

Mr. William Bennett – Project Manager
Environmental Engineer 1
Remedial Bureau C
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway, Albany, New York 12233-7014

Subject:

**Soil Sampling Report
Ramapo Paint Sludge Site – Operable Unit 2 (OU-2)
Rockland County, New York
Site #3-44-064**

Dear Mr. Bennett:

ARCADIS U.S., Inc. (ARCADIS), on behalf of the Ford Motor Company (Ford), has prepared this Soil Sampling Report to provide additional information regarding the extent of paint sludge and impacted soil within the Torne Valley Road area, known as Operable Unit 2 (OU-2) of the Ramapo Paint Sludge Site located in Ramapo, New York (**Figure 1**). The additional investigation was required at OU-2 (the Site) to better define the extent of soil impacted by paint sludge and characterize soil outside the areas where paint sludge was observed in efforts to evaluate various remedial options at the Site. This report is provided as outlined in the OU-2 Soil Sampling Workplan submitted March 26, 2012 to the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation and approved by the NYSDEC in a letter dated March 26, 2012.

The objectives of the soil investigation were to:

- Define the extent of soil (0 to 2 feet below land surface [bls]) impacted by paint sludge at the Site;
- Characterize soil conditions (0 to 2 feet bls) within OU-2 outside the areas where paint sludge has been visually identified; and
- Collect soil samples (0 to 2 feet bls) for comparison and development of site-specific clean-up criteria.

The data collected from the sampling event within OU-2 enables an evaluation of the areas impacted with paint sludge, as well as the implementability, technical feasibility, and cost of remedial alternatives for the Site.

Imagine the result

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NJ000602.0004

Remedial Investigation Activities

The remedial investigation activities consisted of advancing twenty-seven (27) soil borings at the locations shown on **Figure 2**. The borings were advanced down to twenty-four (24) inches bls using a hand auger in accordance with standard operating procedures set forth by ARCADIS. Soil samples were collected from two (2) depth intervals at each boring location. One (1) sample was collected from the interval between zero (0) to six (6) inches bls, and the second sample was collected from the interval between eighteen (18) inches to twenty-four (24) inches bls.

The soil was removed from the auger and placed in stainless steel bowls. The collected soils were screened utilizing a Photo-Ionization Detector (PID) to evaluate the presence of volatile organic compounds (VOCs) and visually inspected for the presence of paint sludge. Soils were logged on field log sheets for characterization and sent to Accutest Laboratories in Dayton, New Jersey for analysis. Soil boring logs are included as **Attachment 1**.

All soil samples were analyzed for VOCs and Target Analyte List (TAL) metals with 10% of the samples being analyzed for the full Target Compound List (TCL)/TAL chemical analysis including semi-volatile organic compounds (SVOCs), pesticides, and polychlorinated biphenyl (PCBs). Quality assurance/quality control (QA/QC) sampling was conducted in accordance with the NYSDEC approved Quality Assurance Project Plan (QAPP, ARCADIS 2006). The analytical results of the soils samples are summarized in **Table 1** and the laboratory reports are included as **Attachment 2**.

The boreholes were backfilled with drill cuttings. The sampling equipment was decontaminated between each sampling location utilizing liquinox™ detergent and de-ionized water.

Findings and Recommendations

A total of twenty-seven (27) soil borings were advanced within OU-2. Soil boring locations are shown on **Figure 2** and the soil boring logs are located in **Attachment 1**. Paint sludge was not observed in any of the soil borings. The soil type encountered in the Site consisted primarily of silt intermixed with sand containing minimal parts of clay. Additionally, large pebbles (approximately 1 to 2 inches in size) were encountered in the soil samples, primarily in the second sampling intervals [between 18 inches to 24 inches bls].

The surface and subsurface soil sample results are presented in **Table 1**. Surface samples were collected from 0 to 6 inches bls at all sample locations. The sub-surface soil samples were collected from 18 to 24 inches bls. VOCs, semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyl (PCBs), and metals concentrations did not exceed the NYSDEC Restricted Residential Use Standards in all the surface or sub-surface soil samples.

Summary and Conclusions

The soil sampling activities were performed as described in the OU-2 Soil Sampling Work Plan at the Site.

The Site cleanup goal is NYSDEC Restricted Residential Use. The analytical results of the surface and sub-surface soil samples indicated that all the analyzed parameters are below the NYSDEC Restricted Residential Use Standards. Therefore, the soil outside of the observed paint sludge areas is well characterized, and the extent of paint sludge and soil impacts at the Site is sufficiently delineated down to 2 feet bls, as indicated in Figure 3.

Sincerely,

ARCADIS U.S., Inc.



Jon Rocklin
Project Manager

Copies:

M. Zakkar (Ford)
D. Simmons
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A. Perretta (NYSDOH)
E. Dzurinko (Director of Public Works)

Table:

Table 1 Summary of Soil Analytical Results

Figures:

Figure 1 Site Location Map
Figure 2 Soil Sample Location Map

Figure 3 Extent of Paint Sludge and Impacted Soil

Attachments:

