenol		~	0.089	U	0.091	U	0.091	U
Acenaphthene	500	0.045	U	0.046	U	0.35	D	
Acenaphthylene	500	0.045	U	0.053	JD	0.13	D	
Acetophenone		~	0.045	U	0.046	U	0.045	U
Aniline		~	0.18	U	0.18	U	0.18	U
Anthracene	500	0.045	U	0.046	U	1.04	D	
Atrazine		~	0.045	U	0.046	U	0.045	U
Benzaldehyde		~	0.045	U	0.046	U	0.045	U
Benzidine		~	0.18	U	0.18	U	0.18	U
Benzo(a)anthracene	5.6	0.054	JD	0.11	D	1.99	D	
Benzo(a)pyrene	1	0.045	U	0.072	JD	0.65	D	
Benzo(b)fluoranthene	5.6	0.045	U	0.066	JD	0.91	D	
Benzo(g,h,i)perylene	500	0.045	U	0.046	U	0.28	D	
Benzo(k)fluoranthene	56	0.045	U	0.087	JD	0.48	D	
Benzoic acid		~	0.045	U	0.046	U	0.045	U
Benzyl alcohol		~	0.045	U	0.046	U	0.045	U
Benzyl butyl phthalate		~	0.045	U	0.046	U	0.045	U
Bis(2-chloroethoxy)methane		~	0.045	U	0.046	U	0.045	U
Bis(2-chloroethyl)ether		~	0.045	U	0.046	U	0.045	U

Summary of Soil Quality Results - Source Areas 5 - 6

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-5-1 (4-6.75 ftbg) 16K0548-01 11/10/2016 3:00:00 PM Soil		SA-5-2 (8-12 ftbg) 16K0548-02 11/10/2016 3:00:00 PM Soil		SA-6-1 (12-15 ftbg) 16K0548-03 11/10/2016 3:00:00 PM Soil	
		Result	Q	Result	Q	Result	Q
		Compound					
Bis(2-chloroisopropyl)ether	~	0.045	U	0.046	U	0.045	U
Bis(2-ethylhexyl)phthalate	~	0.045	U	0.046	U	0.10	D
Caprolactam	~	0.089	U	0.091	U	0.091	U
Carbazole	~	0.045	U	0.046	U	0.059	JD
Chrysene	56	0.089	D	0.19	D	2.07	D
Dibenzo(a,h)anthracene	0.56	0.045	U	0.046	U	0.12	D
Dibenzofuran	350	0.045	U	0.046	U	0.26	D
Diethyl phthalate	~	0.045	U	0.046	U	0.045	U
Dimethyl phthalate	~	0.045	U	0.046	U	0.045	U
Di-n-butyl phthalate	~	0.045	U	0.046	U	0.045	U
Di-n-octyl phthalate	~	0.045	U	0.046	U	0.045	U
Fluoranthene	500	0.15	D	0.24	D	5.89	D
Fluorene	500	0.045	U	0.046	U	0.51	D
Hexachlorobenzene	6	0.045	U	0.046	U	0.045	U
Hexachlorobutadiene	~	0.045	U	0.046	U	0.045	U
Hexachlorocyclopentadiene	~	0.045	U	0.046	U	0.045	U
Hexachloroethane	~	0.045	U	0.046	U	0.045	U
Indeno(1,2,3-cd)pyrene	5.6	0.045	U	0.046	U	0.33	D
Isophorone	~	0.045	U	0.046	U	0.045	U
Naphthalene	500	0.045	U	0.046	U	0.15	D
Nitrobenzene	~	0.045	U	0.046	U	0.045	U
N-Nitrosodimethylamine	~	0.045	U	0.046	U	0.045	U
N-nitroso-di-n-propylamine	~	0.045	U	0.046	U	0.045	U
N-Nitrosodiphenylamine	~	0.045	U	0.046	U	0.045	U
Pentachlorophenol	6.7	0.045	U	0.046	U	0.045	U
Phenanthrene	500	0.15	D	0.13	D	4.53	D
Phenol	500	0.045	U	0.046	U	0.045	U
Pyrene	500	0.13	D	0.26	D	5.74	D
<b>Pesticides, 8081 target list</b>	mg/Kg	mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>		5		5		5	
4,4'-DDD	92	0.0053	DP	0.0045	DP	0.0044	DP
4,4'-DDE	62	0.0018	U	0.0018	U	0.0018	U
4,4'-DDT	47	0.0034	D	0.0018	U	0.0018	U
Aldrin	0.68	0.0018	U	0.0018	U	0.0018	U
alpha-BHC	3.4	0.0018	U	0.0018	U	0.0018	U
alpha-Chlordane	24	0.0064	DP	0.0072	DP	0.0018	U
beta-BHC	3	0.0018	U	0.0018	U	0.0018	U
Chlordane, total	~	0.055	D	0.040	D	0.036	U
delta-BHC	500	0.0018	U	0.0018	U	0.0018	U
Dieldrin	1.4	0.0018	U	0.0018	D	0.0018	U

109 - 125 Marbledale Road  
 Tuckahoe, New York  
 BCP Site No. C360143

Summary of Soil Quality Results - Source Areas 5 - 6

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-5-1 (4-6.75 ftbg) 16K0548-01 11/10/2016 3:00:00 PM Soil		SA-5-2 (8-12 ftbg) 16K0548-02 11/10/2016 3:00:00 PM Soil		SA-6-1 (12-15 ftbg) 16K0548-03 11/10/2016 3:00:00 PM Soil	
		Result	Q	Result	Q	Result	Q
		Compound					
Endosulfan I	200	0.0018	U	0.0018	U	0.0018	U
Endosulfan II	200	0.0018	U	0.0018	U	0.0018	U
Endosulfan sulfate	200	0.0018	U	0.0018	U	0.0018	U
Endrin	89	0.0018	U	0.0018	U	0.0018	U
Endrin aldehyde	~	0.0018	U	0.0018	U	0.0018	U
Endrin ketone	~	0.0018	U	0.0018	U	0.0018	U
gamma-BHC (Lindane)	9.2	0.0018	U	0.0018	U	0.0018	U
gamma-Chlordane	~	0.0043	DP	0.0047	D	0.0018	U
Heptachlor	15	0.0018	U	0.0018	U	0.0018	U
Heptachlor epoxide	~	0.0018	U	0.0018	U	0.0018	U
Methoxychlor	~	0.0088	U	0.0090	U	0.0090	U
Toxaphene	~	0.089	U	0.091	U	0.091	U
<b>Metals, Target Analyte</b>	mg/Kg	mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>		1		1		1	
Aluminum	~	6,910	B	6,210	B	5,540	B
Antimony	~	0.53	U	0.55	U	0.54	U
Arsenic	16	3.28		2.69		1.91	
Barium	400	55.90		37.40		75.20	
Beryllium	590	0.11	U	0.11	U	0.11	U
Cadmium	9.3	0.41		0.39		0.34	
Calcium	~	40,100		40,700		19,600	
Chromium	~	23		11.30		11.50	
Cobalt	~	6.63		4.89		6.11	
Copper	270	21.30		18.50		34.20	
Iron	~	12,400		9,000		9,440	
Lead	1000	29.60		58.70		39.30	
Magnesium	~	8,040		11,600		2,620	
Manganese	10000	217		159		387	
Nickel	310	17.50	B	12.30	B	27.30	B
Potassium	~	1,320		802		992	
Selenium	1500	1.07	U	1.09	U	1.09	U
Silver	1500	0.53	U	0.55	U	0.54	U
Sodium	~	239		303		242	
Thallium	~	1.07	U	1.09	U	1.09	U
Vanadium	~	30.90		24.90		22.30	
Zinc	10000	36.30	B	42.60	B	43	B
<b>Mercury by 7473</b>	mg/Kg	mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>		1		1		1	
Mercury	2.8	0.054		0.10		0.086	
<b>Total Solids</b>		%		%		%	

