



# Ecosystems Strategies, Inc.

24 Davis Avenue, Poughkeepsie, NY 12603

phone 845.452.1658 | fax 845.485.7083 | [ecosystemsstrategies.com](http://ecosystemsstrategies.com)

August 12, 2015

Kenneth Kearney  
Parkview Development & Construction, LLC  
1777 US Route 6  
Carmel, New York 10512

via EMAIL: [kenkgroup@aol.com](mailto:kenkgroup@aol.com)

Re: Supplemental Subsurface Investigation for the property located at  
922 Main Street and 921 Diven Street,  
City of Peekskill, Westchester County, New York  
ESI File. KP14175.20

Dear Mr. Kearney:

Ecosystems Strategies, Inc. (ESI) is submitting the attachments corresponding to supplemental subsurface investigative activities performed at the above-referenced property on August 5, 2015. These data, and analytical information previously reported in the Phase II Environmental Site Assessment, will be included in an application for acceptance into the New York State Brownfields Cleanup Program.

Please review this document and contact our office at (845) 452-1658 with any questions.

Sincerely,

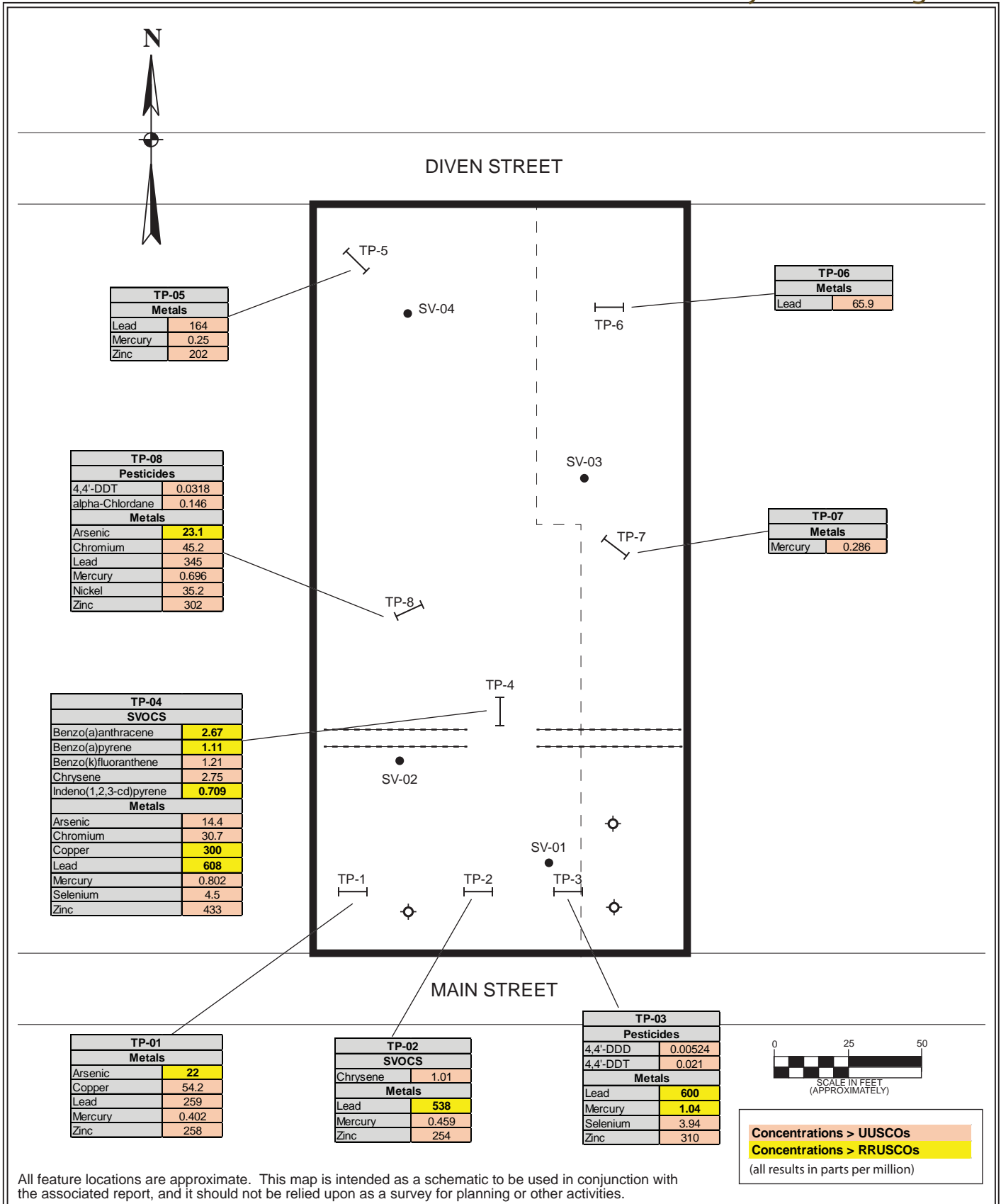
ECOSYSTEMS STRATEGIES, INC.

Paul H. Ciminello  
President

PHC:ALA

Attachments: Sampling Map  
Data Tables  
Laboratory Report

cc: Michelle Valenzo [thekearneygroup@aol.com](mailto:thekearneygroup@aol.com)



All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

**Concentrations > UUSCOs**  
**Concentrations > RRUSCOs**  
 (all results in parts per million)

<p><b>Sampling Map</b></p> <p>922 Main Street and 921 Diven Street                  City of Peekskill                  Westchester County, New York</p>	<p>Legend:</p> <ul style="list-style-type: none"> <li><span style="border-bottom: 2px solid black; width: 20px; display: inline-block;"></span> subject property border</li> <li><span style="border-bottom: 1px dashed black; width: 20px; display: inline-block;"></span> lot line</li> <li><span style="border-bottom: 1px dashed black; width: 20px; display: inline-block;"></span> approximate location of concrete &amp; rebar</li> <li><span style="border: 1px solid black; border-radius: 50%; width: 10px; height: 10px; display: inline-block; margin-right: 5px;"></span> approximate location of Geothermal wells</li> <li><span style="border-top: 1px solid black; width: 10px; display: inline-block; margin-right: 5px;"></span> test pit location</li> <li><span style="display: inline-block; width: 0; height: 0; border-left: 5px solid transparent; border-right: 5px solid transparent; border-bottom: 8px solid black; margin-right: 5px;"></span> soil vapor location</li> </ul>	<p>ESI File: KP14175.20</p>
	<p>August 2015</p>	<p>Scale as shown</p>
	<p>Attachment</p>	

**Table 1: VOCs in Soils**

All data in mg/Kg (parts per million, ppm)		Sample ID		TP-03		TP-04		TP-07	
U= Not Detected at or above indicated value		Sample Date		(2015-06-22)		(2015-06-22)		(2015-06-22)	
Data above SCOs shown in <b>Bold</b>		Dilution Factor		1		1		1	
VOCs, 8260	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier	
1,1,1,2-Tetrachloroethane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
1,1,1-Trichloroethane	0.68	100	0.0029	U	0.0029	U	0.0025	U	
1,1,2,2-Tetrachloroethane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
1,1,2-Trichloroethane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
1,1-Dichloroethane	0.27	26	0.0029	U	0.0029	U	0.0025	U	
1,1-Dichloroethylene (1,1-DCE)	0.33	100	0.0029	U	0.0029	U	0.0025	U	
1,2,3-Trichlorobenzene	NA	NA	0.0029	U	0.0029	U	0.0025	U	
1,2,3-Trichloropropane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
1,2,4-Trichlorobenzene	NA	NA	0.0029	U	0.0029	U	0.0025	U	
1,2,4-Trimethylbenzene	3.6	52	0.0029	U	0.0029	U	0.0025	U	
1,2-Dibromo-3-chloropropane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
1,2-Dibromoethane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
1,2-Dichlorobenzene	1.1	100	0.0029	U	0.0029	U	0.0025	U	
1,2-Dichloroethane	0.2	31	0.0029	U	0.0029	U	0.0025	U	
1,2-Dichloropropane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
1,3,5-Trimethylbenzene	8.4	52	0.0029	U	0.0029	U	0.0025	U	
1,3-Dichlorobenzene	2.4	49	0.0029	U	0.0029	U	0.0025	U	
1,4-Dichlorobenzene	1.8	13	0.0029	U	0.0029	U	0.0025	U	
1,4-Dioxane	0.1	13	0.059	U	0.057	U	0.05	U	
2-Butanone (MEK)	0.12	100	0.0029	U	0.0029	U	0.0025	U	
2-Hexanone	NA	NA	0.0029	U	0.0029	U	0.0025	U	
4-Methyl-2-pentanone	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Acetone	0.05	100	0.0059	U	0.0057	U	0.005	U	
Acrolein	NA	NA	0.0059	U	0.0057	U	0.005	U	
Acrylonitrile	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Benzene	0.06	48	0.0029	U	0.0029	U	0.0025	U	
Bromochloromethane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Bromodichloromethane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Bromoform	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Bromomethane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Carbon disulfide	NA	100	0.0029	U	0.0029	U	0.0025	U	
Carbon tetrachloride	0.76	24	0.0029	U	0.0029	U	0.0025	U	
Chlorobenzene	1.1	100	0.0029	U	0.0029	U	0.0025	U	
Chloroethane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Chloroform	0.37	49	0.0029	U	0.0029	U	0.0025	U	
Chloromethane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
cis-1,2-Dichloroethylene (cis-DCE)	0.25	100	0.0029	U	0.0029	U	0.0025	U	
cis-1,3-Dichloropropylene	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Cyclohexane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Dibromochloromethane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Dibromomethane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Dichlorodifluoromethane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Ethyl Benzene	1	41	0.0029	U	0.0029	U	0.0025	U	
Hexachlorobutadiene	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Isopropylbenzene	2.3	100	0.0029	U	0.0029	U	0.0025	U	
Methyl acetate	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Methyl tert-butyl ether (MTBE)	0.93	100	0.0029	U	0.0029	U	0.0025	U	
Methylcyclohexane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Methylene chloride	0.05	500	0.0059	U	0.0057	U	0.005	U	
n-Butylbenzene	12	100	0.0029	U	0.0029	U	0.0025	U	
n-Propylbenzene	3.9	100	0.0029	U	0.0029	U	0.0025	U	
o-Xylene	0.26	100	0.0029	U	0.0029	U	0.0025	U	
p- & m- Xylenes	0.26	100	0.0059	U	0.0057	U	0.005	U	
p-Isopropyltoluene	10	NA	0.0029	U	0.0029	U	0.0025	U	
sec-Butylbenzene	11	100	0.0029	U	0.0029	U	0.0025	U	
Styrene	NA	NA	0.0029	U	0.0029	U	0.0025	U	
tert-Butyl alcohol (TBA)	NA	NA	0.0029	U	0.0029	U	0.0025	U	
tert-Butylbenzene	5.9	100	0.0029	U	0.0029	U	0.0025	U	
Tetrachloroethylene (PCE)	1.3	19	0.0029	U	0.0029	U	0.0025	U	
Toluene	0.7	100	0.0029	U	0.0029	U	0.0025	U	
trans-1,2-Dichloroethylene (trans-DCE)	0.19	100	0.0029	U	0.0029	U	0.0025	U	
trans-1,3-Dichloropropylene	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Trichloroethylene (TCE)	0.47	21	0.0029	U	0.0029	U	0.0025	U	
Trichlorofluoromethane	NA	NA	0.0029	U	0.0029	U	0.0025	U	
Vinyl chloride (VC)	NA	0.9	0.0029	U	0.0029	U	0.0025	U	
Xylenes, Total	0.26	100	0.0088	U	0.0086	U	0.0076	U	