Attachment 1 Soil Boring Logs

Attachment 2 Laboratory Reports

Table

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-1 OU2-SB-1 (0.0-0.6) 5/21/2012 0.0 - 0.6	OU2-SB-1 OU2-SB-1 (1.5-2.0) 5/21/2012 1.5 - 2.0	OU2-SB-2 OU2-SB-2(0.0-0.6) 5/22/2012 0.0 - 0.6	OU2-SB-2 OU2-SB-2(1.5-2.0) 5/22/2012 1.5 - 2.0	OU2-SB-3 OU2-SB-3 (0.0-0.6) 5/21/2012 0.0 - 0.6	OU2-SB-3 OU2-SB-3 (1.5-2.0) 5/21/2012 1.5 - 2.0	OU2-SB-4 OU2-SB-4(0.0-0.6) 5/22/2012 0.0 - 0.6	OU2-SB-4 OU2-SB-4(1.5-2.0) 5/22/2012 1.5 - 2.0	OU2-SB-5 OU2-SB-5(0.0-0.6) 5/22/2012 0.0 - 0.6	OU2-SB-5 OU2-SB-5(1.5-2.0) 5/22/2012 1.5 - 2.0
Volatile Organic Compounds												
1,1,1-Trichloroethane	100	100	< 0.00032	< 0.00041	< 0.00093	< 0.00026	< 0.0003	< 0.00026	< 0.00024	< 0.00023	< 0.00025	< 0.000099
1,1,2,2-Tetrachloroethane	NS	NS	< 0.00024	< 0.0003	< 0.00069	< 0.00019	< 0.00022	< 0.00019	< 0.00018	< 0.00017	< 0.00019	< 0.00012
1,1,2-Trichloroethane	NS	NS	< 0.00057	< 0.00073	< 0.0017	< 0.00047	< 0.00054	< 0.00046	< 0.00043	< 0.00041	< 0.00045	< 0.00016
1,1-Dichloroethane	19	26	< 0.00029	< 0.00037	< 0.00085	< 0.00024	< 0.00027	< 0.00023	< 0.00022	< 0.00021	< 0.00023	< 0.00013
1,1-Dichloroethene	100	100	< 0.00081	< 0.001	< 0.0024	< 0.00067	< 0.00076	< 0.00066	< 0.00061	< 0.00059	< 0.00064	< 0.00024
1,2,4-Trichlorobenzene	NS	NS	< 0.00045	< 0.00057	< 0.0013	< 0.00037	< 0.00043	< 0.00037	< 0.00034	< 0.00033	< 0.00036	< 0.00013
1,2-Dibromo-3-chloropropane	NS	NS	< 0.002	< 0.0025	< 0.0059	< 0.0016	< 0.0019	< 0.0016	< 0.0015	< 0.0014	< 0.0016	< 0.00083
1,2-Dibromoethane	NS	NS	< 0.00031	< 0.0004	< 0.00092	< 0.00026	< 0.0003	< 0.00026	< 0.00024	< 0.00023	< 0.00025	< 0.00012
1,2-Dichlorobenzene	100	100	< 0.00036	< 0.00047	< 0.0011	< 0.0003	< 0.00035	< 0.0003	< 0.00028	< 0.00026	< 0.00029	< 0.00018
1,2-Dichloroethane	2.3	3.1	< 0.00024	< 0.00031	< 0.00071	< 0.0002	< 0.00023	< 0.0002	< 0.00018	< 0.00017	< 0.00019	< 0.00013
1,2-Dichloropropane	NS	NS	< 0.00035	< 0.00045	< 0.001	< 0.00029	< 0.00033	< 0.00029	< 0.00027	< 0.00025	< 0.00028	< 0.00014
1,3-Dichlorobenzene	17	49	< 0.00025	< 0.00032	< 0.00074	< 0.00021	< 0.00024	< 0.00021	< 0.00019	< 0.00018	< 0.0002	< 0.00018
1,4-Dichlorobenzene	9.8	13	< 0.00022	< 0.00029	< 0.00066	< 0.00018	< 0.00021	< 0.00018	< 0.00017	< 0.00016	< 0.00018	< 0.00017
2-Butanone (MEK)	100	100	< 0.0057	< 0.0073	< 0.017	< 0.0047	< 0.0054	< 0.0046	< 0.0043	< 0.0041	< 0.0045	< 0.0022
2-Hexanone	NS	NS	< 0.0033	< 0.0042	< 0.0096	< 0.0027	< 0.0031	< 0.0027	< 0.0025	< 0.0024	< 0.0026	< 0.00058
4-Methyl-2-pentanone(MIBK)	NS	NS	< 0.0035	< 0.0044	< 0.01	< 0.0029	< 0.0033	< 0.0028	< 0.0026	< 0.0025	< 0.0027	< 0.0007
Acetone	100	100	0.175	0.3	< 0.026	0.0128	< 0.0083	< 0.0071	< 0.0066	< 0.0063	< 0.0069	< 0.0016
Benzene	2.9	4.8	< 0.00017	< 0.00022	< 0.00052	< 0.00014	< 0.00017	< 0.00014	< 0.00013	< 0.00013	< 0.00014	< 0.00011
Bromodichloromethane	NS	NS	< 0.00029	< 0.00038	< 0.00087	< 0.00024	< 0.00028	< 0.00024	< 0.00022	< 0.00021	< 0.00023	< 0.000099
Bromoform	NS	NS	< 0.00099	< 0.0013	< 0.0029	< 0.00082	< 0.00094	< 0.00081	< 0.00075	< 0.00072	< 0.00079	< 0.00014
Bromomethane	NS	NS	< 0.00052	< 0.00066	< 0.0015	< 0.00043	< 0.00049	< 0.00042	< 0.00039	< 0.00038	< 0.00041	< 0.00026
Carbon disulfide	NS	NS	< 0.00026	< 0.00033	< 0.00076	0.0016 J	< 0.00024	< 0.00021	< 0.0002	< 0.00019	< 0.0002	< 0.00011