Summary of Soil Quality Results - Source Areas 5 - 6

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-5-1 (4-6.75 ftbg) 16K0548-01 11/10/2016 3:00:00 PM Soil		SA-5-2 (8-12 ftbg) 16K0548-02 11/10/2016 3:00:00 PM Soil		SA-6-1 (12-15 ftbg) 16K0548-03 11/10/2016 3:00:00 PM Soil	
		Result	Q	Result	Q	Result	Q
		Compound					
Dilution Factor		1		1		1	
% Solids	~	93.80		91.50		92.20	
Herbicides, Target List	mg/Kg	mg/Kg		mg/Kg		mg/Kg	
Dilution Factor		1		1		1	
2,4,5-T	~	0.021	U	0.022	U	0.022	U
2,4,5-TP (Silvex)	500	0.021	U	0.022	U	0.022	U
2,4-D	~	0.021	U	0.022	U	0.022	U
Polychlorinated Biphenyls (PCB)	mg/Kg	mg/Kg		mg/Kg		mg/Kg	
Dilution Factor		1		1		1	
Aroclor 1016	~	0.018	U	0.018	U	0.018	U
Aroclor 1221	~	0.018	U	0.018	U	0.018	U
Aroclor 1232	~	0.018	U	0.018	U	0.018	U
Aroclor 1242	~	0.018	U	0.018	U	0.018	U
Aroclor 1248	~	0.018	U	0.018	U	0.018	U
Aroclor 1254	~	0.018	U	0.018	U	0.018	U
Aroclor 1260	~	0.018	U	0.018	U	0.018	U
Total PCBs	1	0.018	U	0.018	U	0.018	U

**NOTES:**

Any Regulatory Exceedences are color coded by Regulation

**Q is the Qualifier Column with definitions as follows:**

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

~=this indicates that no regulatory limit has been established for this analyte

Summary of Soil Quality Results - Source Areas 7 - 10

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-7-1 (0-4 ftbg) 16K0606-01 11/14/2016 Soil		SA-8-1 (4-8 ftbg) 16K0606-02 11/14/2016 Soil		SA-9-1 (12-15 ftbg) 16K0606-03 11/14/2016 Soil		SA-10-1 (8-12 ftbg) 16K0606-04 11/14/2016 Soil		
		Compound	Result	Q	Result	Q	Result	Q	Result	Q
		Volatile Organics, 8260 List	mg/Kg	mg/Kg	mg/Kg	U	mg/Kg	U	mg/Kg	U
Dilution Factor				1		1		90		1
1,1,1,2-Tetrachloroethane		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,1,1-Trichloroethane		500	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,1,2,2-Tetrachloroethane		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,1,2-Trichloroethane		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,1-Dichloroethane		240	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,1-Dichloroethylene		500	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,1-Dichloropropylene		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,2,3-Trichlorobenzene		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,2,3-Trichloropropane		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,2,4-Trichlorobenzene		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,2,4-Trimethylbenzene		190	0.0086		0.0025	U	0.0023	U	0.0022	U
1,2-Dibromo-3-chloropropane		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,2-Dibromoethane		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,2-Dichlorobenzene		500	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,2-Dichloroethane		30	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,2-Dichloropropane		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,3,5-Trimethylbenzene		190	0.0095		0.0025	U	0.0023	U	0.0022	U
1,3-Dichlorobenzene		280	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,3-Dichloropropane		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,4-Dichlorobenzene		130	0.0022	U	0.0025	U	0.0023	U	0.0022	U
1,4-Dioxane		130	0.044	U	0.051	U	0.047	U	0.043	U
2,2-Dichloropropane		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
2-Butanone		500	0.0071		0.0025	U	0.0023	U	0.0022	U
2-Chlorotoluene		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
4-Chlorotoluene		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Acetone		500	0.054	B	0.011	B	0.026	B	0.0088	B
Benzene		44	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Bromobenzene		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Bromochloromethane		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Bromodichloromethane		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Bromoform		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Bromomethane		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Carbon tetrachloride		22	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Chlorobenzene		500	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Chloroethane		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Chloroform		350	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Chloromethane		~	0.0022	U	0.0025	U	0.0023	U	0.0022	U

Summary of Soil Quality Results - Source Areas 7 - 10

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-7-1 (0-4 ftbg) 16K0606-01 11/14/2016 Soil		SA-8-1 (4-8 ftbg) 16K0606-02 11/14/2016 Soil		SA-9-1 (12-15 ftbg) 16K0606-03 11/14/2016 Soil		SA-10-1 (8-12 ftbg) 16K0606-04 11/14/2016 Soil	
		Compound	Result	Q	Result	Q	Result	Q	Result
									Q
cis-1,2-Dichloroethylene	500	0.0022	U	0.0025	U	0.0023	U	0.0022	U
cis-1,3-Dichloropropylene	~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Dibromochloromethane	~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Dibromomethane	~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Dichlorodifluoromethane	~	0.0063		0.0025	U	0.0023	U	0.0022	U
Ethyl Benzene	390	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Hexachlorobutadiene	~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Isopropylbenzene	~	0.0032	J	0.0025	U	0.0023	U	0.0022	U
Methyl tert-butyl ether (MTBE)	500	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Methylene chloride	500	0.0044	U	0.0051	U	0.0047	U	0.0043	U
Naphthalene	500	0.011	B	0.0025	U	7.80	BD	0.035	B
n-Butylbenzene	500	0.0022	U	0.0025	U	0.0023	U	0.0022	U
n-Propylbenzene	500	0.0063		0.0025	U	0.0023	U	0.0022	U
o-Xylene	~	0.0025	J	0.0025	U	0.0023	U	0.0022	U
p- & m- Xylenes	~	0.0044	U	0.0051	U	0.0047	U	0.0043	U
p-Isopropyltoluene	~	0.049		0.0025	U	0.0023	U	0.0022	U
sec-Butylbenzene	500	0.013		0.0025	U	0.0023	U	0.0022	U
Styrene	~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
tert-Butylbenzene	500	0.0039	J	0.0025	U	0.0023	U	0.0022	U
Tetrachloroethylene	150	0.0022	U	0.0025	U	0.0029	J	0.0022	U
Toluene	500	0.0022	U	0.0025	U	0.0023	U	0.0022	U
trans-1,2-Dichloroethylene	500	0.0022	U	0.0025	U	0.0023	U	0.0022	U
trans-1,3-Dichloropropylene	~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Trichloroethylene	200	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Trichlorofluoromethane	~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Vinyl acetate	~	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Vinyl Chloride	13	0.0022	U	0.0025	U	0.0023	U	0.0022	U
Xylenes, Total	500	0.0067	U	0.0076	U	0.0070	U	0.0065	U
Semi-Volatiles, 8270 Target List	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor			10		2			100	
1,2,4-Trichlorobenzene	~	0.34	U	0.072	U	0.35	U	0.068	U
1,2-Dichlorobenzene	500	0.34	U	0.072	U	0.35	U	0.068	U
1,3-Dichlorobenzene	280	0.34	U	0.072	U	0.35	U	0.068	U
1,4-Dichlorobenzene	130	0.34	U	0.072	U	0.35	U	0.068	U
2,4,5-Trichlorophenol	~	0.34	U	0.072	U	0.35	U	0.068	U
2,4,6-Trichlorophenol	~	0.34	U	0.072	U	0.35	U	0.068	U
2,4-Dichlorophenol	~	0.34	U	0.072	U	0.35	U	0.068	U
2,4-Dimethylphenol	~	0.34	U	0.072	U	0.35	U	0.068	U
2,4-Dinitrophenol	~	0.67	U	0.14	U	0.69	U	0.14	U
2,4-Dinitrotoluene	~	0.34	U	0.072	U	0.35	U	0.068	U