Detected Concentrations  
**Concentrations > UUSCOs**  
**Concentrations > RRUSCOs**

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available  
 Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

**Table 2: SVOCs (PAHs) in Soils**

All data in mg/Kg (parts per million, ppm) U= Not Detected at or above indicated value Data above SCOs shown in Bold		Sample ID		TP-01		TP-02		TP-04	
		Sample Date		(2015-06-22)		(2015-06-22)		(2015-06-22)	
		Dilution Factor		5		5		10	
SVOCs, 8270	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier	
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	
2-Methylnaphthalene	NA	NA	0.179	U	0.185	U	0.365	U	
Acenaphthene	20	100	0.179	U	0.185	U	0.365	U	
Acenaphthylene	100	100	0.179	U	0.248	JD	0.365	U	
Anthracene	100	100	0.179	U	0.185	U	0.93	D	
Benzo(a)anthracene	1	1	0.632	D	0.772	D	2.67	D	
Benzo(a)pyrene	1	1	0.412	D	0.486	D	1.11	D	
Benzo(b)fluoranthene	1	1	0.461	D	0.731	D	0.948	D	
Benzo(g,h,i)perylene	100	100	0.226	JD	0.253	JD	0.605	JD	
Benzo(k)fluoranthene	0.8	3.9	0.475	D	0.51	D	1.21	D	
Chrysene	1	3.9	0.704	D	1.01	D	2.75	D	
Dibenzo(a,h)anthracene	0.33	0.33	0.179	U	0.185	U	0.365	U	
Fluoranthene	100	100	1.37	D	2.37	D	6.48	D	
Fluorene	30	100	0.179	U	0.185	U	0.365	U	
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.237	JD	0.265	JD	0.709	JD	
Naphthalene	12	100	0.179	U	0.185	U	0.365	U	
Phenanthrene	100	100	0.924	D	1.64	D	4.49	D	
Pyrene	100	100	1.11	D	1.8	D	4.63	D	

Detected Concentrations
Concentrations > UUSCOs
Concentrations > RRUSCOs

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available  
 Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

**Table 2: SVOCs (PAHs) in Soils**

All data in mg/Kg (parts per million, ppm) U= Not Detected at or above indicated value Data above SCOs shown in Bold			Sample ID		TP-05		TP-15		TP-16	
			Sample Date		(2015-06-22)		(2015-08-05)		(2015-08-05)	
			Dilution Factor		2		5		1	
SVOCs, 8270	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier		
2-Chloronaphthalene	NA	NA	NA	NA	0.037	U	0.0074	U		
2-Methylnaphthalene	NA	NA	0.0683	U	0.062		0.0074			
Acenaphthene	20	100	0.0683	U	0.034	J	0.011			
Acenaphthylene	100	100	0.0683	U	0.11		0.049			
Anthracene	100	100	0.0683	U	0.15		0.069			
Benzo(a)anthracene	1	1	0.34	D	0.38		0.22			
Benzo(a)pyrene	1	1	0.142	D	0.33		0.22			
Benzo(b)fluoranthene	1	1	0.199	D	0.42		0.28			
Benzo(g,h,i)perylene	100	100	0.0683	U	0.22		0.14			
Benzo(k)fluoranthene	0.8	3.9	0.161	D	0.17		0.1			
Chrysene	1	3.9	0.326	D	0.41		0.21			
Dibenzo(a,h)anthracene	0.33	0.33	0.0683	U	0.065		0.043			
Fluoranthene	100	100	0.667	D	0.89		0.34			
Fluorene	30	100	0.0683	U	0.076		0.015			
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.0683	U	0.18		0.16			
Naphthalene	12	100	0.0683	U	0.16		0.013			
Phenanthrene	100	100	0.339	D	0.79		0.17			
Pyrene	100	100	0.568	D	0.73		0.3			

Detected Concentrations
Concentrations > UUSCOs
Concentrations > RRUSCOs

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available  
 Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

**Table 3: Pesticides and PCBs in Soils**

All data in mg/Kg (parts per million, ppm) U= Not Detected at or above indicated value Data above SCOs shown in <b>Bold</b>			Sample ID		TP-03		TP-06		TP-08		TP-10		TP-12	
			Sample Date		(2015-06-22)		(2015-06-22)		(2015-06-22)		(2015-08-05)		(2015-08-05)	
			Dilution Factor		5		5		5		1		1	
<b>Pesticides, 8081</b>	<b>UUSCO</b>	<b>RRUSCO</b>	<i>Result</i>	<i>Qualifier</i>	<i>Result</i>	<i>Qualifier</i>	<i>Result</i>	<i>Qualifier</i>	<i>Result</i>	<i>Qualifier</i>	<i>Result</i>	<i>Qualifier</i>	<i>Result</i>	<i>Qualifier</i>
4,4'-DDD	0.0033	13	0.00524	D	0.00268	U	0.00287	U	0.00175	U	0.00188	U		
4,4'-DDE	0.0033	8.9	0.00286	U	0.00268	U	0.00287	U	0.00342		0.00914			
4,4'-DDT	0.0033	7.9	0.021	D	0.00268	U	0.0318	D	0.0254		0.0202	P		
Aldrin	0.005	0.097	0.00286	U	0.00268	U	0.00287	U	0.00175	U	0.00188	U		
alpha-BHC	0.02	0.48	0.00286	U	0.00268	U	0.00287	U	0.00072	U	0.00078	U		
alpha-Chlordane	0.094	4.2	0.0141	D	0.00268	U	0.146	D	0.00219	U	0.00235	U		
beta-BHC	0.036	0.36	0.00286	U	0.00268	U	0.00287	U	0.00175	U	0.00188	U		
Chlordane (total)	NA	NA	0.131	D	0.107	U	1.31	D	0.0142	U	0.0153	U		
delta-BHC	0.04	100	0.00286	U	0.00268	U	0.00287	U	0.00175	U	0.00188	U		
Dieldrin	0.005	0.2	0.00286	U	0.00268	U	0.00287	U	0.00109	U	0.00118	U		
Endosulfan I	2.4	24	0.00286	U	0.00268	U	0.00287	U	0.00175	U	0.00188	U		
Endosulfan II	2.4	24	0.00286	U	0.00268	U	0.00287	U	0.00175	U	0.00188	U		
Endosulfan sulfate	2.4	24	0.00286	U	0.00268	U	0.00287	U	0.00072	U	0.00078	U		
Endrin	0.014	11	0.00286	U	0.00268	U	0.00287	U	0.00154		0.00358	PI		
Endrin aldehyde	NA	NA	0.00286	U	0.00268	U	0.00287	U	0.00219	U	0.00235	U		
Endrin ketone	NA	NA	0.00286	U	0.00268	U	0.00287	U	0.00175	U	0.00188	U		
gamma-BHC (Lindane)	0.1	1.3	0.00286	U	0.00268	U	0.00287	U	0.00072	U	0.00078	U		
gamma-Chlordane	NA	0.54	0.0175	D	0.00268	U	0.159	D	0.00219	U	0.00235	U		
Heptachlor	0.042	2.1	0.00286	U	0.00268	U	0.00287	U	0.00087	U	0.00094	U		
Heptachlor Epoxide	NA	0.077	0.00286	U	0.00268	U	0.00287	U	0.00328	U	0.00353	U		
Methoxychlor	NA	100	0.0143	U	0.0134	U	0.0143	U	0.00328	U	0.00353	U		
Toxaphene	NA	NA	0.145	U	0.136	U	0.145	U	0.0328	U	0.0353	U		

			Sample ID		TP-03		TP-06		TP-08	
			Sample Date		(2015-06-22)		(2015-06-22)		(2015-06-22)	
			Dilution Factor		1		1		1	
<b>PCBs, 8082</b>	<b>UUSCO</b>	<b>RRUSCO</b>	<i>Result</i>	<i>Qualifier</i>	<i>Result</i>	<i>Qualifier</i>	<i>Result</i>	<i>Qualifier</i>	<i>Result</i>	<i>Qualifier</i>
Aroclor 1016	0.1	1.00	0.0289	U	0.027	U	0.029	U		
Aroclor 1221	0.1	1.00	0.0289	U	0.027	U	0.029	U		
Aroclor 1232	0.1	1.00	0.0289	U	0.027	U	0.029	U		
Aroclor 1242	0.1	1.00	0.0289	U	0.027	U	0.029	U		
Aroclor 1248	0.1	1.00	0.0289	U	0.027	U	0.029	U		
Aroclor 1254	0.1	1.00	0.0289	U	0.027	U	0.029	U		
Aroclor 1260	0.1	1.00	0.0289	U	0.027	U	0.029	U		
Aroclor, Total	0.1	1.00	0.0289	U	0.027	U	0.029	U		

Detected Concentrations  
**Concentrations > UUSCOs**  
**Concentrations > RRUSCOs**

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available  
 Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

**Table 3: Pesticides and PCBs in Soils**

All data in mg/Kg (parts per million, ppm) U= Not Detected at or above indicated value Data above SCOs shown in <b>Bold</b>			Sample ID		TP-14		TP-15		TP-16	
			Sample Date		(2015-08-05)		(2015-08-05)		(2015-08-05)	
			Dilution Factor		1		1		1	
<b>Pesticides, 8081</b>	<b>UUSCO</b>	<b>RRUSCO</b>	<i>Result</i>	<i>Qualifier</i>	<i>Result</i>	<i>Qualifier</i>	<i>Result</i>	<i>Qualifier</i>		
4,4'-DDD	0.0033	13	0.00173	U	0.00173	U	0.00176	U		
4,4'-DDE	0.0033	8.9	0.00303	P	0.00173	U	0.00176	U		
4,4'-DDT	0.0033	7.9	0.0256		0.00481		0.00837	P		
Aldrin	0.005	0.097	0.00173	U	0.00173	U	0.00176	U		
alpha-BHC	0.02	0.48	0.00072	U	0.00072	U	0.00073	U		
alpha-Chlordane	0.094	4.2	0.0163		0.0471	PI	0.0861	PI		
beta-BHC	0.036	0.36	0.00173	U	0.00173	U	0.00118	J		
Chlordane (total)	NA	NA	0.0461		0.33		0.561			
delta-BHC	0.04	100	0.00173	U	0.00173	U	0.00176	U		
Dieldrin	0.005	0.2	0.00108	U	0.00108	U	0.0011	U		
Endosulfan I	2.4	24	0.00173	U	0.00173	U	0.00176	U		
Endosulfan II	2.4	24	0.00173	U	0.00173	U	0.00176	U		
Endosulfan sulfate	2.4	24	0.00072	U	0.00072	U	0.00073	U		
Endrin	0.014	11	0.00634	P	0.00072	U	0.00073	U		
Endrin aldehyde	NA	NA	0.00216	U	0.00216	U	0.00221	U		
Endrin ketone	NA	NA	0.00173	U	0.00173	U	0.00176	U		
gamma-BHC (Lindane)	0.1	1.3	0.00072	U	0.00072	U	0.00073	U		
gamma-Chlordane	NA	0.54	0.00664		0.0549		0.103			
Heptachlor	0.042	2.1	0.00066	J	0.00365		0.0108			
Heptachlor Epoxide	NA	0.077	0.00187	J	0.00368	PI	0.00342	PI		
Methoxychlor	NA	100	0.00324	U	0.00324	U	0.00331	U		
Toxaphene	NA	NA	0.0324	U	0.0324	U	0.0331	U		