Carbon tetrachloride	1.4	2.4	< 0.00045	< 0.00058	< 0.0013	< 0.00038	< 0.00043	< 0.00037	< 0.00034	< 0.00033	< 0.00036	< 0.00012
Chlorobenzene	100	100	< 0.00042	< 0.00054	< 0.0012	< 0.00035	< 0.0004	< 0.00035	< 0.00032	< 0.00031	< 0.00034	< 0.0001
Chloroethane	NS	NS	< 0.00054	< 0.00069	< 0.0016	< 0.00044	< 0.00051	< 0.00044	< 0.00041	< 0.00039	< 0.00043	< 0.00021
Chloroform	10	49	< 0.00063	< 0.00081	< 0.0019	< 0.00053	< 0.0006	< 0.00052	< 0.00048	< 0.00046	< 0.00051	< 0.000077
Chloromethane	NS	NS	< 0.00082	< 0.001	< 0.0024	< 0.00068	< 0.00078	< 0.00067	< 0.00062	< 0.0006	< 0.00065	< 0.00017
cis-1,2-Dichloroethene	59	100	< 0.00042	< 0.00054	< 0.0012	< 0.00035	< 0.0004	< 0.00035	< 0.00032	< 0.00031	< 0.00034	< 0.00017
cis-1,3-Dichloropropene	NS	NS	< 0.0002	< 0.00026	< 0.00059	< 0.00017	< 0.00019	< 0.00016	< 0.00015	< 0.00015	< 0.00016	< 0.00013
Cyclohexane	NS	NS	< 0.0005	< 0.00064	< 0.0015	< 0.00041	< 0.00047	< 0.00041	< 0.00038	< 0.00036	< 0.0004	< 0.00012
Dibromochloromethane	NS	NS	< 0.00022	< 0.00028	< 0.00065	< 0.00018	< 0.00021	< 0.00018	< 0.00017	< 0.00016	< 0.00018	< 0.00015
Dichlorodifluoromethane	NS	NS	< 0.00042	< 0.00054	< 0.0012	< 0.00035	< 0.0004	< 0.00034	< 0.00032	< 0.00031	< 0.00034	< 0.00021
Ethylbenzene	30	41	< 0.00019	< 0.00025	< 0.00057	< 0.00016	< 0.00018	< 0.00016	< 0.00015	< 0.00014	< 0.00015	< 0.00025
Freon 113	NS	NS	< 0.00094	< 0.0012	< 0.0028	< 0.00078	< 0.00089	< 0.00077	< 0.00071	< 0.00068	< 0.00075	< 0.0004
Isopropylbenzene	NS	NS	< 0.00018	< 0.00023	< 0.00053	< 0.00015	< 0.00017	< 0.00015	< 0.00014	< 0.00013	< 0.00014	< 0.00007
Methyl Acetate	NS	NS	< 0.0029	< 0.0037	< 0.0086	< 0.0024	< 0.0028	< 0.0024	< 0.0022	< 0.0021	< 0.0023	< 0.0024
Methyl Tert Butyl Ether	62	100	< 0.00024	< 0.0003	< 0.00069	< 0.00019	< 0.00022	< 0.00019	< 0.00018	< 0.00017	< 0.00019	< 0.00022
Methylcyclohexane	NS	NS	< 0.00032	< 0.00041	< 0.00095	< 0.00027	< 0.00031	< 0.00026	< 0.00024	< 0.00023	< 0.00026	< 0.00016
Methylene chloride	51	100	< 0.0003	< 0.00039	< 0.00089	< 0.00025	< 0.00029	< 0.00025	< 0.00023	< 0.00022	< 0.00024	< 0.0012
Styrene	NS	NS	< 0.00024	< 0.00031	< 0.00072	< 0.0002	< 0.00023	< 0.0002	< 0.00018	< 0.00018	< 0.00019	< 0.000086
Tetrachloroethene	5.5	19	< 0.00025	< 0.00032	< 0.00074	< 0.00021	< 0.00024	< 0.00021	< 0.00019	< 0.00018	< 0.0002	< 0.00016
Toluene	100	100	< 0.0005	< 0.00064	< 0.0015	< 0.00041	< 0.00047	< 0.00041	< 0.00038	< 0.00036	< 0.0004	0.00041 J
trans-1,2-Dichloroethene	100	100	< 0.00056	< 0.00071	< 0.0016	< 0.00046	< 0.00053	< 0.00046	< 0.00042	< 0.0004	< 0.00044	< 0.00022
trans-1,3-Dichloropropene	NS	NS	< 0.00044	< 0.00056	< 0.0013	< 0.00037	< 0.00042	< 0.00036	< 0.00033	< 0.00032	< 0.00035	< 0.00015
Trichloroethene	10	21	< 0.00032	< 0.00042	< 0.00096	< 0.00027	< 0.00031	< 0.00027	< 0.00025	< 0.00024	< 0.00026	< 0.00016
Trichlorofluoromethane	NS	NS	< 0.00063	< 0.00081	< 0.0019	< 0.00052	< 0.0006	< 0.00052	< 0.00048	< 0.00046	< 0.0005	< 0.00028
Vinyl chloride	0.21	0.9	< 0.00061	< 0.00077	< 0.0018	< 0.0005	< 0.00057	< 0.00049	< 0.00046	< 0.00044	< 0.00048	< 0.00014
Xylene (total)	100	100	< 0.00024	< 0.00031	< 0.00071	< 0.0002	< 0.00023	< 0.0002	< 0.00018	< 0.00018	< 0.00019	0.00026 J
Total TIC, Volatile	NS	NS	0.0137 JN	0.088 JN	0.028 JN	0	0	0.0162 JN	0	0	0	0