Summary of Soil Quality Results - Source Areas 7 - 10

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-7-1 (0-4 ftbg) 16K0606-01 11/14/2016 Soil		SA-8-1 (4-8 ftbg) 16K0606-02 11/14/2016 Soil		SA-9-1 (12-15 ftbg) 16K0606-03 11/14/2016 Soil		SA-10-1 (8-12 ftbg) 16K0606-04 11/14/2016 Soil	
		Compound	Result	Q	Result	Q	Result	Q	Result
2,6-Dinitrotoluene	~	0.34	U	0.072	U	0.35	U	0.068	U
2-Chloronaphthalene	~	0.34	U	0.072	U	0.35	U	0.068	U
2-Chlorophenol	~	0.34	U	0.072	U	0.35	U	0.068	U
2-Methylnaphthalene	~	0.34	U	0.072	U	4.08	D	0.068	U
2-Methylphenol	500	0.34	U	0.072	U	0.35	U	0.068	U
2-Nitroaniline	~	0.67	U	0.14	U	0.69	U	0.14	U
2-Nitrophenol	~	0.34	U	0.072	U	0.35	U	0.068	U
3- & 4-Methylphenols	~	0.34	U	0.072	U	0.35	U	0.068	U
3,3'-Dichlorobenzidine	~	0.34	U	0.072	U	0.59	JD	0.068	U
3-Nitroaniline	~	0.67	U	0.14	U	0.69	U	0.14	U
4,6-Dinitro-2-methylphenol	~	0.67	U	0.14	U	0.69	U	0.14	U
4-Bromophenyl phenyl ether	~	0.34	U	0.072	U	0.35	U	0.068	U
4-Chloro-3-methylphenol	~	0.34	U	0.072	U	0.35	U	0.068	U
4-Chloroaniline	~	0.34	U	0.072	U	0.35	U	0.068	U
4-Chlorophenyl phenyl ether	~	0.34	U	0.072	U	0.35	U	0.068	U
4-Nitroaniline	~	0.67	U	0.14	U	0.69	U	0.14	U
4-Nitrophenol	~	0.67	U	0.14	U	0.69	U	0.14	U
Acenaphthene	500	0.41	JD	0.072	U	14.60	D	0.23	D
Acenaphthylene	500	0.34	U	0.072	U	0.56	JD	0.068	U
Aniline	~	1.35	U	0.29	U	1.38	U	0.27	U
Anthracene	500	1.95	D	0.072	U	30.40	D	1.05	D
Benzo(a)anthracene	5.6	5.38	D	0.072	U	38.50	D	1.68	D
Benzo(a)pyrene	1	2.68	D	0.072	U	12.20	D	0.77	D
Benzo(b)fluoranthene	5.6	3.34	D	0.072	U	20.90	D	1.09	D
Benzo(g,h,i)perylene	500	1.01	D	0.072	U	7.09	D	0.60	D
Benzo(k)fluoranthene	56	2.43	D	0.072	U	13.20	D	0.79	D
Benzyl alcohol	~	0.34	U	0.072	U	0.35	U	0.068	U
Benzyl butyl phthalate	~	0.34	U	0.072	U	0.35	U	0.068	U
Bis(2-chloroethoxy)methane	~	0.34	U	0.072	U	0.35	U	0.068	U
Bis(2-chloroethyl)ether	~	0.34	U	0.072	U	0.35	U	0.068	U
Bis(2-chloroisopropyl)ether	~	0.34	U	0.072	U	0.35	U	0.068	U
Bis(2-ethylhexyl)phthalate	~	0.34	U	0.072	U	0.35	U	0.068	U
Chrysene	56	4.23	D	0.072	U	39.60	D	2.14	D
Dibenzo(a,h)anthracene	0.56	0.34	U	0.072	U	3.23	D	0.19	D
Dibenzofuran	350	0.34	U	0.072	U	8.36	D	0.068	U
Diethyl phthalate	~	0.34	U	0.072	U	0.35	U	0.068	U
Dimethyl phthalate	~	0.34	U	0.072	U	0.35	U	0.068	U
Di-n-butyl phthalate	~	0.34	U	0.072	U	0.35	U	0.068	U
Di-n-octyl phthalate	~	0.34	U	0.072	U	0.35	U	0.068	U

Summary of Soil Quality Results - Source Areas 7 - 10

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-7-1 (0-4 ftbg) 16K0606-01 11/14/2016 Soil		SA-8-1 (4-8 ftbg) 16K0606-02 11/14/2016 Soil		SA-9-1 (12-15 ftbg) 16K0606-03 11/14/2016 Soil		SA-10-1 (8-12 ftbg) 16K0606-04 11/14/2016 Soil	
		Compound	Result	Q	Result	Q	Result	Q	Result
									Q
Fluoranthene	500	11.20	D	0.072	U	98.40	D	5.89	D
Fluorene	500	0.81	D	0.072	U	11.50	D	0.30	D
Hexachlorobenzene	6	0.34	U	0.072	U	0.35	U	0.068	U
Hexachlorobutadiene	~	0.34	U	0.072	U	0.35	U	0.068	U
Hexachlorocyclopentadiene	~	0.34	U	0.072	U	0.35	U	0.068	U
Hexachloroethane	~	0.34	U	0.072	U	0.35	U	0.068	U
Indeno(1,2,3-cd)pyrene	5.6	1.06	D	0.072	U	7.98	D	0.49	D
Isophorone	~	0.34	U	0.072	U	0.35	U	0.068	U
Naphthalene	500	0.34	U	0.072	U	14.80	D	0.10	JD
Nitrobenzene	~	0.34	U	0.072	U	0.35	U	0.068	U
N-Nitrosodimethylamine	~	0.34	U	0.072	U	0.35	U	0.068	U
N-nitroso-di-n-propylamine	~	0.34	U	0.072	U	0.35	U	0.068	U
N-Nitrosodiphenylamine	~	0.34	U	0.072	U	0.35	U	0.068	U
Pentachlorophenol	6.7	0.34	U	0.072	U	0.35	U	0.068	U
Phenanthrene	500	7.75	D	0.072	U	89.20	D	4.21	D
Phenol	500	0.34	U	0.072	U	0.35	U	0.068	U
Pyrene	500	9.84	D	0.072	U	76.90	D	4.46	D
Pyridine	~	1.35	U	0.29	U	1.38	U	0.27	U
<b>Pesticides, 8081 target list</b>	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>			5		5		5		5
4,4'-DDD	92	0.010	D	0.0019	U	0.0018	U	0.0018	U
4,4'-DDE	62	0.0082	DP	0.0019	U	0.0024	D	0.0018	U
4,4'-DDT	47	0.0054	D	0.0019	U	0.0032	D	0.0042	D
Aldrin	0.68	0.0018	U	0.0019	U	0.0018	U	0.0018	U
alpha-BHC	3.4	0.0018	U	0.0019	U	0.0018	U	0.0018	U
alpha-Chlordane	24	0.0018	U	0.0019	U	0.0088	D	0.0020	D
beta-BHC	3	0.0018	U	0.0019	U	0.0018	U	0.0018	U
Chlordane, total	~	0.036	U	0.038	U	0.061	D	0.036	U
delta-BHC	500	0.0018	U	0.0019	U	0.0018	U	0.0018	U
Dieldrin	1.4	0.0018	U	0.0019	U	0.0018	U	0.0018	U
Endosulfan I	200	0.0018	U	0.0019	U	0.0018	U	0.0018	U
Endosulfan II	200	0.0018	U	0.0019	U	0.0018	U	0.0018	U
Endosulfan sulfate	200	0.0018	U	0.0019	U	0.0018	U	0.0018	U
Endrin	89	0.0018	U	0.0019	U	0.0018	U	0.0018	U
Endrin aldehyde	~	0.0018	U	0.0019	U	0.0018	U	0.0018	U
Endrin ketone	~	0.0018	U	0.0019	U	0.0018	U	0.0018	U
gamma-BHC (Lindane)	9.2	0.0018	U	0.0019	U	0.0018	U	0.0018	U
gamma-Chlordane	~	0.0018	U	0.0019	U	0.0081	D	0.0025	D
Heptachlor	15	0.0018	U	0.0019	U	0.0031	DP	0.0018	U
Heptachlor epoxide	~	0.0018	U	0.0019	U	0.0018	U	0.0018	U