Sample ID		
Sample Date		
Dilution Factor		
<b>PCBs, 8082</b>	<b>UUSCO</b>	<b>RRUSCO</b>
Aroclor 1016	0.1	1.00
Aroclor 1221	0.1	1.00
Aroclor 1232	0.1	1.00
Aroclor 1242	0.1	1.00
Aroclor 1248	0.1	1.00
Aroclor 1254	0.1	1.00
Aroclor 1260	0.1	1.00
Aroclor, Total	0.1	1.00

Detected Concentrations  
**Concentrations > UUSCOs**  
**Concentrations > RRUSCOs**

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available  
 Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

**Table 4: TAL Metals in Soils**

All data in mg/Kg (parts per million, ppm) U= Not Detected at or above indicated value Data above SCOs shown in <b>Bold</b>		Sample ID		TP-01		TP-02		TP-03		TP-04	
		Sample Date		(2015-06-22)		(2015-06-22)		(2015-06-22)		(2015-06-22)	
		Dilution Factor		1		1		1		1	
Metals, 6010 and 7473	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	
Aluminum	NA	NA	15,900		20,300		14,700		13,800		
Antimony	NA	NA	0.572	U	0.589	U	0.577	U	0.581	U	
Arsenic	13	16	<b>22</b>		7.93		9.05		14.4		
Barium	350	400	233		274		316		346		
Beryllium	7.2	72	0.114	U	0.118	U	0.115	U	0.116	U	
Cadmium	2.5	4.3	0.861		0.789		0.833		1.22		
Calcium	NA	NA	11,100		5,260		8,510		15,300		
Chromium	30	180	26.3		29.9		26.8		30.7		
Cobalt	NA	NA	13.8		12.6		11.5		12.3		
Copper	50	270	54.2		37.5		42.3		<b>300</b>		
Iron	NA	NA	29900		26400		24800		28400		
Lead	63	400	259		<b>538</b>		<b>600</b>		<b>608</b>		
Magnesium	NA	NA	10,600		7,090		7,940		8,920		
Manganese	1,600	2,000	419		821		444		448		
Mercury	0.18	0.81	0.402		0.479		<b>1.04</b>		0.802		
Nickel	30	310	16.6		18.5		17.1		18.4		
Potassium	NA	NA	3,540		2,200		2,140		2,130		
Selenium	3.90	180	3	B	2.8	B	3.94	B	4.5	B	
Silver	2	180	0.572	U	0.589	U	0.577	U	0.581	U	
Sodium	NA	NA	185		128		121		162		
Thallium	NA	NA	1.14	U	1.18	U	1.15	U	1.16	U	
Vanadium	NA	NA	48.8		40.4		36.6		38.7		
Zinc	109	2,200	258		254		310		433		

Detected Concentrations  
**Concentrations > UUSCOs**  
**Concentrations > RRUSCOs**

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available  
 Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted



**Table 4: TAL Metals in Soils**

All data in mg/Kg (parts per million, ppm) U= Not Detected at or above indicated value Data above SCOs shown in <b>Bold</b>		Sample ID		TP-05		TP-06		TP-07		TP-08	
		Sample Date		(2015-06-22)		(2015-06-22)		(2015-06-22)		(2015-06-22)	
		Dilution Factor		1		1		1		1	
Metals, 6010 and 7473	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	
Aluminum	NA	NA	10,700		9,110		8,470		14,300		
Antimony	NA	NA	0.545	U	0.541	U	0.54	U	0.58	U	
Arsenic	13	16	11.6		3.19		2.89		<b>23.1</b>		
Barium	350	400	156		69.5		50.2		226		
Beryllium	7.2	72	0.109	U	0.108	U	0.108	U	0.116	U	
Cadmium	2.5	4.3	0.704		0.325	U	0.324	U	0.837		
Calcium	NA	NA	3,900		1,480		1,760		11,500		
Chromium	30	180	25.4		10.9		11.6		45.2		
Cobalt	NA	NA	10.1		9.61		8.05		12.6		
Copper	50	270	40.7		28		20.7		49.6		
Iron	NA	NA	19500		18000		15200		25800		
Lead	63	400	164		65.9		60.2		345		
Magnesium	NA	NA	5,560		3,240		3,550		7,100		
Manganese	1,600	2,000	345		579		314		451		
Mercury	0.18	0.81	0.25		0.0325	U	0.286		0.696		
Nickel	30	310	21		12.2		12.7		35.2		
Potassium	NA	NA	1,450		980		941		1,950		
Selenium	3.90	180	2.16	B	2.12	B	1.14	B	3.48	B	
Silver	2	180	0.545	U	0.541	U	0.54	U	0.58	U	
Sodium	NA	NA	98.5		83.8		80		134		
Thallium	NA	NA	1.09	U	1.08	U	1.08	U	1.16	U	
Vanadium	NA	NA	27.2		21.2		17.5		35.2		
Zinc	109	2,200	202		58.1		53.9		302		

Detected Concentrations  
**Concentrations > UUSCOs**  
**Concentrations > RRUSCOs**

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available  
 Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

**Table 4: TAL Metals in Soils**

All data in mg/Kg (parts per million, ppm) U= Not Detected at or above indicated value Data above SCOs shown in <b>Bold</b>			Sample ID		TP-10		TP-12		TP-14		TP-15	
			Sample Date		(2015-08-05)		(2015-08-05)		(2015-08-05)		(2015-08-05)	
			Dilution Factor		2		2		2		2	
Metals, 6010 and 7473	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier		
Aluminum	NA	NA	10,000		9,700		21,000		18,000			
Antimony	NA	NA	3.3	J	1.4	J	-		-			
Arsenic	13	16	9.2		<b>17</b>		<b>35</b>		<b>19</b>			
Barium	350	400	180		<b>460</b>		300		240			
Beryllium	7.2	72	0.32	J	0.43	J	0.18	J	0.17	J		
Cadmium	2.5	4.3	0.86	U	0.14	J	0.86	U	0.89	U		
Calcium	NA	NA	2,300		12,000		9,000		4,900			
Chromium	30	180	18		21		31		25			
Cobalt	NA	NA	6.7		7		13		12			
Copper	50	270	77		48		51		62			
Iron	NA	NA	18000		16000		30000		29000			
Lead	63	400	380		<b>1,100</b>		260		60			
Magnesium	NA	NA	3,400		3,200		12,000		12,000			
Manganese	1,600	2,000	380		320		470		370			
Mercury	0.18	0.81	0.26		<b>1.4</b>		<b>2.5</b>		0.14			
Nickel	30	310	13		12		12		12			
Potassium	NA	NA	1,300		1,000		6,900		4,200			
Selenium	3.90	180	1.7	U	0.46	J	1.7	U	1.8	U		
Silver	2	180	0.22	J	0.51	J	0.33	J	0.89	U		
Sodium	NA	NA	62	J	130	J	110	J	150	J		
Thallium	NA	NA	1.7	U	1.9	U	1.7	U	1.8	U		
Vanadium	NA	NA	23		28		63		58			
Zinc	109	2,200	290		380		200		150			

Detected Concentrations  
 Concentrations > UUSCOs  
 Concentrations > RRUSCOs

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available  
 Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

**Table 4: TAL Metals in Soils**

All data in mg/Kg (parts per million, ppm) U= Not Detected at or above indicated value Data above SCOs shown in <b>Bold</b>			Sample ID	
			TP-16	
			Sample Date	
			(2015-08-05)	
			Dilution Factor	
			2	
Metals, 6010 and 7473	UUSCO	RRUSCO	Result	Qualifier
Aluminum	NA	NA	18,000	
Antimony	NA	NA	4.4	U
Arsenic	13	16	<b>19</b>	
Barium	350	400	160	
Beryllium	7.2	72	0.26	J
Cadmium	2.5	4.3	0.87	U
Calcium	NA	NA	4,800	
Chromium	30	180	21	
Cobalt	NA	NA	11	
Copper	50	270	45	
Iron	NA	NA	24000	
Lead	63	400	66	
Magnesium	NA	NA	8,200	
Manganese	1,600	2,000	430	
Mercury	0.18	0.81	0.24	
Nickel	30	310	12	
Potassium	NA	NA	3,500	
Selenium	3.90	180	1.7	U
Silver	2	180	0.87	U
Sodium	NA	NA	97	J
Thallium	NA	NA	1.7	U
Vanadium	NA	NA	44	
Zinc	109	2,200	120	

Detected Concentrations  
 Concentrations > UUSCOs  
 Concentrations > RRUSCOs

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available  
 Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 5: VOCs in Soil Vapor

All data in $\mu\text{g}/\text{m}^3$ U= Not Detected at or above indicated value Data above AGVs shown in <b>Bold</b>	Sample ID	SV-01		SV-02		SV-03	
	Sample Date	(2015-03-03)		(2015-03-03)		(2015-03-03)	
	Dilution Factor	1		1		1	
VOCs, TO-15	Guidance Value	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	NA	1.09	U	1.09	U	1.09	U
1,1,2,2-Tetrachloroethane	NA	1.37	U	1.37	U	1.37	U
1,1,2-Trichloroethane	NA	1.09	U	1.09	U	1.09	U
1,1-Dichloroethane	NA	0.809	U	0.809	U	0.809	U
1,1-Dichloroethene	NA	0.793	U	0.793	U	0.793	U
1,2,4-Trichlorobenzene	NA	1.48	U	1.48	U	1.48	U
1,2,4-Trimethylbenzene	NA	1.8		1.76		1.81	
1,2-Dibromoethane	NA	1.54	U	1.54	U	1.54	U
1,2-Dichlorobenzene	NA	1.2	U	1.2	U	1.2	U
1,2-Dichloroethane	NA	0.809	U	0.809	U	0.809	U
1,2-Dichloropropane	NA	0.924	U	0.924	U	0.924	U
1,3,5-Trimethylbenzene	NA	0.983	U	0.983	U	0.983	U
1,3-Butadiene	NA	9.2		0.442	U	19.3	
1,3-Dichlorobenzene	NA	1.2	U	1.2	U	1.2	U
1,4-Dichlorobenzene	NA	3.66		1.2	U	1.2	U
1,4-Dioxane	NA	0.721	U	0.721	U	0.721	U
2,2,4-Trimethylpentane	NA	0.934	U	0.934	U	0.934	U
2-Butanone	NA	4.28		1.47	U	9.2	
2-Hexanone	NA	0.82	U	0.82	U	0.82	U
3-Chloropropene	NA	0.626	U	0.626	U	0.626	U
4-Ethyltoluene	NA	0.983	U	0.983	U	0.983	U
4-Methyl-2-pentanone	NA	2.05	U	2.05	U	2.05	U
Acetone	NA	58.4		53.7		136	
Benzene	NA	4.79		0.639	U	6.2	
Benzyl chloride	NA	1.04	U	1.04	U	1.04	U
Bromodichloromethane	NA	1.34	U	1.34	U	1.34	U
Bromoform	NA	2.07	U	2.07	U	2.07	U
Bromomethane	NA	0.777	U	0.777	U	0.777	U
Carbon disulfide	NA	10.7		0.623	U	1.87	
Carbon tetrachloride	NA	1.26	U	1.26	U	1.26	U
Chlorobenzene	NA	0.921	U	0.921	U	0.921	U
Chloroethane	NA	0.528	U	0.528	U	0.528	U
Chloroform	NA	0.977	U	0.977	U	1.73	
Chloromethane	NA	0.413	U	0.413	U	0.413	U
cis-1,2-Dichloroethene	NA	0.793	U	0.793	U	0.793	U
cis-1,3-Dichloropropene	NA	0.908	U	0.908	U	0.908	U
Cyclohexane	NA	3.27		0.688	U	0.688	U
Dibromochloromethane	NA	1.7	U	1.7	U	1.7	U
Dichlorodifluoromethane	NA	1.06		1.49		1.45	
Ethanol	NA	5.65		4.71	U	4.71	U
Ethyl Acetate	NA	1.8	U	1.8	U	1.8	U
Ethylbenzene	NA	1.28		0.869	U	2.59	
Freon-113	NA	1.53	U	1.53	U	1.53	U
Freon-114	NA	1.4	U	1.4	U	1.4	U
Heptane	NA	47.1		1.06		2.65	
Hexachlorobutadiene	NA	2.13	U	2.13	U	2.13	U
Isopropanol	NA	1.23	U	1.23	U	1.23	U
Methyl tert butyl ether	NA	0.721	U	0.721	U	0.721	U
Methylene chloride	NA	1.74	U	1.74	U	1.74	U
n-Hexane	NA	106		1.11		5.53	
o-Xylene	NA	1.11		0.869	U	1.67	
p/m-Xylene	NA	2.61		1.74	U	4.86	
Styrene	NA	0.852	U	0.852	U	0.852	U
Tertiary butyl Alcohol	NA	1.52	U	1.52	U	1.52	U
Tetrachloroethene	NA	7.05		1.73		1.36	U
Tetrahydrofuran	NA	1.47	U	1.47	U	1.47	U
Toluene	NA	5.43		0.874		12.5	
trans-1,2-Dichloroethene	NA	0.793	U	0.793	U	0.793	U
trans-1,3-Dichloropropene	NA	0.908	U	0.908	U	0.908	U
Trichloroethene	NA	1.07	U	1.54		1.07	U
Trichlorofluoromethane	NA	1.8		1.37		1.13	
Vinyl bromide	NA	0.874	U	0.874	U	0.874	U
Vinyl chloride	NA	0.511	U	0.511	U	0.511	U