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Rockland County, New York

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Semi-volatile Organic Compounds												
1,1'-Biphenyl	NS	NS	NA	NA	NA	NA	< 0.0043	< 0.0039	NA	NA	NA	NA
2,4,5-Trichlorophenol	NS	NS	NA	NA	NA	NA	< 0.043	< 0.039	NA	NA	NA	NA
2,4,6-Trichlorophenol	NS	NS	NA	NA	NA	NA	< 0.034	< 0.032	NA	NA	NA	NA
2,4-Dichlorophenol	NS	NS	NA	NA	NA	NA	< 0.059	< 0.054	NA	NA	NA	NA
2,4-Dimethylphenol	NS	NS	NA	NA	NA	NA	< 0.062	< 0.057	NA	NA	NA	NA
2,4-Dinitrophenol	NS	NS	NA	NA	NA	NA	< 0.045	< 0.041	NA	NA	NA	NA
2,4-Dinitrotoluene	NS	NS	NA	NA	NA	NA	< 0.016	< 0.015	NA	NA	NA	NA
2,6-Dinitrotoluene	NS	NS	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA	NA	NA
2-Chloronaphthalene	NS	NS	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA	NA
2-Chlorophenol	NS	NS	NA	NA	NA	NA	< 0.037	< 0.034	NA	NA	NA	NA
2-Methylnaphthalene	NS	NS	NA	NA	NA	NA	< 0.02	< 0.019	NA	NA	NA	NA
2-Methylphenol	100	100	NA	NA	NA	NA	< 0.042	< 0.038	NA	NA	NA	NA
2-Nitroaniline	NS	NS	NA	NA	NA	NA	< 0.016	< 0.015	NA	NA	NA	NA
2-Nitrophenol	NS	NS	NA	NA	NA	NA	< 0.039	< 0.036	NA	NA	NA	NA
3&4-Methylphenol	NS	NS	NA	NA	NA	NA	< 0.047	< 0.043	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NS	NS	NA	NA	NA	NA	< 0.0093	< 0.0086	NA	NA	NA	NA
3-Nitroaniline	NS	NS	NA	NA	NA	NA	< 0.015	< 0.013	NA	NA	NA	NA
4,6-Dinitro-o-cresol	NS	NS	NA	NA	NA	NA	< 0.045	< 0.041	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NS	NS	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA	NA	NA
4-Chloro-3-methyl phenol	NS	NS	NA	NA	NA	NA	< 0.037	< 0.034	NA	NA	NA	NA
4-Chloroaniline	NS	NS	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NS	NS	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA	NA
4-Nitroaniline	NS	NS	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA	NA	NA
4-Nitrophenol	NS	NS	NA	NA	NA	NA	< 0.062 J	< 0.057 J	NA	NA	NA	NA
Acenaphthene	100	100	NA	NA	NA	NA	< 0.011	< 0.0098	NA	NA	NA	NA
Acenaphthylene	100	100	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA	NA
Acetophenone	NS	NS	NA	NA	NA	NA	< 0.0064	< 0.0059	NA	NA	NA	NA
Anthracene	100	100	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA	NA	NA
Atrazine	NS	NS	NA	NA	NA	NA	< 0.0072	< 0.0066	NA	NA	NA	NA
Benzaldehyde	NS	NS	NA	NA	NA	NA	< 0.0084	< 0.0078	NA	NA	NA	NA
Benzo(a)anthracene	1	1	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA	NA
Benzo(b)fluoranthene	1	1	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA	NA
Benzo(g,h,i)perylene	100	100	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA	NA	NA
Benzo(k)fluoranthene	1	3.9	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NS	NS	NA	NA	NA	NA	< 0.015	< 0.014	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NS	NS	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether	NS	NS	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NS	NS	NA	NA	NA	NA	< 0.032	< 0.03	NA	NA	NA	NA
Butyl benzyl phthalate	NS	NS	NA	NA	NA	NA	< 0.021	< 0.02	NA	NA	NA	NA
Caprolactam	NS	NS	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA	NA
Carbazole	NS	NS	NA	NA	NA	NA	< 0.017	< 0.016	NA	NA	NA	NA
Chrysene	1	3.9	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA	NA
Dibenzo(a,h)anthracene	0.33	0.33	NA	NA	NA	NA	< 0.012	< 0.012	NA	NA	NA	NA
Dibenzofuran	14	59	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA	NA
Diethyl phthalate	NS	NS	NA	NA	NA	NA	< 0.012	< 0.012	NA	NA	NA	NA
Dimethyl phthalate	NS	NS	NA	NA	NA	NA	0.0555 J	0.0353 J	NA	NA	NA	NA
Di-n-butyl phthalate	NS	NS	NA	NA	NA	NA	< 0.0081	< 0.0075	NA	NA	NA	NA
Di-n-octyl phthalate	NS	NS	NA	NA	NA	NA	< 0.018	< 0.016	NA	NA	NA	NA
Fluoranthene	100	100	NA	NA	NA	NA	< 0.016	< 0.015	NA	NA	NA	NA
Fluorene	100	100	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA	NA
Hexachlorobenzene	0.33	1.2	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA	NA
Hexachlorobutadiene	NS	NS	NA	NA	NA	NA	< 0.01	< 0.0094	NA	NA	NA	NA