Summary of Soil Quality Results - Source Areas 7 - 10

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-7-1 (0-4 ftbg) 16K0606-01 11/14/2016 Soil		SA-8-1 (4-8 ftbg) 16K0606-02 11/14/2016 Soil		SA-9-1 (12-15 ftbg) 16K0606-03 11/14/2016 Soil		SA-10-1 (8-12 ftbg) 16K0606-04 11/14/2016 Soil	
		Compound	Result	Q	Result	Q	Result	Q	Result
		Methoxychlor	~	0.0089	U	0.0094	U	0.0091	U
		Toxaphene	~	0.090	U	0.096	U	0.092	U
<b>Metals, Target Analyte</b>	mg/Kg	mg/Kg			mg/Kg		mg/Kg		mg/Kg
<b>Dilution Factor</b>		1			1		1		1
Aluminum	~	6,020	B	9,890	B	9,770	B	6,700	B
Antimony	~	0.54	U	0.57	U	0.55	U	0.55	U
Arsenic	16	2.99		1.79		6.44		2.69	
Barium	400	31.90		42.20		92.80		83.30	
Beryllium	590	0.11	U	0.11	U	0.79		0.11	U
Cadmium	9.3	0.32	U	0.34	U	0.89		0.38	
Calcium	~	25,200		13,200		37,400		18,200	
Chromium	~	10.80		17		11.50		14.90	
Cobalt	~	5.01		6.44		4.85		8.16	
Copper	270	21.90		8.68		103		34.40	
Iron	~	9,240		11,500		8,810		13,600	
Lead	1000	23.70		4.52		103		51.80	
Magnesium	~	12,600		13,400		9,590		8,290	
Manganese	10000	162		315		332		233	
Nickel	310	11		14.80		13.40		14.50	
Potassium	~	887		882		1,720		1,160	
Selenium	1500	1.12		1.14	U	1.10	U	1.09	U
Silver	1500	0.54	U	0.57	U	0.55	U	0.55	U
Sodium	~	257		133		381		198	
Thallium	~	1.08	U	1.14	U	1.10	U	1.09	U
Vanadium	~	25.60		19.80		35.80		29.30	
Zinc	10000	26.30		36.60		66.60		78.90	
<b>Mercury by 7473</b>	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>		1		1		1		1	
Mercury	2.8	0.046		0.034	U	0.15		0.082	
<b>Total Solids</b>		%		%		%		%	
<b>Dilution Factor</b>		1		1		1		1	
% Solids	~	92.80		87.40		90.90		91.70	
<b>Herbicides, Target List</b>	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>		1		1		1		1	
2,4,5-T	~	0.022	U	0.023	U	0.022	U	0.022	U
2,4,5-TP (Silvex)	500	0.022	U	0.023	U	0.022	U	0.022	U
2,4-D	~	0.022	U	0.023	U	0.022	U	0.022	U
<b>Polychlorinated Biphenyls (PCB)</b>	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
<b>Dilution Factor</b>		1		1		1		1	
Aroclor 1016	~	0.018	U	0.019	U	0.018	U	0.018	U

Summary of Soil Quality Results - Source Areas 7 - 10

Sample ID York ID Sampling Date Client Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SA-7-1 (0-4 ftbg) 16K0606-01 11/14/2016 Soil		SA-8-1 (4-8 ftbg) 16K0606-02 11/14/2016 Soil		SA-9-1 (12-15 ftbg) 16K0606-03 11/14/2016 Soil		SA-10-1 (8-12 ftbg) 16K0606-04 11/14/2016 Soil	
Compound		Result	Q	Result	Q	Result	Q	Result	Q
Aroclor 1221	~	0.018	U	0.019	U	0.018	U	0.018	U
Aroclor 1232	~	0.018	U	0.019	U	0.018	U	0.018	U
Aroclor 1242	~	0.018	U	0.019	U	0.018	U	0.018	U
Aroclor 1248	~	0.018	U	0.019	U	0.062		0.018	U
Aroclor 1254	~	0.018	U	0.019	U	0.018	U	0.018	U
Aroclor 1260	~	0.018	U	0.019	U	0.018	U	0.021	
Total PCBs	1	0.018	U	0.019	U	0.062		0.021	