Detected concentrations  
 Relatively Elevated concentrations

Notes: There are no established guidance values for VOCs in subsurface vapors NA = not available  
 Result Qualifiers: J = approximate E = estimated B = detected in blank

**Table 5: VOCs in Soil Vapor**

All data in $\mu\text{g}/\text{m}^3$ U= Not Detected at or above indicated value Data above AGVs shown in <b>Bold</b>	Sample ID	SV-04	
	Sample Date	(2015-03-03)	
	Dilution Factor	1	
VOCs, TO-15	Guidance Value	Result	Qualifier
1,1,1-Trichloroethane	NA	1.09	U
1,1,2,2-Tetrachloroethane	NA	1.37	U
1,1,2-Trichloroethane	NA	1.09	U
1,1-Dichloroethane	NA	0.809	U
1,1-Dichloroethene	NA	0.793	U
1,2,4-Trichlorobenzene	NA	1.48	U
1,2,4-Trimethylbenzene	NA	1.91	
1,2-Dibromoethane	NA	1.54	U
1,2-Dichlorobenzene	NA	1.2	U
1,2-Dichloroethane	NA	0.809	U
1,2-Dichloropropane	NA	0.924	U
1,3,5-Trimethylbenzene	NA	0.983	U
1,3-Butadiene	NA	6.75	
1,3-Dichlorobenzene	NA	1.2	U
1,4-Dichlorobenzene	NA	1.2	U
1,4-Dioxane	NA	0.721	U
2,2,4-Trimethylpentane	NA	0.934	U
2-Butanone	NA	7.05	
2-Hexanone	NA	0.82	U
3-Chloropropene	NA	0.626	U
4-Ethyltoluene	NA	0.983	U
4-Methyl-2-pentanone	NA	2.05	U
Acetone	NA	182	
Benzene	NA	8.05	
Benzyl chloride	NA	1.04	U
Bromodichloromethane	NA	1.34	U
Bromoform	NA	2.07	U
Bromomethane	NA	0.777	U
Carbon disulfide	NA	1.08	
Carbon tetrachloride	NA	1.26	U
Chlorobenzene	NA	0.921	U
Chloroethane	NA	0.528	U
Chloroform	NA	0.977	U
Chloromethane	NA	0.413	U
cis-1,2-Dichloroethene	NA	0.793	U
cis-1,3-Dichloropropene	NA	0.908	U
Cyclohexane	NA	0.733	
Dibromochloromethane	NA	1.7	U
Dichlorodifluoromethane	NA	1.27	
Ethanol	NA	4.71	U
Ethyl Acetate	NA	1.8	U
Ethylbenzene	NA	1.13	
Freon-113	NA	1.53	U
Freon-114	NA	1.4	U
Heptane	NA	1.23	
Hexachlorobutadiene	NA	2.13	U
Isopropanol	NA	1.23	U
Methyl tert butyl ether	NA	33.9	
Methylene chloride	NA	1.74	U
n-Hexane	NA	2.85	
o-Xylene	NA	1.08	
p/m-Xylene	NA	2.39	
Styrene	NA	0.852	U
Tertiary butyl Alcohol	NA	1.52	U
Tetrachloroethene	NA	1.36	U
Tetrahydrofuran	NA	1.47	U
Toluene	NA	5.46	
trans-1,2-Dichloroethene	NA	0.793	U
trans-1,3-Dichloropropene	NA	0.908	U
Trichloroethene	NA	1.07	U
Trichlorofluoromethane	NA	1.41	
Vinyl bromide	NA	0.874	U
Vinyl chloride	NA	0.511	U

Detected concentrations  
**Relatively Elevated concentrations**

Notes: There are no established guidance values for VOCs in subsurface vapors NA = not available  
 Result Qualifiers: J = approximate E = estimated B = detected in blank



## ANALYTICAL REPORT

Lab Number:	L1519118
Client:	Ecosystems Strategies, Inc. 24 Davis Avenue Poughkeepsie, NY 12603
ATTN:	Christine Arnone
Phone:	(845) 452-1658
Project Name:	KP14175
Project Number:	KP14175
Report Date:	08/12/15

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Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** KP14175**Project Number:** KP14175**Lab Number:** L1519118**Report Date:** 08/12/15

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L1519118-01	TP-10	SOIL	PEEKSKILL	08/05/15 09:30	08/11/15
L1519118-02	TP-12	SOIL	PEEKSKILL	08/05/15 10:15	08/11/15
L1519118-03	TP-14	SOIL	PEEKSKILL	08/05/15 11:00	08/11/15
L1519118-04	TP-15	SOIL	PEEKSKILL	08/05/15 11:45	08/11/15
L1519118-05	TP-16	SOIL	PEEKSKILL	08/05/15 12:30	08/11/15

**Project Name:** KP14175  
**Project Number:** KP14175

**Lab Number:** L1519118  
**Report Date:** 08/12/15

**NJ DEP Data of Known Quality Protocols  
 Conformance/Non-Conformance  
 Summary Questionnaire**

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	YES
1a	Were the method specified handling, preservation, and holding time requirements met?	YES
1b	EPH Method: Was the EPH Method conducted without significant modifications (see Section 11.3 of respective DKQ methods)?	N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature ( $4 \pm 2^{\circ} \text{C}$ )?	YES
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	NO
5a	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	YES
5b	Were these reporting limits met?	YES
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	NO
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	YES

**Note:** For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1a or #1b is "No", the data package does not meet the requirements for "Data of Known Quality".





**Project Name:** KP14175  
**Project Number:** KP14175

**Lab Number:** L1519118  
**Report Date:** 08/12/15

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

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**Project Name:** KP14175  
**Project Number:** KP14175

**Lab Number:** L1519118  
**Report Date:** 08/12/15

### Case Narrative (continued)

#### Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### DKQP Related Narratives

##### PAHs by SIM

L1519118-04: The sample has elevated detection limits due to the dilution required by the sample matrix.

In reference to question 4:

WG811222-2/-3: One or more compounds failed to meet the DKQP recovery and/or RPD limits. Please refer to the QC section of the report for specific details.

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

##### Pesticides

In reference to question 4:

L1519118-02 through -05: One or more dual column RPDs are above the acceptance criteria. Please refer to the sample results and/or QC section of the report for specific details.

WG811207-2/-3: One or more compounds failed to meet the DKQP recovery and/or RPD limits. Please refer to the QC section of the report for specific details.

##### Metals

L1519118-01 through -05 have elevated detection limits for all elements, with the exception of mercury, due to the dilutions required by matrix interferences encountered during analysis.

In reference to question 4:

The WG811248-4 MS recoveries for aluminum (0%), iron (0%), lead (1860%), manganese (0%), and zinc (370%), performed on L1519118-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

**Project Name:** KP14175  
**Project Number:** KP14175

**Lab Number:** L1519118  
**Report Date:** 08/12/15

### Case Narrative (continued)

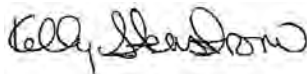
The WG811248-4 MS recoveries, performed on L1519118-01, are outside the acceptance criteria for antimony (180%), chromium (69%), magnesium (35%), and thallium (73%). A post digestion spike was performed and yielded an unacceptable recoveries for thallium (60%); all other compounds were within acceptance criteria. This has been attributed to sample matrix.

The WG811231-4 MS recovery, performed on L1519118-01, is outside the acceptance criteria for mercury (165%). A post digestion spike was performed and was within acceptance criteria.

The WG811248-3 Laboratory Duplicate RPDs, performed on L1519118-01, are outside the acceptance criteria for lead (23%) and zinc (27%). The elevated RPDs have been attributed to the non-homogeneous nature of the sample utilized for the laboratory duplicate.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 08/12/15

# ORGANICS

# SEMIVOLATILES

Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

## SAMPLE RESULTS

Lab ID: L1519118-04 D  
 Client ID: TP-15  
 Sample Location: PEEKSKILL  
 Matrix: Soil  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 08/12/15 12:06  
 Analyst: MW  
 Percent Solids: 90%

Date Collected: 08/05/15 11:45  
 Date Received: 08/11/15  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 08/12/15 01:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>PAHs by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	0.034	J	mg/kg	0.037	0.0078	5
Fluoranthene	0.89		mg/kg	0.037	0.0026	5
Naphthalene	0.16		mg/kg	0.037	0.0066	5
2-Methylnaphthalene	0.062		mg/kg	0.037	0.010	5
Benzo(a)anthracene	0.38		mg/kg	0.037	0.0035	5
Benzo(a)pyrene	0.33		mg/kg	0.037	0.0044	5
Benzo(b)fluoranthene	0.42		mg/kg	0.037	0.0035	5
Benzo(k)fluoranthene	0.17		mg/kg	0.037	0.0033	5
Chrysene	0.41		mg/kg	0.037	0.0028	5
Acenaphthylene	0.11		mg/kg	0.037	0.0046	5
Anthracene	0.15		mg/kg	0.037	0.0030	5
Benzo(ghi)perylene	0.22		mg/kg	0.037	0.0031	5
Fluorene	0.076		mg/kg	0.037	0.0044	5
Phenanthrene	0.79		mg/kg	0.037	0.0031	5
Dibenzo(a,h)anthracene	0.065		mg/kg	0.037	0.0037	5
Indeno(1,2,3-cd)pyrene	0.18		mg/kg	0.037	0.0044	5
Pyrene	0.73		mg/kg	0.037	0.0026	5
2-Chloronaphthalene	ND		mg/kg	0.037	0.0048	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	75		30-130
2-Fluorobiphenyl	75		30-130
4-Terphenyl-d14	72		30-130

Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

## SAMPLE RESULTS

Lab ID: L1519118-05  
 Client ID: TP-16  
 Sample Location: PEEKSKILL  
 Matrix: Soil  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 08/12/15 13:46  
 Analyst: MW  
 Percent Solids: 89%

Date Collected: 08/05/15 12:30  
 Date Received: 08/11/15  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 08/12/15 01:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>PAHs by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	0.011		mg/kg	0.0074	0.0016	1
Fluoranthene	0.34		mg/kg	0.0074	0.00052	1
Naphthalene	0.013		mg/kg	0.0074	0.0013	1
2-Methylnaphthalene	0.0074		mg/kg	0.0074	0.0021	1
Benzo(a)anthracene	0.22		mg/kg	0.0074	0.00070	1
Benzo(a)pyrene	0.22		mg/kg	0.0074	0.00089	1
Benzo(b)fluoranthene	0.28		mg/kg	0.0074	0.00070	1
Benzo(k)fluoranthene	0.10		mg/kg	0.0074	0.00067	1
Chrysene	0.21		mg/kg	0.0074	0.00056	1
Acenaphthylene	0.049		mg/kg	0.0074	0.00092	1
Anthracene	0.069		mg/kg	0.0074	0.00059	1
Benzo(ghi)perylene	0.14		mg/kg	0.0074	0.00063	1
Fluorene	0.015		mg/kg	0.0074	0.00089	1
Phenanthrene	0.17		mg/kg	0.0074	0.00063	1
Dibenzo(a,h)anthracene	0.043		mg/kg	0.0074	0.00074	1
Indeno(1,2,3-cd)pyrene	0.16		mg/kg	0.0074	0.00089	1
Pyrene	0.30		mg/kg	0.0074	0.00052	1
2-Chloronaphthalene	ND		mg/kg	0.0074	0.00096	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	60		30-130
2-Fluorobiphenyl	68		30-130
4-Terphenyl-d14	68		30-130

Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D-SIM  
Analytical Date: 08/12/15 10:51  
Analyst: MW

Extraction Method: EPA 3546  
Extraction Date: 08/12/15 01:14

Parameter	Result	Qualifier	Units	RL	MDL
PAHs by GC/MS-SIM - Westborough Lab for sample(s): 04-05 Batch: WG811222-1					
Acenaphthene	ND		mg/kg	0.0066	0.0014
Fluoranthene	ND		mg/kg	0.0066	0.00046
Naphthalene	ND		mg/kg	0.0066	0.0012
2-Methylnaphthalene	ND		mg/kg	0.0066	0.0019
Benzo(a)anthracene	ND		mg/kg	0.0066	0.00062
Benzo(a)pyrene	ND		mg/kg	0.0066	0.00079
Benzo(b)fluoranthene	ND		mg/kg	0.0066	0.00062
Benzo(k)fluoranthene	ND		mg/kg	0.0066	0.00059
Chrysene	ND		mg/kg	0.0066	0.00049
Acenaphthylene	ND		mg/kg	0.0066	0.00082
Anthracene	ND		mg/kg	0.0066	0.00052
Benzo(ghi)perylene	ND		mg/kg	0.0066	0.00056
Fluorene	ND		mg/kg	0.0066	0.00079
Phenanthrene	ND		mg/kg	0.0066	0.00056
Dibenzo(a,h)anthracene	ND		mg/kg	0.0066	0.00066
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.0066	0.00079
Pyrene	ND		mg/kg	0.0066	0.00046
2-Chloronaphthalene	ND		mg/kg	0.0066	0.00085

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	86		30-130
2-Fluorobiphenyl	82		30-130
4-Terphenyl-d14	90		30-130



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PAHs by GC/MS-SIM - Westborough Lab Associated sample(s): 04-05 Batch: WG811222-2 WG811222-3								
Acenaphthene	59	Q	55	Q	70-130	7		30
Fluoranthene	61	Q	56	Q	70-130	9		30
Naphthalene	58	Q	55	Q	70-130	5		30
2-Methylnaphthalene	61	Q	58	Q	70-130	5		30
Benzo(a)anthracene	58	Q	54	Q	70-130	7		30
Benzo(a)pyrene	58	Q	42	Q	70-130	32	Q	30
Benzo(b)fluoranthene	54	Q	50	Q	70-130	8		30
Benzo(k)fluoranthene	58	Q	53	Q	70-130	9		30
Chrysene	57	Q	53	Q	70-130	7		30
Acenaphthylene	64	Q	60	Q	70-130	6		30
Anthracene	63	Q	58	Q	70-130	8		30
Benzo(ghi)perylene	57	Q	53	Q	70-130	7		30
Fluorene	62	Q	57	Q	70-130	8		30
Phenanthrene	58	Q	54	Q	70-130	7		30
Dibenzo(a,h)anthracene	58	Q	54	Q	70-130	7		30
Indeno(1,2,3-cd)pyrene	54	Q	50	Q	70-130	8		30
Pyrene	61	Q	56	Q	70-130	9		30
2-Chloronaphthalene	61	Q	58	Q	70-130	5		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** KP14175  
**Project Number:** KP14175

**Lab Number:** L1519118  
**Report Date:** 08/12/15

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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PAHs by GC/MS-SIM - Westborough Lab Associated sample(s): 04-05 Batch: WG811222-2 WG811222-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>
Nitrobenzene-d5	65		61		30-130
2-Fluorobiphenyl	65		61		30-130
4-Terphenyl-d14	67		62		30-130

# PESTICIDES

Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

## SAMPLE RESULTS

Lab ID: L1519118-01  
 Client ID: TP-10  
 Sample Location: PEEKSKILL  
 Matrix: Soil  
 Analytical Method: 1,8081B  
 Analytical Date: 08/12/15 11:10  
 Analyst: AL  
 Percent Solids: 90%

Date Collected: 08/05/15 09:30  
 Date Received: 08/11/15  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 08/12/15 01:15  
 Cleanup Method: EPA 3620B  
 Cleanup Date: 08/12/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND		mg/kg	0.00175	0.00034	1	A
Lindane	ND		mg/kg	0.00072	0.00032	1	A
Alpha-BHC	ND		mg/kg	0.00072	0.00020	1	A
Beta-BHC	ND		mg/kg	0.00175	0.00066	1	A
Heptachlor	ND		mg/kg	0.00087	0.00039	1	A
Aldrin	ND		mg/kg	0.00175	0.00061	1	A
Heptachlor epoxide	ND		mg/kg	0.00328	0.00098	1	A
Endrin	0.00154		mg/kg	0.00072	0.00029	1	A
Endrin aldehyde	ND		mg/kg	0.00219	0.00076	1	A
Endrin ketone	ND		mg/kg	0.00175	0.00045	1	A
Dieldrin	ND		mg/kg	0.00109	0.00054	1	A
4,4'-DDE	0.00342		mg/kg	0.00175	0.00040	1	A
4,4'-DDD	ND		mg/kg	0.00175	0.00062	1	A
4,4'-DDT	0.0254		mg/kg	0.00328	0.00141	1	A
Endosulfan I	ND		mg/kg	0.00175	0.00041	1	A
Endosulfan II	ND		mg/kg	0.00175	0.00058	1	A
Endosulfan sulfate	ND		mg/kg	0.00072	0.00034	1	A
Methoxychlor	ND		mg/kg	0.00328	0.00102	1	A
Toxaphene	ND		mg/kg	0.0328	0.00918	1	A
Chlordane	ND		mg/kg	0.0142	0.00579	1	A
cis-Chlordane	ND		mg/kg	0.00219	0.00060	1	A
trans-Chlordane	ND		mg/kg	0.00219	0.00057	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	73		30-150	B
2,4,5,6-Tetrachloro-m-xylene	101		30-150	A
Decachlorobiphenyl	97		30-150	A

Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

## SAMPLE RESULTS

Lab ID: L1519118-02  
 Client ID: TP-12  
 Sample Location: PEEKSKILL  
 Matrix: Soil  
 Analytical Method: 1,8081B  
 Analytical Date: 08/12/15 11:36  
 Analyst: AL  
 Percent Solids: 83%

Date Collected: 08/05/15 10:15  
 Date Received: 08/11/15  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 08/12/15 01:15  
 Cleanup Method: EPA 3620B  
 Cleanup Date: 08/12/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND		mg/kg	0.00188	0.00036	1	A
Lindane	ND		mg/kg	0.00078	0.00035	1	A
Alpha-BHC	ND		mg/kg	0.00078	0.00022	1	A
Beta-BHC	ND		mg/kg	0.00188	0.00071	1	A
Heptachlor	ND		mg/kg	0.00094	0.00042	1	A
Aldrin	ND		mg/kg	0.00188	0.00066	1	A
Heptachlor epoxide	ND		mg/kg	0.00353	0.00106	1	A
Endrin	0.00358	PI	mg/kg	0.00078	0.00032	1	A
Endrin aldehyde	ND		mg/kg	0.00235	0.00082	1	A
Endrin ketone	ND		mg/kg	0.00188	0.00048	1	A
Dieldrin	ND		mg/kg	0.00118	0.00058	1	A
4,4'-DDE	0.00914		mg/kg	0.00188	0.00043	1	A
4,4'-DDD	ND		mg/kg	0.00188	0.00067	1	A
4,4'-DDT	0.0202	P	mg/kg	0.00353	0.00151	1	A
Endosulfan I	ND		mg/kg	0.00188	0.00044	1	A
Endosulfan II	ND		mg/kg	0.00188	0.00062	1	A
Endosulfan sulfate	ND		mg/kg	0.00078	0.00037	1	A
Methoxychlor	ND		mg/kg	0.00353	0.00110	1	A
Toxaphene	ND		mg/kg	0.0353	0.00988	1	A
Chlordane	ND		mg/kg	0.0153	0.00623	1	A
cis-Chlordane	ND		mg/kg	0.00235	0.00065	1	A
trans-Chlordane	ND		mg/kg	0.00235	0.00062	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	77		30-150	B
2,4,5,6-Tetrachloro-m-xylene	97		30-150	A
Decachlorobiphenyl	133		30-150	A

Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

## SAMPLE RESULTS

Lab ID: L1519118-03  
 Client ID: TP-14  
 Sample Location: PEEKSKILL  
 Matrix: Soil  
 Analytical Method: 1,8081B  
 Analytical Date: 08/12/15 11:49  
 Analyst: AL  
 Percent Solids: 91%

Date Collected: 08/05/15 11:00  
 Date Received: 08/11/15  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 08/12/15 01:15  
 Cleanup Method: EPA 3620B  
 Cleanup Date: 08/12/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Pesticides by GC - Westborough Lab							
Delta-BHC	ND		mg/kg	0.00173	0.00033	1	A
Lindane	ND		mg/kg	0.00072	0.00032	1	A
Alpha-BHC	ND		mg/kg	0.00072	0.00020	1	A
Beta-BHC	ND		mg/kg	0.00173	0.00065	1	A
Heptachlor	0.00066	J	mg/kg	0.00086	0.00038	1	A
Aldrin	ND		mg/kg	0.00173	0.00060	1	A
Heptachlor epoxide	0.00187	J	mg/kg	0.00324	0.00097	1	A
Endrin	0.00634	P	mg/kg	0.00072	0.00029	1	B
Endrin aldehyde	ND		mg/kg	0.00216	0.00075	1	A
Endrin ketone	ND		mg/kg	0.00173	0.00044	1	A
Dieldrin	ND		mg/kg	0.00108	0.00054	1	A
4,4'-DDE	0.00303	P	mg/kg	0.00173	0.00040	1	A
4,4'-DDD	ND		mg/kg	0.00173	0.00061	1	A
4,4'-DDT	0.0256		mg/kg	0.00324	0.00139	1	A
Endosulfan I	ND		mg/kg	0.00173	0.00040	1	A
Endosulfan II	ND		mg/kg	0.00173	0.00057	1	A
Endosulfan sulfate	ND		mg/kg	0.00072	0.00034	1	A
Methoxychlor	ND		mg/kg	0.00324	0.00101	1	A
Toxaphene	ND		mg/kg	0.0324	0.00907	1	A
Chlordane	0.0461		mg/kg	0.0140	0.00572	1	B
cis-Chlordane	0.0163		mg/kg	0.00216	0.00060	1	B
trans-Chlordane	0.00664		mg/kg	0.00216	0.00057	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	91		30-150	B
2,4,5,6-Tetrachloro-m-xylene	97		30-150	A
Decachlorobiphenyl	142		30-150	A

Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

## SAMPLE RESULTS

Lab ID: L1519118-04  
 Client ID: TP-15  
 Sample Location: PEEKSKILL  
 Matrix: Soil  
 Analytical Method: 1,8081B  
 Analytical Date: 08/12/15 12:02  
 Analyst: AL  
 Percent Solids: 90%

Date Collected: 08/05/15 11:45  
 Date Received: 08/11/15  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 08/12/15 01:15  
 Cleanup Method: EPA 3620B  
 Cleanup Date: 08/12/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND		mg/kg	0.00173	0.00033	1	A
Lindane	ND		mg/kg	0.00072	0.00032	1	A
Alpha-BHC	ND		mg/kg	0.00072	0.00020	1	A
Beta-BHC	ND		mg/kg	0.00173	0.00065	1	A
Heptachlor	0.00365		mg/kg	0.00086	0.00038	1	B
Aldrin	ND		mg/kg	0.00173	0.00060	1	A
Heptachlor epoxide	0.00368	PI	mg/kg	0.00324	0.00097	1	B
Endrin	ND		mg/kg	0.00072	0.00029	1	A
Endrin aldehyde	ND		mg/kg	0.00216	0.00075	1	A
Endrin ketone	ND		mg/kg	0.00173	0.00044	1	A
Dieldrin	ND		mg/kg	0.00108	0.00054	1	A
4,4'-DDE	ND		mg/kg	0.00173	0.00040	1	A
4,4'-DDD	ND		mg/kg	0.00173	0.00061	1	A
4,4'-DDT	0.00481		mg/kg	0.00324	0.00139	1	B
Endosulfan I	ND		mg/kg	0.00173	0.00040	1	A
Endosulfan II	ND		mg/kg	0.00173	0.00057	1	A
Endosulfan sulfate	ND		mg/kg	0.00072	0.00034	1	A
Methoxychlor	ND		mg/kg	0.00324	0.00101	1	A
Toxaphene	ND		mg/kg	0.0324	0.00908	1	A
Chlordane	0.330		mg/kg	0.0140	0.00573	1	A
cis-Chlordane	0.0471	PI	mg/kg	0.00216	0.00060	1	B
trans-Chlordane	0.0549		mg/kg	0.00216	0.00057	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	89		30-150	B
2,4,5,6-Tetrachloro-m-xylene	93		30-150	A
Decachlorobiphenyl	115		30-150	A

Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

## SAMPLE RESULTS

Lab ID: L1519118-05  
 Client ID: TP-16  
 Sample Location: PEEKSKILL  
 Matrix: Soil  
 Analytical Method: 1,8081B  
 Analytical Date: 08/12/15 12:16  
 Analyst: AL  
 Percent Solids: 89%

Date Collected: 08/05/15 12:30  
 Date Received: 08/11/15  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 08/12/15 01:15  
 Cleanup Method: EPA 3620B  
 Cleanup Date: 08/12/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND		mg/kg	0.00176	0.00034	1	A
Lindane	ND		mg/kg	0.00073	0.00032	1	A
Alpha-BHC	ND		mg/kg	0.00073	0.00020	1	A
Beta-BHC	0.00118	J	mg/kg	0.00176	0.00067	1	A
Heptachlor	0.0108		mg/kg	0.00088	0.00039	1	A
Aldrin	ND		mg/kg	0.00176	0.00062	1	A
Heptachlor epoxide	0.00342	PI	mg/kg	0.00331	0.00099	1	B
Endrin	ND		mg/kg	0.00073	0.00030	1	A
Endrin aldehyde	ND		mg/kg	0.00221	0.00077	1	A
Endrin ketone	ND		mg/kg	0.00176	0.00045	1	A
Dieldrin	ND		mg/kg	0.00110	0.00055	1	A
4,4'-DDE	ND		mg/kg	0.00176	0.00040	1	A
4,4'-DDD	ND		mg/kg	0.00176	0.00063	1	A
4,4'-DDT	0.00837	P	mg/kg	0.00331	0.00142	1	B
Endosulfan I	ND		mg/kg	0.00176	0.00041	1	A
Endosulfan II	ND		mg/kg	0.00176	0.00059	1	A
Endosulfan sulfate	ND		mg/kg	0.00073	0.00035	1	A
Methoxychlor	ND		mg/kg	0.00331	0.00103	1	A
Toxaphene	ND		mg/kg	0.0331	0.00927	1	A
Chlordane	0.561		mg/kg	0.0143	0.00585	1	B
cis-Chlordane	0.0861	PI	mg/kg	0.00221	0.00061	1	B
trans-Chlordane	0.103		mg/kg	0.00221	0.00058	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	90		30-150	B
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	102		30-150	A



Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8081B  
Analytical Date: 08/12/15 09:11  
Analyst: AL

Extraction Method: EPA 3546  
Extraction Date: 08/12/15 00:21  
Cleanup Method: EPA 3620B  
Cleanup Date: 08/12/15

Parameter	Result	Qualifier	Units	RL	MDL	Column
Pesticides by GC - Westborough Lab for sample(s): 01-05 Batch: WG811207-1						
Delta-BHC	ND		mg/kg	0.00152	0.00029	A
Lindane	ND		mg/kg	0.00063	0.00028	A
Alpha-BHC	ND		mg/kg	0.00063	0.00018	A
Beta-BHC	ND		mg/kg	0.00152	0.00057	A
Heptachlor	ND		mg/kg	0.00076	0.00034	A
Aldrin	ND		mg/kg	0.00152	0.00053	A
Heptachlor epoxide	ND		mg/kg	0.00285	0.00085	A
Endrin	ND		mg/kg	0.00063	0.00026	A
Endrin aldehyde	ND		mg/kg	0.00190	0.00066	A
Endrin ketone	ND		mg/kg	0.00152	0.00039	A
Dieldrin	ND		mg/kg	0.00095	0.00047	A
4,4'-DDE	ND		mg/kg	0.00152	0.00035	A
4,4'-DDD	ND		mg/kg	0.00152	0.00054	A
4,4'-DDT	ND		mg/kg	0.00285	0.00122	A
Endosulfan I	ND		mg/kg	0.00152	0.00036	A
Endosulfan II	ND		mg/kg	0.00152	0.00050	A
Endosulfan sulfate	ND		mg/kg	0.00063	0.00030	A
Methoxychlor	ND		mg/kg	0.00285	0.00088	A
Toxaphene	ND		mg/kg	0.0285	0.00799	A
Chlordane	ND		mg/kg	0.0124	0.00504	A
cis-Chlordane	ND		mg/kg	0.00190	0.00053	A
trans-Chlordane	ND		mg/kg	0.00190	0.00050	A

Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8081B  
 Analytical Date: 08/12/15 09:11  
 Analyst: AL

Extraction Method: EPA 3546  
 Extraction Date: 08/12/15 00:21  
 Cleanup Method: EPA 3620B  
 Cleanup Date: 08/12/15

Parameter	Result	Qualifier	Units	RL	MDL
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Pesticides by GC - Westborough Lab for sample(s): 01-05 Batch: WG811207-1

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	117		30-150	B
2,4,5,6-Tetrachloro-m-xylene	92		30-150	A
Decachlorobiphenyl	106		30-150	A

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Pesticides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG811207-2 WG811207-3									
Delta-BHC	74		88		40-140	17		30	A
Lindane	88		98		40-140	11		30	A
Alpha-BHC	88		102		40-140	15		30	A
Beta-BHC	84		101		40-140	18		30	A
Heptachlor	96		116		40-140	19		30	A
Aldrin	93		107		40-140	14		30	A
Heptachlor epoxide	88		103		40-140	16		30	A
Endrin	92		110		40-140	18		30	A
Endrin aldehyde	74		89		40-140	18		30	A
Endrin ketone	77		91		40-140	17		30	A
Dieldrin	94		110		40-140	16		30	A
4,4'-DDE	86		104		40-140	19		30	A
4,4'-DDD	103		120		40-140	15		30	A
4,4'-DDT	97		115		40-140	17		30	A
Endosulfan I	88		104		40-140	17		30	A
Endosulfan II	91		61		40-140	39	Q	30	A
Endosulfan sulfate	71		83		40-140	16		30	A
Methoxychlor	87		107		40-140	21		30	A
cis-Chlordane	87		101		40-140	15		30	A
trans-Chlordane	89		102		40-140	14		30	A

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** KP14175  
**Project Number:** KP14175

**Lab Number:** L1519118  
**Report Date:** 08/12/15

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG811207-2 WG811207-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	80		88		30-150	B
Decachlorobiphenyl	98		110		30-150	B
2,4,5,6-Tetrachloro-m-xylene	79		85		30-150	A
Decachlorobiphenyl	83		104		30-150	A

## METALS

**Project Name:** KP14175  
**Project Number:** KP14175

**Lab Number:** L1519118  
**Report Date:** 08/12/15

**SAMPLE RESULTS**

Lab ID: L1519118-01  
 Client ID: TP-10  
 Sample Location: PEEKSKILL  
 Matrix: Soil  
 Percent Solids: 90%

Date Collected: 08/05/15 09:30  
 Date Received: 08/11/15  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	10000		mg/kg	8.6	1.7	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Antimony, Total	3.3	J	mg/kg	4.3	0.69	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Arsenic, Total	9.2		mg/kg	0.86	0.17	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Barium, Total	180		mg/kg	0.86	0.26	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Beryllium, Total	0.32	J	mg/kg	0.43	0.09	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.86	0.06	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Calcium, Total	2300		mg/kg	8.6	2.6	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Chromium, Total	18		mg/kg	0.86	0.17	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Cobalt, Total	6.7		mg/kg	1.7	0.43	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Copper, Total	77		mg/kg	0.86	0.17	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Iron, Total	18000		mg/kg	4.3	1.7	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Lead, Total	380		mg/kg	4.3	0.17	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Magnesium, Total	3400		mg/kg	8.6	0.86	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Manganese, Total	380		mg/kg	0.86	0.17	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Mercury, Total	0.26		mg/kg	0.07	0.02	1	08/12/15 08:55	08/12/15 12:10	EPA 7471B	1,7471B	MC
Nickel, Total	13		mg/kg	2.2	0.34	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Potassium, Total	1300		mg/kg	220	34.	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Selenium, Total	ND		mg/kg	1.7	0.26	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Silver, Total	0.22	J	mg/kg	0.86	0.17	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Sodium, Total	62	J	mg/kg	170	26.	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Thallium, Total	ND		mg/kg	1.7	0.34	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Vanadium, Total	23		mg/kg	0.86	0.09	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH
Zinc, Total	290		mg/kg	4.3	0.60	2	08/12/15 04:25	08/12/15 12:29	EPA 3050B	1,6010C	JH