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Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-1 OU2-SB-1 (0.0-0.6) 5/21/2012 0.0 - 0.6	OU2-SB-1 OU2-SB-1 (1.5-2.0) 5/21/2012 1.5 - 2.0	OU2-SB-2 OU2-SB-2(0.0-0.6) 5/22/2012 0.0 - 0.6	OU2-SB-2 OU2-SB-2(1.5-2.0) 5/22/2012 1.5 - 2.0	OU2-SB-3 OU2-SB-3 (0.0-0.6) 5/21/2012 0.0 - 0.6	OU2-SB-3 OU2-SB-3 (1.5-2.0) 5/21/2012 1.5 - 2.0	OU2-SB-4 OU2-SB-4(0.0-0.6) 5/22/2012 0.0 - 0.6	OU2-SB-4 OU2-SB-4(1.5-2.0) 5/22/2012 1.5 - 2.0	OU2-SB-5 OU2-SB-5(0.0-0.6) 5/22/2012 0.0 - 0.6	OU2-SB-5 OU2-SB-5(1.5-2.0) 5/22/2012 1.5 - 2.0
Semi-volatile Organic Compounds												
Hexachlorocyclopentadiene	NS	NS	NA	NA	NA	NA	< 0.037	< 0.034	NA	NA	NA	NA
Hexachloroethane	NS	NS	NA	NA	NA	NA	< 0.01	< 0.0094	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.5	0.5	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA	NA	NA
Isophorone	NS	NS	NA	NA	NA	NA	< 0.0099	< 0.0091	NA	NA	NA	NA
Naphthalene	100	100	NA	NA	NA	NA	< 0.01	< 0.0092	NA	NA	NA	NA
Nitrobenzene	NS	NS	NA	NA	NA	NA	< 0.011	< 0.0097	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NS	NS	NA	NA	NA	NA	< 0.0089	< 0.0082	NA	NA	NA	NA
N-Nitrosodiphenylamine	NS	NS	NA	NA	NA	NA	< 0.022	< 0.02	NA	NA	NA	NA
Pentachlorophenol	2.4	6.7	NA	NA	NA	NA	< 0.063 J	< 0.058 J	NA	NA	NA	NA
Phenanthrene	100	100	NA	NA	NA	NA	< 0.017	< 0.015	NA	NA	NA	NA
Phenol	100	100	NA	NA	NA	NA	< 0.038	< 0.035	NA	NA	NA	NA
Pyrene	100	100	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA	NA	NA
Total TIC, Semi-Volatile	NS	NS	NA	NA	NA	NA	0.37 JN	0.29 JN	NA	NA	NA	NA
Pesticides												
4,4'-DDD	2.6	13	NA	NA	NA	NA	< 0.00042	< 0.0004	NA	NA	NA	NA
4,4'-DDE	1.8	8.9	NA	NA	NA	NA	0.0121	0.0071	NA	NA	NA	NA
4,4'-DDT	1.7	7.9	NA	NA	NA	NA	0.0149	0.0076	NA	NA	NA	NA
Aldrin	0.019	0.097	NA	NA	NA	NA	< 0.00041	< 0.00039	NA	NA	NA	NA
alpha-BHC	0.097	0.48	NA	NA	NA	NA	< 0.00062	< 0.00058	NA	NA	NA	NA
alpha-Chlordane	0.91	4.2	NA	NA	NA	NA	< 0.00054	< 0.0005	NA	NA	NA	NA
Beta-BHC	0.072	0.36	NA	NA	NA	NA	< 0.00058	< 0.00054	NA	NA	NA	NA
Camphechlor	NS	NS	NA	NA	NA	NA	< 0.01	< 0.0097	NA	NA	NA	NA
Delta-BHC	100	100	NA	NA	NA	NA	< 0.00048	< 0.00045	NA	NA	NA	NA
Pesticides												
Dieldrin	0.039	0.2	NA	NA	NA	NA	< 0.00064	< 0.0006	NA	NA	NA	NA
Endosulfan I	4.8	24	NA	NA	NA	NA	< 0.0004	< 0.00037	NA	NA	NA	NA
Endosulfan II	4.8	24	NA	NA	NA	NA	< 0.00054	< 0.00051	NA	NA	NA	NA
Endosulfan Sulfate	4.8	24	NA	NA	NA	NA	< 0.00075	< 0.0007	NA	NA	NA	NA
Endrin	2.2	11	NA	NA	NA	NA	< 0.00042	< 0.00039	NA	NA	NA	NA
Endrin Aldehyde	NS	NS	NA	NA	NA	NA	< 0.00078	< 0.00073	NA	NA	NA	NA
Endrin Ketone	NS	NS	NA	NA	NA	NA	< 0.00054	< 0.0005	NA	NA	NA	NA
gamma-BHC (Lindane)	0.28	1.3	NA	NA	NA	NA	< 0.00038	< 0.00035	NA	NA	NA	NA
Gamma-Chlordane	NS	NS	NA	NA	NA	NA	< 0.00042	< 0.00039	NA	NA	NA	NA
Heptachlor	0.42	2.1	NA	NA	NA	NA	< 0.00051	< 0.00047	NA	NA	NA	NA
Heptachlor Epoxide	NS	NS	NA	NA	NA	NA	< 0.00041	< 0.00038	NA	NA	NA	NA
Methoxychlor	NS	NS	NA	NA	NA	NA	< 0.00058	< 0.00054	NA	NA	NA	NA
Polychlorinated Biphenyls												
Aroclor 1016	1	1	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA	NA
Aroclor 1221	1	1	NA	NA	NA	NA	< 0.025	< 0.023	NA	NA	NA	NA
Aroclor 1232	1	1	NA	NA	NA	NA	< 0.021	< 0.02	NA	NA	NA	NA
Aroclor 1242	1	1	NA	NA	NA	NA	0.0529	0.075	NA	NA	NA	NA
Aroclor 1248	1	1	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA	NA	NA
Aroclor 1254	1	1	NA	NA	NA	NA	< 0.019	< 0.018	NA	NA	NA	NA
Aroclor 1260	1	1	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA	NA	NA