**NOTES:**

Any Regulatory Exceedences are color coded by Regulation

**Q is the Qualifier Column with definitions as follows:**

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

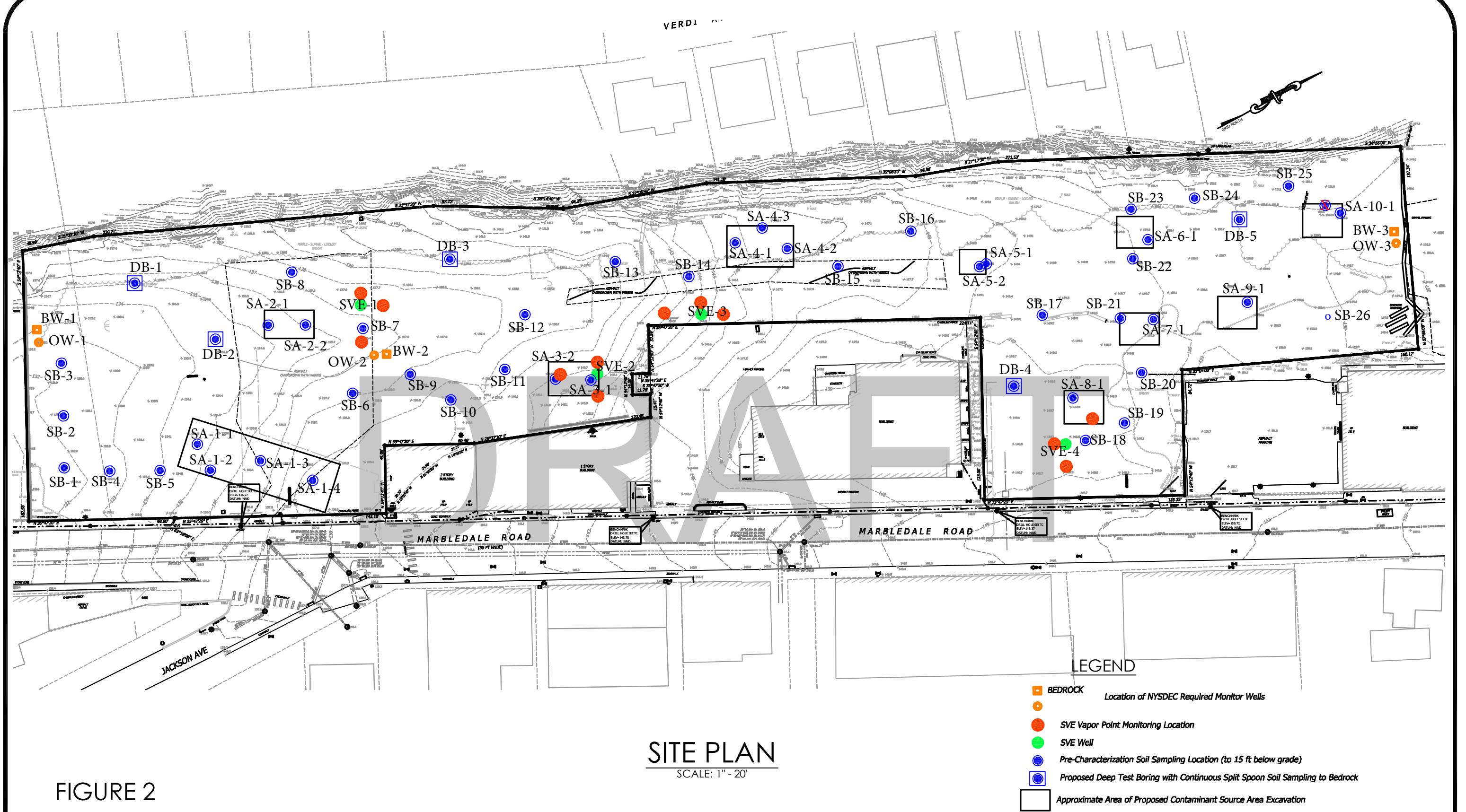
B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

~=this indicates that no regulatory limit has been established for this analyte

DRAFT



**Hydro Environmental  
SOLUTIONS, INC.**  
One Deans Bridge Road  
Somers, New York 10589

## **Summary of Laboratory Analytical Results Memorandum**

**To:** The Village of Tuckahoe  
Tuckahoe, New York

**From:** William A. Canavan, PG, LSRP  
HydroEnvironmental Solutions, Inc.

**Date:** December 14, 2016

**Re:** 109-125 Marbledale Road  
Tuckahoe, New York  
NYSDEC BCP Site No. C360143

HydroEnvironmental Solutions, Inc. (HES) has reviewed the laboratory analytical reports for the soil vapor samples. Soil vapor samples were collected as influent, midstream and effluent samples from SVE-1, SVE-2, SVE-3 and SVE-4 locations during pilot testing of the soil vapor extraction wells. The attached tables summarize the laboratory results for the soil vapor samples collected. The New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH) do not have soil vapor regulatory standards for comparison. The SVE sampling locations are shown on **Figure 2**, a draft generalized site plan showing additional sampling locations required by the NYSDEC.



*HydroEnvironmental*  
**SOLUTIONS, INC.**

One Deans Bridge Road      Somers, New York 10589  
(914) 276 - 2560      Fax: (914) 276 - 2664

**Summary of Soil Vapor Extraction Results - SVE-1**

Sample ID York ID Sampling Date Client Matrix	SVE-1 Influent		SVE-1 Mid Stream		SVE-1 Effluent	
	16K0863-01 11/18/2016 Soil Vapor		16K0863-02 11/18/2016 Soil Vapor		16K0863-03 11/18/2016 Soil Vapor	
	Compound	Result	Q	Result	Q	Result
Volatile Organics, EPA TO15 Full List		ug/m3		ug/m3		ug/m3
Dilution Factor	70.48			19.53		18.95
1,1,1,2-Tetrachloroethane	48	U	13	U	13	U
1,1,1-Trichloroethane	38	U	11	U	10	U
1,1,2,2-Tetrachloroethane	48	U	13	U	13	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	54	U	15	U	15	U
1,1,2-Trichloroethane	210	D	11	U	10	U
1,1-Dichloroethane	29	U	7.90	U	7.70	U
1,1-Dichloroethylene	28	U	7.70	U	7.50	U
1,2,4-Trichlorobenzene	52	U	14	U	14	U
1,2,4-Trimethylbenzene	35	U	9.60	U	9.30	U
1,2-Dibromoethane	54	U	15	U	15	U
1,2-Dichlorobenzene	42	U	12	U	11	U
1,2-Dichloroethane	29	U	7.90	U	7.70	U
1,2-Dichloropropane	33	U	9	U	8.80	U
1,2-Dichlorotetrafluoroethane	6,200	D	14	U	61	D
1,3,5-Trimethylbenzene	35	U	9.60	U	9.30	U
1,3-Butadiene	47	U	13	U	13	U
1,3-Dichlorobenzene	42	U	12	U	11	U
1,3-Dichloropropane	33	U	9	U	8.80	U
1,4-Dichlorobenzene	42	U	12	U	11	U
1,4-Dioxane	51	U	14	U	14	U
2-Butanone	71	D	12	D	13	D
2-Hexanone	250	D	16	U	16	U
3-Chloropropene	4,500	D	31	U	30	U
4-Methyl-2-pentanone	1,200	D	8	U	7.80	U
Acetone	270	D	17	D	16	D
Acrylonitrile	35	D	4.20	U	4.10	U
Benzene	260	D	6.20	U	6.10	U
Benzyl chloride	36	U	10	U	9.80	U
Bromodichloromethane	110	D	13	U	13	U
Bromoform	73	U	20	U	20	U
Bromomethane	27	U	7.60	U	7.40	U
Carbon disulfide	22	U	19	D	5.90	U
Carbon tetrachloride	11	U	3.10	U	3	U
Chlorobenzene	32	U	9	U	8.70	U
Chloroethane	19	U	5.20	U	5	U
Chloroform	34	U	9.50	U	9.30	U
Chloromethane	15	U	44	D	180	D
cis-1,2-Dichloroethylene	28	U	7.70	U	7.50	U
cis-1,3-Dichloropropylene	32	U	8.90	U	8.60	U
Cyclohexane	560	D	6.70	U	6.50	U
Dibromochloromethane	60	U	17	U	16	U
Dichlorodifluoromethane	4,100	D	150	D	43	D
Ethyl acetate	320	D	14	U	16	D
Ethyl Benzene	31	U	8.50	U	8.20	U
Hexachlorobutadiene	75	U	21	U	20	U
Isopropanol	40	D	9.60	U	9.30	U
Methyl Methacrylate	390	D	8	U	7.80	U
Methyl tert-butyl ether (MTBE)	25	U	7	U	6.80	U
Methylene chloride	49	U	14	U	13	U
n-Heptane	1,200	D	8	U	7.80	U
n-Hexane	1,900	D	14	D	6.70	U
o-Xylene	31	U	8.50	U	8.20	U
p- & m- Xylenes	61	U	17	U	16	U
p-Ethyltoluene	35	U	9.60	U	9.30	U
Propylene	66	D	8.40	D	4.20	D
Styrene	30	U	8.30	U	8.10	U
Tetrachloroethylene	33	D	3.30	U	3.20	U
Tetrahydrofuran	2,000	D	12	U	11	U
Toluene	27	U	7.40	U	7.10	U
trans-1,2-Dichloroethylene	28	U	7.70	U	7.50	U
trans-1,3-Dichloropropylene	32	U	8.90	U	8.60	U
Trichloroethylene	9.50	U	2.60	U	2.50	U
Trichlorofluoromethane (Freon 11)	40	U	11	U	11	U
Vinyl acetate	25	U	6.90	U	6.70	U
Vinyl bromide	31	U	8.50	U	8.30	U
Vinyl Chloride	18	D	5	U	4.80	U