**Project Name:** KP14175  
**Project Number:** KP14175

**Lab Number:** L1519118  
**Report Date:** 08/12/15

**SAMPLE RESULTS**

Lab ID: L1519118-02  
 Client ID: TP-12  
 Sample Location: PEEKSKILL  
 Matrix: Soil  
 Percent Solids: 83%

Date Collected: 08/05/15 10:15  
 Date Received: 08/11/15  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	9700		mg/kg	9.5	1.9	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Antimony, Total	1.4	J	mg/kg	4.8	0.76	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Arsenic, Total	17		mg/kg	0.95	0.19	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Barium, Total	460		mg/kg	0.95	0.28	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Beryllium, Total	0.43	J	mg/kg	0.48	0.10	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Cadmium, Total	0.14	J	mg/kg	0.95	0.07	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Calcium, Total	12000		mg/kg	9.5	2.8	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Chromium, Total	21		mg/kg	0.95	0.19	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Cobalt, Total	7.0		mg/kg	1.9	0.48	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Copper, Total	48		mg/kg	0.95	0.19	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Iron, Total	16000		mg/kg	4.8	1.9	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Lead, Total	1100		mg/kg	4.8	0.19	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Magnesium, Total	3200		mg/kg	9.5	0.95	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Manganese, Total	320		mg/kg	0.95	0.19	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Mercury, Total	1.4		mg/kg	0.08	0.02	1	08/12/15 08:55	08/12/15 12:18	EPA 7471B	1,7471B	MC
Nickel, Total	12		mg/kg	2.4	0.38	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Potassium, Total	1000		mg/kg	240	38.	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Selenium, Total	0.46	J	mg/kg	1.9	0.28	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Silver, Total	0.51	J	mg/kg	0.95	0.19	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Sodium, Total	130	J	mg/kg	190	28.	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Thallium, Total	ND		mg/kg	1.9	0.38	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Vanadium, Total	28		mg/kg	0.95	0.10	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH
Zinc, Total	380		mg/kg	4.8	0.66	2	08/12/15 04:25	08/12/15 12:47	EPA 3050B	1,6010C	JH



**Project Name:** KP14175  
**Project Number:** KP14175

**Lab Number:** L1519118  
**Report Date:** 08/12/15

**SAMPLE RESULTS**

Lab ID: L1519118-03  
 Client ID: TP-14  
 Sample Location: PEEKSKILL  
 Matrix: Soil  
 Percent Solids: 91%

Date Collected: 08/05/15 11:00  
 Date Received: 08/11/15  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	21000		mg/kg	8.6	1.7	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Antimony, Total	ND		mg/kg	21	3.4	10	08/12/15 04:25	08/12/15 13:53	EPA 3050B	1,6010C	JH
Arsenic, Total	35		mg/kg	0.86	0.17	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Barium, Total	300		mg/kg	0.86	0.26	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Beryllium, Total	0.18	J	mg/kg	0.43	0.09	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.86	0.06	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Calcium, Total	9000		mg/kg	8.6	2.6	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Chromium, Total	31		mg/kg	0.86	0.17	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Cobalt, Total	13		mg/kg	1.7	0.43	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Copper, Total	51		mg/kg	0.86	0.17	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Iron, Total	30000		mg/kg	4.3	1.7	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Lead, Total	260		mg/kg	4.3	0.17	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Magnesium, Total	12000		mg/kg	8.6	0.86	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Manganese, Total	470		mg/kg	0.86	0.17	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Mercury, Total	2.5		mg/kg	0.07	0.02	1	08/12/15 08:55	08/12/15 12:20	EPA 7471B	1,7471B	MC
Nickel, Total	12		mg/kg	2.1	0.34	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Potassium, Total	6900		mg/kg	210	34.	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Selenium, Total	ND		mg/kg	1.7	0.26	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Silver, Total	0.33	J	mg/kg	0.86	0.17	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Sodium, Total	110	J	mg/kg	170	26.	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Thallium, Total	ND		mg/kg	1.7	0.34	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Vanadium, Total	63		mg/kg	0.86	0.09	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH
Zinc, Total	200		mg/kg	4.3	0.60	2	08/12/15 04:25	08/12/15 13:07	EPA 3050B	1,6010C	JH





**Project Name:** KP14175  
**Project Number:** KP14175

**Lab Number:** L1519118  
**Report Date:** 08/12/15

**SAMPLE RESULTS**

Lab ID: L1519118-04  
 Client ID: TP-15  
 Sample Location: PEEKSKILL  
 Matrix: Soil  
 Percent Solids: 90%

Date Collected: 08/05/15 11:45  
 Date Received: 08/11/15  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	18000		mg/kg	8.9	1.8	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Antimony, Total	ND		mg/kg	22	3.6	10	08/12/15 04:25	08/12/15 13:57	EPA 3050B	1,6010C	JH
Arsenic, Total	19		mg/kg	0.89	0.18	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Barium, Total	240		mg/kg	0.89	0.27	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Beryllium, Total	0.17	J	mg/kg	0.44	0.09	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.89	0.06	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Calcium, Total	4900		mg/kg	8.9	2.7	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Chromium, Total	25		mg/kg	0.89	0.18	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Cobalt, Total	12		mg/kg	1.8	0.44	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Copper, Total	62		mg/kg	0.89	0.18	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Iron, Total	29000		mg/kg	4.4	1.8	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Lead, Total	60		mg/kg	4.4	0.18	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Magnesium, Total	12000		mg/kg	8.9	0.89	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Manganese, Total	370		mg/kg	0.89	0.18	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Mercury, Total	0.14		mg/kg	0.07	0.02	1	08/12/15 08:55	08/12/15 12:22	EPA 7471B	1,7471B	MC
Nickel, Total	12		mg/kg	2.2	0.36	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Potassium, Total	4200		mg/kg	220	36.	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Selenium, Total	ND		mg/kg	1.8	0.27	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Silver, Total	ND		mg/kg	0.89	0.18	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Sodium, Total	150	J	mg/kg	180	27.	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Thallium, Total	ND		mg/kg	1.8	0.36	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Vanadium, Total	58		mg/kg	0.89	0.09	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH
Zinc, Total	150		mg/kg	4.4	0.62	2	08/12/15 04:25	08/12/15 13:11	EPA 3050B	1,6010C	JH



**Project Name:** KP14175  
**Project Number:** KP14175

**Lab Number:** L1519118  
**Report Date:** 08/12/15

**SAMPLE RESULTS**

Lab ID: L1519118-05  
 Client ID: TP-16  
 Sample Location: PEEKSKILL  
 Matrix: Soil  
 Percent Solids: 89%

Date Collected: 08/05/15 12:30  
 Date Received: 08/11/15  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	18000		mg/kg	8.7	1.7	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Antimony, Total	ND		mg/kg	4.4	0.70	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Arsenic, Total	19		mg/kg	0.87	0.17	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Barium, Total	160		mg/kg	0.87	0.26	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Beryllium, Total	0.26	J	mg/kg	0.44	0.09	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.87	0.06	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Calcium, Total	4800		mg/kg	8.7	2.6	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Chromium, Total	21		mg/kg	0.87	0.17	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Cobalt, Total	11		mg/kg	1.7	0.44	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Copper, Total	45		mg/kg	0.87	0.17	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Iron, Total	24000		mg/kg	4.4	1.7	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Lead, Total	66		mg/kg	4.4	0.17	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Magnesium, Total	8200		mg/kg	8.7	0.87	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Manganese, Total	430		mg/kg	0.87	0.17	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Mercury, Total	0.24		mg/kg	0.07	0.02	1	08/12/15 08:55	08/12/15 12:24	EPA 7471B	1,7471B	MC
Nickel, Total	12		mg/kg	2.2	0.35	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Potassium, Total	3500		mg/kg	220	35.	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Selenium, Total	ND		mg/kg	1.7	0.26	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Silver, Total	ND		mg/kg	0.87	0.17	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Sodium, Total	97	J	mg/kg	170	26.	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Thallium, Total	ND		mg/kg	1.7	0.35	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Vanadium, Total	44		mg/kg	0.87	0.09	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH
Zinc, Total	120		mg/kg	4.4	0.61	2	08/12/15 04:25	08/12/15 13:15	EPA 3050B	1,6010C	JH



**Project Name:** KP14175  
**Project Number:** KP14175

**Lab Number:** L1519118  
**Report Date:** 08/12/15

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-05 Batch: WG811231-1									
Mercury, Total	ND	mg/kg	0.08	0.02	1	08/12/15 08:55	08/12/15 12:06	1,7471B	MC

### Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-05 Batch: WG811248-1									
Aluminum, Total	ND	mg/kg	4.0	0.80	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Antimony, Total	ND	mg/kg	2.0	0.32	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Arsenic, Total	ND	mg/kg	0.40	0.08	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Barium, Total	ND	mg/kg	0.40	0.12	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Beryllium, Total	ND	mg/kg	0.20	0.04	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Cadmium, Total	ND	mg/kg	0.40	0.03	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Calcium, Total	ND	mg/kg	4.0	1.2	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Chromium, Total	ND	mg/kg	0.40	0.08	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Cobalt, Total	ND	mg/kg	0.80	0.20	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Copper, Total	ND	mg/kg	0.40	0.08	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Iron, Total	ND	mg/kg	2.0	0.80	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Lead, Total	ND	mg/kg	2.0	0.08	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Magnesium, Total	ND	mg/kg	4.0	0.40	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Manganese, Total	ND	mg/kg	0.40	0.08	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Nickel, Total	ND	mg/kg	1.0	0.16	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Potassium, Total	ND	mg/kg	100	16.	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Selenium, Total	ND	mg/kg	0.80	0.12	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Silver, Total	ND	mg/kg	0.40	0.08	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Sodium, Total	ND	mg/kg	80	12.	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Thallium, Total	ND	mg/kg	0.80	0.16	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Vanadium, Total	ND	mg/kg	0.40	0.04	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH
Zinc, Total	ND	mg/kg	2.0	0.28	1	08/12/15 04:25	08/12/15 12:21	1,6010C	JH



**Project Name:** KP14175

**Lab Number:** L1519118

**Project Number:** KP14175

**Report Date:** 08/12/15

## **Method Blank Analysis Batch Quality Control**

### **Prep Information**

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Digestion Method: EPA 3050B

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** KP14175  
**Project Number:** KP14175

**Lab Number:** L1519118  
**Report Date:** 08/12/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-05 Batch: WG811231-2 SRM Lot Number: D088-540								
Mercury, Total	107		-		72-128	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-05 Batch: WG811248-2 SRM Lot Number: D088-540					
Aluminum, Total	88	-	48-151	-	
Antimony, Total	187	-	1-208	-	
Arsenic, Total	105	-	79-121	-	
Barium, Total	105	-	83-117	-	
Beryllium, Total	103	-	83-117	-	
Cadmium, Total	107	-	83-117	-	
Calcium, Total	106	-	81-119	-	
Chromium, Total	110	-	80-120	-	
Cobalt, Total	102	-	84-115	-	
Copper, Total	106	-	81-118	-	
Iron, Total	103	-	45-155	-	
Lead, Total	98	-	81-117	-	
Magnesium, Total	101	-	76-124	-	
Manganese, Total	106	-	81-118	-	
Nickel, Total	104	-	83-117	-	
Potassium, Total	100	-	71-129	-	
Selenium, Total	108	-	78-122	-	
Silver, Total	110	-	75-124	-	
Sodium, Total	103	-	72-127	-	
Thallium, Total	110	-	80-120	-	
Vanadium, Total	107	-	78-122	-	