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-1 OU2-SB-1 (0.0-0.6) 5/21/2012 0.0 - 0.6	OU2-SB-1 OU2-SB-1 (1.5-2.0) 5/21/2012 1.5 - 2.0	OU2-SB-2 OU2-SB-2(0.0-0.6) 5/22/2012 0.0 - 0.6	OU2-SB-2 OU2-SB-2(1.5-2.0) 5/22/2012 1.5 - 2.0	OU2-SB-3 OU2-SB-3 (0.0-0.6) 5/21/2012 0.0 - 0.6	OU2-SB-3 OU2-SB-3 (1.5-2.0) 5/21/2012 1.5 - 2.0	OU2-SB-4 OU2-SB-4(0.0-0.6) 5/22/2012 0.0 - 0.6	OU2-SB-4 OU2-SB-4(1.5-2.0) 5/22/2012 1.5 - 2.0	OU2-SB-5 OU2-SB-5(0.0-0.6) 5/22/2012 0.0 - 0.6	OU2-SB-5 OU2-SB-5(1.5-2.0) 5/22/2012 1.5 - 2.0
Metals												
Aluminum	NS	NS	7930	10600	11500	14000	10500	13800	11100	14300	6950	8710
Antimony	NS	NS	< 2.8	< 3.1	< 5.6	< 2.7	< 2.6	< 2.4	< 2.4	< 2.4	< 2.6	< 2.4
Arsenic	16	16	6	4.8	< 5.6	< 2.7	< 2.6	< 2.4	3.1	4.1	< 2.6	2.6
Barium	350	400	46.2	< 31	91.1	40.3	38.9	39.5	69.7	83.7	57.4	36.2
Beryllium	14	72	0.44	0.41	1.5	0.64	0.55	0.56	0.65	0.78	0.5	0.48
Cadmium	2.5	4.3	< 0.69	< 0.77	< 1.4	< 0.68	< 0.64	< 0.6	< 0.6	< 0.61	< 0.64	< 0.61
Calcium	NS	NS	< 690	< 770	5170	1240	2380	1720	4180	6250	10400	3110
Chromium	NS	NS	10.7	12.8	15.5	16.6	17.2	17.3	16.4	23.1	13.6	17.1
Cobalt	NS	NS	< 6.9	< 7.7	< 14	< 6.8	7.2	7.6	6.5	7.8	< 6.4	< 6.1
Copper	270	270	20.6	11.5	20.5	11.5	18.2	19.8	23.5	29.3	20.7	14.4
Iron	NS	NS	9390	16200	15500	12000	18700	18400	19700	22700	16900	16400
Lead	400	400	165	92.9	78.8	144	22.2	8.2	20.8	36.4	20.2	15.7
Magnesium	NS	NS	< 690	930	2110	2060	3190	2830	4380	5660	7950	2720
Manganese	2000	2000	42.6	42.7	1080	65.2	240	137	387	451	498	238
Mercury	0.81	0.81	0.19	< 0.069 UB	0.17	0.044	< 0.04	< 0.037	0.036	0.097	< 0.037	< 0.038
Nickel	140	310	10.8	6.5	14.1	9.9	12.6	13.8	14.6	19.2	11.6	12.5
Potassium	NS	NS	< 1400	< 1500	< 2800	< 1400	< 1300	< 1200	1380	1480	< 1300	< 1200
Selenium	36	180	< 2.8	< 3.1	< 5.6	< 2.7	< 2.6	< 2.4	< 2.4	< 2.4	< 2.6	< 2.4
Silver	36	180	< 0.69	< 0.77	< 1.4	0.8	< 0.64	< 0.6	1.2	2.4	< 0.64	< 0.61
Sodium	NS	NS	< 1400	< 1500	< 2800	< 1400	< 1300	< 1200	< 1200	< 1200	< 1300	< 1200
Thallium	NS	NS	< 1.4	< 1.5	< 2.8	< 1.4	< 1.3	< 1.2	< 1.2	< 1.2	< 1.3	< 1.2
Vanadium	NS	NS	28.2	34.5	29.5	27.1	31.4	30.7	27.6	33.1	23.9	24.1
Zinc	2200	10000	28.4	23.5	155	41.7	35.4	29.1	60.5	82.1	41.5	40.9
Other												
Cyanide	27	27	NA	NA	NA	NA	< 0.31	< 0.27	NA	NA	NA	NA
Solids, Percent	NS	NS	71.8	66.1	35.8	77.9	77.1	84.7	85	83.1	79.7	84.6

Notes:
Results reported in milligrams per kilogram (mg/kg).
Field Blank and Trip Blank reported in micrograms per liter (ug/l).
NS No standard
NA Not analyzed
J Estimated result
JN Estimated result
R Rejected result
UB Analyte considered non-detect at the listed value due to associated blank contamination
Bold Result exceeds 375-6.8(b) residential use soil cleanup objective.
Shade Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.