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U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

~this indicates that no regulatory limit has been established for this analyte

109-125 Marbledale Road  
 Tuckahoe, New York  
 BCP Site No. C360143

Summary of Soil Vapor Extraction Results - SVE-2

Sample ID York ID Sampling Date Client Matrix	SVE-2 Influent		SVE-2 Midstream		SVE-2 Effluent		Ambient Air	
	16K0927-01 11/21/2016 Soil Vapor		16K0927-02 11/21/2016 Soil Vapor		16K0927-03 11/21/2016 Soil Vapor		16K0927-04 11/21/2016 Outdoor Ambient Air	
	Compound	Result	Q	Result	Q	Result	Q	Result
		ug/m3		ug/m3		ug/m3		ug/m3
Volatile Organics, EPA TO15 Full List								
Dilution Factor		736		17.5		18.39		1
1,1,1,2-Tetrachloroethane	51	U		12	U	13	U	0.69
1,1,1-Trichloroethane	40	U		9.50	U	10	U	0.55
1,1,2,2-Tetrachloroethane	51	U		12	U	13	U	0.69
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	56	U		13	U	14	U	0.77
1,1,2-Trichloroethane	40	U		9.50	U	10	U	0.55
1,1-Dichloroethane	30	U		7.10	U	7.40	U	0.40
1,1-Dichloroethylene	29	U		6.90	U	7.30	U	0.40
1,2,4-Trichlorobenzene	55	U		13	U	14	U	0.74
1,2,4-Trimethylbenzene	76	D		8.60	U	9	U	0.59
1,2-Dibromoethane	57	U		13	U	14	U	0.77
1,2-Dichlorobenzene	44	U		11	U	11	U	0.60
1,2-Dichloroethane	30	U		7.10	U	7.40	U	0.40
1,2-Dichloropropane	34	U		8.10	U	8.50	U	0.46
1,2-Dichlorotetrafluoroethane	64,000	D		12	U	13	U	0.70
1,3,5-Trimethylbenzene	36	U		8.60	U	9	U	0.49
1,3-Butadiene	49	U		12	U	12	U	0.66
1,3-Dichlorobenzene	44	U		11	U	11	U	0.60
1,3-Dichloropropane	34	U		8.10	U	8.50	U	0.46
1,4-Dichlorobenzene	44	U		11	U	11	U	0.60
1,4-Dioxane	53	U		13	U	13	U	0.72
2-Butanone	22	U		7.20	D	12	D	1.90
2-Hexanone	60	U		14	U	15	U	0.82
3-Chloropropene	120	U		27	U	29	U	1.60
4-Methyl-2-pentanone	30	U		7.20	U	7.50	U	0.41
Acetone	35	U		10	D	16	D	8
Acrylonitrile	16	U		3.80	U	4	U	0.22
Benzene	170	D		5.60	U	5.90	U	1.10
Benzyl chloride	38	U		9.10	U	9.50	U	0.52
Bromodichloromethane	49	U		12	U	12	U	0.67
Bromoform	76	U		18	U	19	U	1
Bromomethane	29	U		6.80	U	7.10	U	0.39
Carbon disulfide	23	U		5.40	U	5.70	U	0.31
Carbon tetrachloride	12	U		2.80	U	2.90	U	0.50
Chlorobenzene	34	U		8.10	U	8.50	U	0.46

109-125 Marbledale Road  
 Tuckahoe, New York  
 BCP Site No. C360143

Summary of Soil Vapor Extraction Results - SVE-2

Sample ID York ID Sampling Date Client Matrix	SVE-2 Influent		SVE-2 Midstream		SVE-2 Effluent		Ambient Air	
	16K0927-01 11/21/2016 Soil Vapor	16K0927-02 11/21/2016 Soil Vapor	16K0927-03 11/21/2016 Soil Vapor	16K0927-04 11/21/2016 Outdoor Ambient Air				
Compound	Result	Q	Result	Q	Result	Q	Result	Q
Chloroethane	19	U	4.60	U	4.90	U	0.26	U
Chloroform	36	U	8.50	U	9	U	0.49	U
Chloromethane	15	U	4.70	D	16	D	1.70	
cis-1,2-Dichloroethylene	29	U	6.90	U	7.30	U	0.40	U
cis-1,3-Dichloropropylene	33	U	7.90	U	8.30	U	0.45	U
Cyclohexane	550	D	6	U	6.30	U	0.34	U
Dibromochloromethane	63	U	15	U	16	U	0.85	U
Dichlorodifluoromethane	59,000	D	3,600	D	670	D	2.60	
Ethyl acetate	53	U	13	U	13	U	1.10	
Ethyl Benzene	32	U	7.60	U	8	U	0.56	
Hexachlorobutadiene	78	U	19	U	20	U	1.10	U
Isopropanol	36	U	8.60	U	9	U	1.50	
Methyl Methacrylate	30	U	7.20	U	7.50	U	0.41	U
Methyl tert-butyl ether (MTBE)	27	U	6.30	U	6.60	U	0.36	U
Methylene chloride	51	U	12	U	14	D	3.30	
n-Heptane	3,500	D	7.20	U	7.50	U	0.41	U
n-Hexane	2,700	D	6.20	U	6.50	U	4.10	
o-Xylene	32	U	7.60	U	8	U	0.74	
p- & m- Xylenes	74	D	15	U	16	U	2.20	
p-Ethyltoluene	36	U	8.60	U	9	U	0.69	
Propylene	230	D	3	U	3.20	U	1.20	
Styrene	31	U	7.50	U	7.80	U	0.43	U
Tetrachloroethylene	45	D	3	U	3.10	U	0.20	
Tetrahydrofuran	43	U	10	U	11	U	2.70	
Toluene	28	U	6.60	U	6.90	U	1.90	
trans-1,2-Dichloroethylene	29	U	6.90	U	7.30	U	0.40	U
trans-1,3-Dichloropropylene	33	U	7.90	U	8.30	U	0.45	
Trichloroethylene	9.90	U	2.40	U	2.50	U	0.13	U
Trichlorofluoromethane (Freon 11)	1,600	D	9.80	U	10	U	1.70	
Vinyl acetate	26	U	6.20	U	6.50	U	0.35	U
Vinyl bromide	32	U	7.70	U	8	U	0.44	U
Vinyl Chloride	55	D	4.50	U	4.70	U	0.26	U

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Summary of Soil Vapor Extraction Results - SVE-3