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: KP14175

Project Number: KP14175

Lab Number: L1519118

Report Date: 08/12/15

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-05 Batch: WG811248-2 SRM Lot Number: D088-540					
Zinc, Total	106	-	82-118	-	

**Matrix Spike Analysis**  
Batch Quality Control

Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG811231-4 QC Sample: L1519118-01 Client ID: TP-10												
Mercury, Total	0.26	0.146	0.50	165	Q	-	-		80-120	-		20



## Matrix Spike Analysis

### Batch Quality Control

Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG811248-4 QC Sample: L1519118-01 Client ID: TP-10									
Aluminum, Total	10000	173	9200	0	Q	-	75-125	-	20
Antimony, Total	3.3J	43.2	78	180	Q	-	75-125	-	20
Arsenic, Total	9.2	10.4	20	104		-	75-125	-	20
Barium, Total	180	173	350	98		-	75-125	-	20
Beryllium, Total	0.32J	4.32	4.2	97		-	75-125	-	20
Cadmium, Total	ND	4.41	4.2	95		-	75-125	-	20
Calcium, Total	2300	865	3200	104		-	75-125	-	20
Chromium, Total	18.	17.3	30	69	Q	-	75-125	-	20
Cobalt, Total	6.7	43.2	41	79		-	75-125	-	20
Copper, Total	77.	21.6	99	102		-	75-125	-	20
Iron, Total	18000	86.5	16000	0	Q	-	75-125	-	20
Lead, Total	380	44.1	1200	1860	Q	-	75-125	-	20
Magnesium, Total	3400	865	3700	35	Q	-	75-125	-	20
Manganese, Total	380	43.2	340	0	Q	-	75-125	-	20
Nickel, Total	13.	43.2	47	79		-	75-125	-	20
Potassium, Total	1300	865	2100	92		-	75-125	-	20
Selenium, Total	ND	10.4	9.0	87		-	75-125	-	20
Silver, Total	0.22J	25.9	23	89		-	75-125	-	20
Sodium, Total	62.J	865	960	111		-	75-125	-	20
Thallium, Total	ND	10.4	7.6	73	Q	-	75-125	-	20
Vanadium, Total	23.	43.2	62	90		-	75-125	-	20

**Matrix Spike Analysis**  
Batch Quality Control

Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG811248-4 QC Sample: L1519118-01 Client ID: TP-10									
Zinc, Total	290	43.2	450	<b>370</b>	Q	-	75-125	-	20

## Lab Duplicate Analysis

Batch Quality Control

Project Name: KP14175

Project Number: KP14175

Lab Number: L1519118

Report Date: 08/12/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG811231-3 QC Sample: L1519118-01 Client ID: TP-10						
Mercury, Total	0.26	0.22	mg/kg	17		20

## Lab Duplicate Analysis

### Batch Quality Control

Project Name: KP14175

Project Number: KP14175

Lab Number: L1519118

Report Date: 08/12/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG811248-3 QC Sample: L1519118-01 Client ID: TP-10					
Aluminum, Total	10000	8500	mg/kg	16	20
Antimony, Total	3.3J	2.8J	mg/kg	NC	20
Arsenic, Total	9.2	9.9	mg/kg	7	20
Barium, Total	180	210	mg/kg	15	20
Beryllium, Total	0.32J	0.24J	mg/kg	NC	20
Cadmium, Total	ND	0.33J	mg/kg	NC	20
Calcium, Total	2300	2200	mg/kg	4	20
Chromium, Total	18.	16	mg/kg	12	20
Cobalt, Total	6.7	6.3	mg/kg	6	20
Copper, Total	77.	89	mg/kg	14	20
Iron, Total	18000	17000	mg/kg	6	20
Lead, Total	380	480	mg/kg	23	Q 20
Magnesium, Total	3400	2900	mg/kg	16	20
Manganese, Total	380	360	mg/kg	5	20
Nickel, Total	13.	12	mg/kg	8	20
Potassium, Total	1300	1100	mg/kg	17	20
Selenium, Total	ND	ND	mg/kg	NC	20
Silver, Total	0.22J	0.19J	mg/kg	NC	20
Sodium, Total	62.J	54J	mg/kg	NC	20

## Lab Duplicate Analysis

Batch Quality Control

Project Name: KP14175

Project Number: KP14175

Lab Number: L1519118

Report Date: 08/12/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG811248-3 QC Sample: L1519118-01 Client ID: TP-10					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	23.	21	mg/kg	9	20
Zinc, Total	290	380	mg/kg	27	Q 20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** KP14175

**Lab Number:** L1519118

**Project Number:** KP14175

**Report Date:** 08/12/15

**SAMPLE RESULTS**

Lab ID: L1519118-01

Date Collected: 08/05/15 09:30

Client ID: TP-10

Date Received: 08/11/15

Sample Location: PEEKSKILL

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.4		%	0.100	NA	1	-	08/12/15 00:54	30,2540G	RT



Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

## SAMPLE RESULTS

Lab ID: L1519118-02

Date Collected: 08/05/15 10:15

Client ID: TP-12

Date Received: 08/11/15

Sample Location: PEEKSKILL

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.4		%	0.100	NA	1	-	08/12/15 00:54	30,2540G	RT





**Project Name:** KP14175

**Lab Number:** L1519118

**Project Number:** KP14175

**Report Date:** 08/12/15

**SAMPLE RESULTS**

Lab ID: L1519118-03

Date Collected: 08/05/15 11:00

Client ID: TP-14

Date Received: 08/11/15

Sample Location: PEEKSKILL

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.7		%	0.100	NA	1	-	08/12/15 00:54	30,2540G	RT



Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

## SAMPLE RESULTS

Lab ID: L1519118-04

Date Collected: 08/05/15 11:45

Client ID: TP-15

Date Received: 08/11/15

Sample Location: PEEKSKILL

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.8		%	0.100	NA	1	-	08/12/15 00:54	30,2540G	RT



Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

## SAMPLE RESULTS

Lab ID: L1519118-05

Date Collected: 08/05/15 12:30

Client ID: TP-16

Date Received: 08/11/15

Sample Location: PEEKSKILL

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.3		%	0.100	NA	1	-	08/12/15 00:54	30,2540G	RT



## Lab Duplicate Analysis

Batch Quality Control

Project Name: KP14175

Project Number: KP14175

Lab Number: L1519118

Report Date: 08/12/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG811213-1 QC Sample: L1518973-01 Client ID: DUP Sample						
Solids, Total	97.4	97.3	%	0		20

Project Name: KP14175

Lab Number: L1519118

Project Number: KP14175

Report Date: 08/12/15

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

## Cooler Information Custody Seal

## Cooler

A Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1519118-01A	Glass 250ml/8oz unpreserved	A	N/A	3.5	Y	Absent	BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NJ-8081(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1519118-02A	Glass 250ml/8oz unpreserved	A	N/A	3.5	Y	Absent	BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NJ-8081(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1519118-03A	Glass 250ml/8oz unpreserved	A	N/A	3.5	Y	Absent	BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NJ-8081(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

\*Values in parentheses indicate holding time in days



Project Name: KP14175

Project Number: KP14175

Lab Number: L1519118

Report Date: 08/12/15

**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1519118-04A	Glass 250ml/8oz unpreserved	A	N/A	3.5	Y	Absent	BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NJ-PAHSIM(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NJ-8081(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1519118-05A	Glass 250ml/8oz unpreserved	A	N/A	3.5	Y	Absent	BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NJ-PAHSIM(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NJ-8081(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

**Container Comments**

L1519118-01A

L1519118-02A

L1519118-03A

L1519118-04A

L1519118-05A

\*Values in parentheses indicate holding time in days



**Project Name:** KP14175  
**Project Number:** KP14175

**Lab Number:** L1519118  
**Report Date:** 08/12/15

## GLOSSARY

### Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** KP14175  
**Project Number:** KP14175

**Lab Number:** L1519118  
**Report Date:** 08/12/15

#### Data Qualifiers

- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e., co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.



**Project Name:** KP14175  
**Project Number:** KP14175

**Lab Number:** L1519118  
**Report Date:** 08/12/15

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

Last revised December 16, 2014

**The following analytes are not included in our NELAP Scope of Accreditation:**

### Westborough Facility

**EPA 524.2:** Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.

**EPA 8260C:** 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.

**EPA 8270D:** 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**EPA 625:** 4-Chloroaniline, 4-Methylphenol.

**SM4500:** Soil: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

### Mansfield Facility

**EPA 8270D:** Biphenyl.

**EPA 2540D:** TSS

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:**

### Drinking Water

**EPA 200.8:** Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7:** Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;

**EPA 300.0:** Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

**EPA 332:** Perchlorate.

**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

### Non-Potable Water

**EPA 200.8:** Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;

**EPA 200.7:** Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;

**EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**

**EPA 624:** Volatile Halocarbons & Aromatics,

**EPA 608:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



# CHAIN OF CUSTODY

PAGE 1 OF 1

WESTBORO, MA  
TEL: 508-898-9220  
FAX: 508-898-9193

MANSFIELD, MA  
TEL: 508-822-9300  
FAX: 508-822-3288

### Project Information

Project Name: KP14175  
Project Location: Peekskill  
Project #: KP14175  
Project Manager: Adam  
ALPHA Quote #:

Date Rec'd in Lab: 8/11/15

ALPHA Job #: L1519118

### Report Information - Data Deliverables

FAX  EMAIL  
 ADEX  Add'l Deliverables

### Billing Information

Same as Client info PO #: KP14175\_50

### Client Information

Client: Ecosystems Strategies, Inc.  
Address: 24 Davis Avenue  
Poughkeepsie, NY 12603  
Phone: 845-452-1658  
Fax: 845-485-7083  
Email: adam@ecosystemsstrategies.com  
 These samples have been previously analyzed by Alpha

### Turn-Around Time

Standard  RUSH (only confirmed if pre-approved)

Date Due: Next day Time:

### Regulatory Requirements/Report Limits

State /Fed Program

Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ANALYSIS	TAL metals	Pesticides	PAHs	TOTAL # BOTTLES
	SAMPLE HANDLING			
	Filtration _____			
	<input type="checkbox"/> Done			
	<input type="checkbox"/> Not needed			
Preservation				
<input type="checkbox"/> Lab to do				
<input type="checkbox"/> Lab to do				
(Please specify below)				
Sample Specific Comments				

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	ANALYSIS			TOTAL # BOTTLES
		Date	Time			TAL metals	Pesticides	PAHs	
<u>1911810</u>	<u>TP-10</u>	<u>8-5-15</u>	<u>9:30</u>	<u>S</u>	<u>SS</u>	<u>X</u>	<u>X</u>		
<u>02</u>	<u>TP-12</u>		<u>10:15</u>			<u>X</u>	<u>X</u>		
<u>03</u>	<u>TP-14</u>		<u>11:00</u>			<u>X</u>	<u>X</u>		
<u>04</u>	<u>TP-15</u>		<u>11:45</u>			<u>X</u>	<u>X</u>	<u>X</u>	
<u>05</u>	<u>TP-16</u>		<u>12:30</u>			<u>X</u>	<u>X</u>	<u>X</u>	

Container Type

Preservative

Relinquished By:

Date/Time

Received By:

Date/Time

Adam 8-11-2015 16:01 1830  
Tom 8/11/15 23:50 Richard 8/11/15 23:50

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.