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Volatile Organic Compounds												
1,1,1-Trichloroethane	100	100	< 0.00025	< 0.00026	< 0.0077	< 0.00025	< 0.00026	< 0.00026	< 0.00012	< 0.0001	< 0.00015	< 0.00014
1,1,2,2-Tetrachloroethane	NS	NS	< 0.00018	< 0.00019	< 0.0096	< 0.00018	< 0.00019	< 0.00019	< 0.00015	< 0.00013	< 0.00019	< 0.00018
1,1,2-Trichloroethane	NS	NS	< 0.00044	< 0.00046	< 0.013	< 0.00045	< 0.00046	< 0.00047	< 0.0002	< 0.00017	< 0.00025	< 0.00023
1,1-Dichloroethane	19	26	< 0.00022	< 0.00023	< 0.0099	< 0.00022	< 0.00023	< 0.00023	< 0.00016	< 0.00013	< 0.0002	< 0.00018
1,1-Dichloroethene	100	100	< 0.00062	< 0.00065	< 0.019	< 0.00063	< 0.00066	< 0.00066	< 0.00029	< 0.00025	< 0.00037	< 0.00034
1,2,4-Trichlorobenzene	NS	NS	< 0.00035	< 0.00036	< 0.01	< 0.00035	< 0.00037	< 0.00037	< 0.00016	< 0.00013	< 0.0002	< 0.00019
1,2-Dibromo-3-chloropropane	NS	NS	< 0.0015	< 0.0016	< 0.064	< 0.0016	< 0.0016	< 0.0016	< 0.001	< 0.00085	< 0.0013	< 0.0012
1,2-Dibromoethane	NS	NS	< 0.00024	< 0.00025	< 0.0092	< 0.00024	< 0.00025	< 0.00026	< 0.00015	< 0.00012	< 0.00018	< 0.00017
1,2-Dichlorobenzene	100	100	< 0.00028	< 0.0003	< 0.014	< 0.00028	< 0.0003	< 0.0003	< 0.00022	< 0.00018	< 0.00027	< 0.00025
1,2-Dichloroethane	2.3	3.1	< 0.00019	< 0.00019	< 0.0098	< 0.00019	< 0.00019	< 0.0002	< 0.00015	< 0.00013	< 0.00019	< 0.00018
1,2-Dichloropropane	NS	NS	< 0.00027	< 0.00028	< 0.011	< 0.00027	< 0.00028	< 0.00029	< 0.00018	< 0.00015	< 0.00022	< 0.00021
1,3-Dichlorobenzene	17	49	< 0.0002	< 0.0002	< 0.014	< 0.0002	< 0.00021	< 0.00021	< 0.00021	< 0.00018	< 0.00027	< 0.00025
1,4-Dichlorobenzene	9.8	13	< 0.00017	< 0.00018	< 0.013	< 0.00017	< 0.00018	< 0.00018	< 0.0002	< 0.00017	< 0.00025	< 0.00024
2-Butanone (MEK)	100	100	< 0.0044	< 0.0046	< 0.17	< 0.0045	< 0.0046	< 0.0047	< 0.0027	< 0.0023	< 0.0034	< 0.0032
2-Hexanone	NS	NS	< 0.0025	< 0.0026	< 0.045	< 0.0026	< 0.0027	< 0.0027	< 0.00071	< 0.00059	< 0.00089	< 0.00083
4-Methyl-2-pentanone(MIBK)	NS	NS	< 0.0027	< 0.0028	< 0.054	< 0.0027	< 0.0028	< 0.0028	< 0.00086	< 0.00072	< 0.0011	< 0.001
Acetone	100	100	< 0.0067	< 0.0071	< 0.12	< 0.0068	< 0.0071	< 0.0071	< 0.0019	< 0.0016	R	< 0.0023
Benzene	2.9	4.8	< 0.00014	< 0.00014	< 0.0086	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00011	< 0.00017	< 0.00016
Bromodichloromethane	NS	NS	< 0.00023	< 0.00024	< 0.0076	< 0.00023	< 0.00024	< 0.00024	< 0.00012	< 0.0001	< 0.00015	< 0.00014
Bromoform	NS	NS	< 0.00077	< 0.0008	< 0.011	< 0.00078	< 0.00081	< 0.00081	< 0.00017	< 0.00014	< 0.00022	< 0.0002
Bromomethane	NS	NS	< 0.0004	< 0.00042	< 0.02	< 0.00041	< 0.00042	< 0.00042	< 0.00031	< 0.00026	< 0.00039	< 0.00037
Carbon disulfide	NS	NS	< 0.0002	< 0.00021	< 0.0085	< 0.0002	< 0.00021	< 0.00021	< 0.00013	< 0.00011	< 0.00017	< 0.00016
Carbon tetrachloride	1.4	2.4	< 0.00035	< 0.00037	< 0.0096	< 0.00036	< 0.00037	< 0.00037	< 0.00015	< 0.00013	< 0.00019	< 0.00018
Chlorobenzene	100	100	< 0.00033	< 0.00034	< 0.0078	< 0.00033	< 0.00034	< 0.00035	< 0.00012	< 0.0001	< 0.00016	< 0.00014
Chloroethane	NS	NS	< 0.00042	< 0.00043	< 0.016	< 0.00042	< 0.00044	< 0.00044	< 0.00026	< 0.00022	< 0.00033	< 0.0003
Chloroform	10	49	< 0.00049	< 0.00051	< 0.006	< 0.0005	< 0.00052	< 0.00052	< 0.000095	< 0.000079	< 0.00012	< 0.00011
Chloromethane	NS	NS	< 0.00063	< 0.00067	< 0.013	< 0.00064	< 0.00067	< 0.00067	< 0.00021	< 0.00018	< 0.00027	< 0.00025
cis-1,2-Dichloroethene	59	100	< 0.00033	< 0.00034	< 0.013	< 0.00033	< 0.00034	< 0.00035	< 0.00021	< 0.00017	< 0.00026	< 0.00024
cis-1,3-Dichloropropene	NS	NS	< 0.00015	< 0.00016	< 0.01	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00013	< 0.0002	< 0.00019
Cyclohexane	NS	NS	< 0.00039	< 0.0004	< 0.009	< 0.00039	< 0.00041	< 0.00041	< 0.00014	< 0.00012	< 0.00018	< 0.00017
Dibromochloromethane	NS	NS	< 0.00017	< 0.00018	< 0.012	< 0.00017	< 0.00018	< 0.00018	< 0.00019	< 0.00016	< 0.00024	< 0.00022
Dichlorodifluoromethane	NS	NS	< 0.00033	< 0.00034	< 0.016	< 0.00033	< 0.00034	< 0.00035	< 0.00026	< 0.00022	< 0.00033	< 0.0003
Ethylbenzene	30	41	< 0.00015	< 0.00016	< 0.019	< 0.00015	< 0.00016	< 0.00016	< 0.0003	< 0.00025	< 0.00038	< 0.00035
Freon 113	NS	NS	< 0.00073	< 0.00076	< 0.031	< 0.00074	< 0.00077	< 0.00077	< 0.00049	< 0.00041	< 0.00062	< 0.00058
Isopropylbenzene	NS	NS	< 0.00014	< 0.00015	< 0.0054	< 0.00014	< 0.00015	< 0.00015	< 0.000085	< 0.000071	< 0.00011	< 0.000099
Methyl Acetate	NS	NS	< 0.0023	< 0.0024	< 0.19	< 0.0023	< 0.0024	< 0.0024	< 0.003	< 0.0025	< 0.0037	< 0.0035
Methyl Tert Butyl Ether	62	100	< 0.00018	< 0.00019	< 0.017	< 0.00018	< 0.00019	< 0.00019	< 0.00027	< 0.00022	< 0.00034	< 0.00031
Methylcyclohexane	NS	NS	< 0.00025	< 0.00026	< 0.012	< 0.00025	< 0.00026	< 0.00026	< 0.00019	< 0.00016	< 0.00024	< 0.00023
Methylene chloride	51	100	< 0.00023	< 0.00025	< 0.092	< 0.00024	< 0.00025	< 0.00025	< 0.0015	< 0.0012	< 0.0018	< 0.0017
Styrene	NS	NS	< 0.00019	< 0.0002	< 0.0066	< 0.00019	< 0.0002	< 0.0002	< 0.0001	< 0.000088	< 0.00013	< 0.00012
Tetrachloroethene	5.5	19	< 0.00019	< 0.0002	< 0.012	< 0.0002	< 0.0002	< 0.00021	< 0.0002	< 0.00016	< 0.00025	< 0.00023
Toluene	100	100	< 0.00038	< 0.0004	< 0.0076	< 0.00039	< 0.0004	< 0.00041	< 0.00012	< 0.0001	< 0.00015	< 0.00014
trans-1,2-Dichloroethene	100	100	< 0.00043	< 0.00045	< 0.017	< 0.00044	< 0.00045	< 0.00046	< 0.00027	< 0.00023	< 0.00034	< 0.00032
trans-1,3-Dichloropropene	NS	NS	< 0.00034	< 0.00036	< 0.011	< 0.00035	< 0.00036	< 0.00036	< 0.00018	< 0.00015	< 0.00022	< 0.00021
Trichloroethene	10	21	< 0.00025	< 0.00026	< 0.013	< 0.00025	< 0.00026	< 0.00027	< 0.0002	< 0.00017	< 0.00025	< 0.00023
Trichlorofluoromethane	NS	NS	< 0.00049	< 0.00051	< 0.022	< 0.0005	< 0.00052	< 0.00052	< 0.00034	< 0.00028	< 0.00043	< 0.0004
Vinyl chloride	0.21	0.9	< 0.00047	< 0.00049	< 0.01	< 0.00047	< 0.00049	< 0.0005	< 0.00016	< 0.00014	< 0.00021	< 0.00019
Xylene (total)	100	100	< 0.00019	< 0.0002	< 0.01	< 0.00019	< 0.0002	< 0.0002	< 0.00016	< 0.00013	< 0.0002	< 0.00019
Total TIC, Volatile	NS	NS	0	0	27.6 JN	0.0353 JN	0	0	0	0	0	0