Sample ID York ID Sampling Date Client Matrix	SVE-3, Influent		SVE-3, Midstream		SVE-3, Effluent		
	16K0977-01 11/22/2016 Air		16K0977-02 11/22/2016 Air		16K0977-03 11/22/2016 Air		
	Compound	Result	Q	Result	Q	Result	Q
Volatile Organics, EPA TO15 Full List		ug/m3		ug/m3		ug/m3	
Dilution Factor	67.2			67.64		17.08	
1,1,1,2-Tetrachloroethane	12	U		12	U	12	U
1,1,1-Trichloroethane	9.20	U		9.20	U	9.30	U
1,1,2,2-Tetrachloroethane	12	U		12	U	12	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	13	D		13	U	13	U
1,1,2-Trichloroethane	9.20	U		9.20	U	9.30	U
1,1-Dichloroethane	6.80	U		6.80	U	6.90	U
1,1-Dichloroethylene	6.70	U		6.70	U	6.80	U
1,2,4-Trichlorobenzene	12	U		13	U	13	U
1,2,4-Trimethylbenzene	9.90	D		8.30	U	8.40	U
1,2-Dibromoethane	13	U		13	U	13	U
1,2-Dichlorobenzene	10	U		10	U	10	U
1,2-Dichloroethane	6.80	U		6.80	U	6.90	U
1,2-Dichloropropane	7.80	U		7.80	U	7.90	U
1,2-Dichlorotetrafluoroethane	14,000	D		12	U	12	U
1,3,5-Trimethylbenzene	8.30	U		8.30	U	8.40	U
1,3-Butadiene	11	U		11	U	11	U
1,3-Dichlorobenzene	10	U		10	U	10	U
1,3-Dichloropropane	7.80	U		7.80	U	7.90	U
1,4-Dichlorobenzene	10	U		10	U	10	U
1,4-Dioxane	12	U		12	U	12	U
2-Butanone	9.40	D		6	D	9.60	D
2-Hexanone	14	U		14	U	14	U
3-Chloropropene	26	U		26	U	27	U
4-Methyl-2-pentanone	6.90	U		6.90	U	7	U
Acetone	28	D		8	D	8.90	D
Acrylonitrile	3.60	U		3.70	U	3.70	U
Benzene	8.10	D		5.40	U	5.50	U
Benzyl chloride	8.70	U		8.80	U	8.80	U
Bromodichloromethane	11	U		11	U	11	U
Bromoform	17	U		17	U	18	U
Bromomethane	6.50	U		6.60	U	6.60	U
Carbon disulfide	5.20	U		5.30	U	5.30	U
Carbon tetrachloride	2.60	U		2.70	U	2.70	U
Chlorobenzene	7.70	U		7.80	U	7.90	U
Chloroethane	4.40	U		4.50	U	4.50	U
Chloroform	8.20	U		8.30	U	8.30	U
Chloromethane	3.50	U		3.50	U	3.50	U
cis-1,2-Dichloroethylene	6.70	U		6.70	U	6.80	U
cis-1,3-Dichloropropylene	7.60	U		7.70	U	7.80	U
Cyclohexane	21	D		5.80	U	5.90	U
Dibromochloromethane	14	U		14	U	15	U
Dichlorodifluoromethane	13,000	D		11,000	D	440	D
Ethyl acetate	12	U		12	U	12	U
Ethyl Benzene	7.30	U		7.30	U	7.40	U
Hexachlorobutadiene	18	U		18	U	18	U
Isopropanol	8.30	U		8.30	U	8.40	U
Methyl Methacrylate	6.90	U		6.90	U	7	U
Methyl tert-butyl ether (MTBE)	6.10	U		6.10	U	6.20	U
Methylene chloride	19	D		12	U	12	U
n-Heptane	25	D		6.90	U	7	U
n-Hexane	77	D		6	U	6	U
o-Xylene	7.30	U		7.30	U	7.40	U
p- & m- Xylenes	15	U		15	U	15	U
p-Ethyltoluene	8.30	U		8.30	U	8.40	U
Propylene	2.90	U		2.90	U	2.90	U
Styrene	7.20	U		7.20	U	7.30	U
Tetrachloroethylene	11	D		2.90	U	2.90	U
Tetrahydrofuran	9.90	U		10	U	10	U
Toluene	7.60	D		6.40	U	6.40	U
trans-1,2-Dichloroethylene	6.70	U		6.70	U	6.80	U
trans-1,3-Dichloropropylene	7.60	U		7.70	U	7.80	U
Trichloroethylene	2.70	D		2.30	U	2.30	U
Trichlorofluoromethane (Freon 11)	1,400	D		9.50	U	9.60	U
Vinyl acetate	5.90	U		6	U	6	U
Vinyl bromide	7.30	U		7.40	U	7.50	U
Vinyl Chloride	4.30	U		6.90	D	4.40	U

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## Summary of Soil Vapor Extraction Results - SVE-4

Sample ID York ID Sampling Date Client Matrix	SVE-4, Influent		SVE-4, Midstream		SVE-4, Effluent		Ambient Air		
	16K0977-04 11/22/2016 Air		16K0977-05 11/22/2016 Air		16K0977-06 11/22/2016 Air		16K0977-07 11/22/2016 Air		
	Compound	Result	Q	Result	Q	Result	Q	Result	Q
Volatile Organics, EPA TO15 Full List	ug/m3			ug/m3		ug/m3		ug/m3	
Dilution Factor	18.19			69.76		19.02		1	
1,1,1,2-Tetrachloroethane	12	U		12	U	13	U	0.69	U
1,1,1-Trichloroethane	9.90	U		9.50	U	10	U	0.55	U
1,1,2,2-Tetrachloroethane	12	U		12	U	13	U	0.69	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	14	U		13	U	15	U	0.77	U
1,1,2-Trichloroethane	9.90	U		9.50	U	10	U	0.55	U
1,1-Dichloroethane	7.40	U		7.10	U	7.70	U	0.40	U
1,1-Dichloroethylene	7.20	U		6.90	U	7.50	U	0.40	U
1,2,4-Trichlorobenzene	13	U		13	U	14	U	0.74	U
1,2,4-Trimethylbenzene	8.90	U		8.60	U	9.30	U	0.59	
1,2-Dibromoethane	14	U		13	U	15	U	0.77	U
1,2-Dichlorobenzene	11	U		10	U	11	U	0.60	U
1,2-Dichloroethane	7.40	U		7.10	U	7.70	U	0.40	U
1,2-Dichloropropane	8.40	U		8.10	U	8.80	U	0.46	U
1,2-Dichlorotetrafluoroethane	460	D		12	U	13	U	0.70	U
1,3,5-Trimethylbenzene	8.90	U		8.60	U	9.40	U	0.49	U
1,3-Butadiene	12	U		12	U	13	U	0.66	U
1,3-Dichlorobenzene	11	U		10	U	11	U	0.60	U
1,3-Dichloropropane	8.40	U		8.10	U	8.80	U	0.46	U
1,4-Dichlorobenzene	11	U		10	U	11	U	0.60	U
1,4-Dioxane	13	U		13	U	14	U	0.72	U
2-Butanone	9.70	D		5.10	D	11	D	3	
2-Hexanone	15	U		14	U	16	U	0.82	U
3-Chloropropene	28	U		27	U	30	U	1.60	U
4-Methyl-2-pentanone	7.50	U		7.10	U	7.80	U	0.41	U
Acetone	37	D		9.10	D	11	D	10	
Acrylonitrile	3.90	U		3.80	U	4.10	U	0.22	U
Benzene	5.80	U		5.60	U	6.10	U	0.58	
Benzyl chloride	9.40	U		9	U	9.80	U	0.52	U
Bromodichloromethane	12	U		12	U	13	U	0.67	U
Bromoform	19	U		18	U	20	U	1	U
Bromomethane	7.10	U		6.80	U	7.40	U	0.39	U
Carbon disulfide	5.70	U		5.40	U	5.90	U	0.69	
Carbon tetrachloride	2.90	U		2.70	U	3	U	0.50	
Chlorobenzene	8.40	U		8	U	8.80	U	0.46	U
Chloroethane	4.80	U		4.60	U	5	U	0.26	U

109-125 Marbledale Road  
Tuckahoe, New York  
BCP Site No. C360143

Summary of Soil Vapor Extraction Results - SVE-4

Sample ID York ID Sampling Date Client Matrix	SVE-4, Influent		SVE-4, Midstream		SVE-4, Effluent		Ambient Air	
	16K0977-04 11/22/2016 Air		16K0977-05 11/22/2016 Air		16K0977-06 11/22/2016 Air		16K0977-07 11/22/2016 Air	
	Compound	Result	Q	Result	Q	Result	Q	Result
Chloroform	52	D	8.50	U	9.30	U	0.49	U
Chloromethane	3.80	U	3.60	U	3.90	U	1.80	
cis-1,2-Dichloroethylene	7.20	U	6.90	U	7.50	U	0.40	U
cis-1,3-Dichloropropylene	8.30	U	7.90	U	8.60	U	0.45	U
Cyclohexane	6.30	U	6	U	6.50	U	0.34	U
Dibromochloromethane	15	U	15	U	16	U	0.85	U
Dichlorodifluoromethane	710	D	7,700	D	630	D	2.50	
Ethyl acetate	13	U	13	U	14	U	1.70	
Ethyl Benzene	7.90	U	7.60	U	8.30	U	0.61	
Hexachlorobutadiene	19	U	19	U	20	U	1.10	U
Isopropanol	8.90	U	8.60	U	9.40	U	1.50	
Methyl Methacrylate	7.40	U	7.10	U	7.80	U	0.41	U
Methyl tert-butyl ether (MTBE)	6.60	U	6.30	U	6.90	U	0.36	U
Methylene chloride	39	D	12	U	13	U	5.10	
n-Heptane	7.50	U	7.10	U	7.80	U	0.41	U
n-Hexane	37	D	6.10	U	6.70	U	6.80	
o-Xylene	7.90	U	7.60	U	8.30	U	0.78	
p- & m- Xylenes	16	U	15	U	17	U	2.30	
p-Ethyltoluene	8.90	U	8.60	U	9.40	U	0.69	
Propylene	3.10	U	3	U	3.30	U	0.17	U
Styrene	7.70	U	7.40	U	8.10	U	0.43	U
Tetrachloroethylene	690	D	4.70	D	6.50	D	1	
Tetrahydrofuran	13	D	10	U	11	U	4.80	
Toluene	6.90	U	6.60	U	7.20	U	1.50	
trans-1,2-Dichloroethylene	7.20	U	6.90	U	7.50	U	0.40	U
trans-1,3-Dichloropropylene	8.30	U	7.90	U	8.60	U	0.45	U
Trichloroethylene	210	D	2.30	U	2.60	U	1.40	
Trichlorofluoromethane (Freon 11)	39	D	9.80	U	11	U	2	
Vinyl acetate	6.40	U	6.10	U	6.70	U	0.35	U
Vinyl bromide	8	U	7.60	U	8.30	U	0.44	U
Vinyl Chloride	4.60	U	4.50	U	4.90	U	0.26	U

Q is the Qualifier Column with definitions as follows:

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

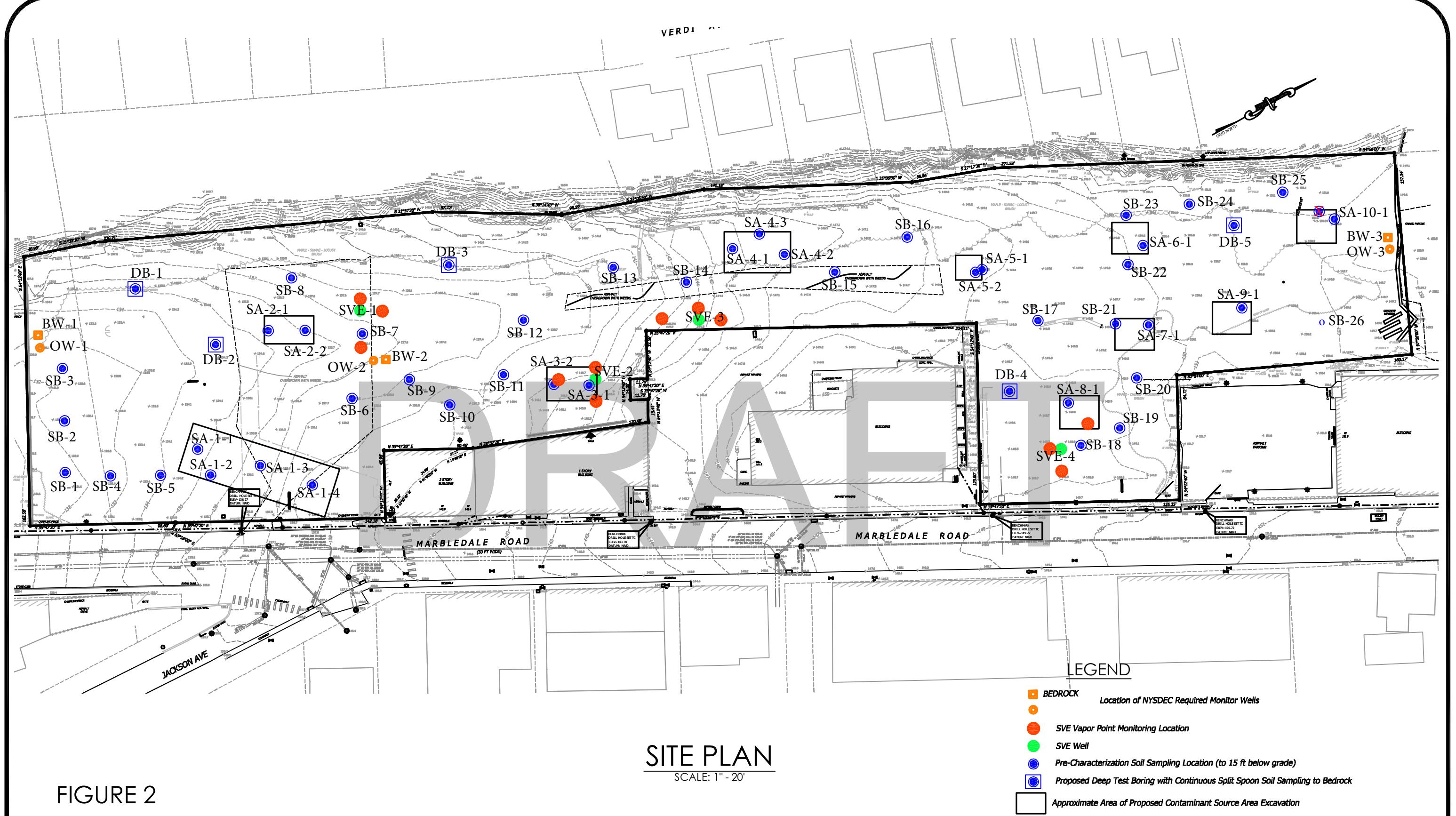
U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

~=this indicates that no regulatory limit has been established for this analyte



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