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Semi-volatile Organic Compounds												
1,1'-Biphenyl	NS	NS	< 0.0039	< 0.004	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NS	NS	< 0.039	< 0.04	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NS	NS	< 0.031	< 0.032	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NS	NS	< 0.054	< 0.056	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NS	NS	< 0.056	< 0.058	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NS	NS	< 0.041 J	< 0.042 J	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NS	NS	< 0.015	< 0.015	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NS	NS	< 0.013	< 0.013	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NS	NS	< 0.01	< 0.011	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NS	NS	< 0.034	< 0.035	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NS	NS	< 0.019	< 0.019	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	100	100	< 0.038	< 0.039	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NS	NS	< 0.015	< 0.015	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NS	NS	< 0.035	< 0.037	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	NS	NS	< 0.042	< 0.044	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NS	NS	< 0.0085	< 0.0088	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NS	NS	< 0.013	< 0.014	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-o-cresol	NS	NS	< 0.041	< 0.042	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NS	NS	< 0.012	< 0.013	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methyl phenol	NS	NS	< 0.033	< 0.035	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NS	NS	< 0.011	< 0.011	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NS	NS	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NS	NS	< 0.013	< 0.013	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NS	NS	< 0.057 J	< 0.058 J	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	100	100	< 0.0097	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	100	100	< 0.011	0.0138 J	NA	NA	NA	NA	NA	NA	NA	NA
Acetophenone	NS	NS	< 0.0059	< 0.0061	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	100	100	0.021 J	0.0206 J	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NS	NS	< 0.0066	< 0.0068	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NS	NS	< 0.0077	< 0.0079	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1	1	0.0943	0.082	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	0.0952	0.085	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	1	1	0.096	0.0863	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	100	100	0.0661	0.0671	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	1	3.9	0.0734	0.0722	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NS	NS	< 0.014	< 0.014	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NS	NS	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether	NS	NS	< 0.0099	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NS	NS	< 0.03	< 0.03	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NS	NS	< 0.019	0.039 J	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NS	NS	< 0.011	< 0.011	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NS	NS	< 0.015	< 0.016	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	1	3.9	0.103	0.111	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	0.33	0.33	0.0324 J	0.0309 J	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	14	59	< 0.0099	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NS	NS	< 0.011	< 0.012	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NS	NS	< 0.012	< 0.012	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NS	NS	< 0.0074	< 0.0077	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NS	NS	< 0.016	< 0.017	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	100	100	0.162	0.263	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	100	100	< 0.011	< 0.011	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	1.2	< 0.011	< 0.011	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NS	NS	< 0.0093	< 0.0096	NA	NA	NA	NA	NA	NA	NA	NA

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-6 OU2-SB-6(0.0-0.6) 5/22/2012 0.0 - 0.6	OU2-SB-6 OU2-SB-6(1.5-2.0) 5/22/2012 1.5 - 2.0	OU2-SB-7 OU2-SB-7(0.0-0.6) 5/22/2012 0.0 - 0.6	OU2-SB-7 OU2-SB-7(1.5-2.0) 5/22/2012 1.5 - 2.0	OU2-SB-8 OU2-SB-8(0.0-0.6) 5/22/2012 0.0 - 0.6	OU2-SB-8 OU2-SB-8(1.5-2.0) 5/22/2012 1.5 - 2.0	OU2-SB-9 OU2-SB-9(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-9 OU2-SB-9(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-10 OU2-SB-10(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-10 OU2-SB-10(1.5-2.0) 5/23/2012 1.5 - 2.0
Semi-volatile Organic Compounds												
Hexachlorocyclopentadiene	NS	NS	< 0.034	< 0.035	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NS	NS	< 0.0093	< 0.0096	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.0634	0.0603	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NS	NS	< 0.009	< 0.0093	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	100	100	< 0.0091	< 0.0094	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NS	NS	< 0.0097	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NS	NS	< 0.0082	< 0.0084	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NS	NS	< 0.02	< 0.021	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	2.4	6.7	< 0.057	< 0.059	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	100	100	0.0672	0.154	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	100	100	< 0.035	< 0.036	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	100	100	0.136	0.189	NA	NA	NA	NA	NA	NA	NA	NA
Total TIC, Semi-Volatile	NS	NS	0.9 JN	3.03 JN	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides												
4,4'-DDD	2.6	13	< 0.00041	< 0.00041	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	1.8	8.9	< 0.00047	0.16	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	1.7	7.9	0.00097 J	< 0.00058	NA	NA	NA	NA	NA	NA	NA	NA
Aldrin	0.019	0.097	< 0.0004	< 0.0004	NA	NA	NA	NA	NA	NA	NA	NA
alpha-BHC	0.097	0.48	< 0.0006	< 0.00059	NA	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane	0.91	4.2	0.0014 JN	< 0.00052	NA	NA	NA	NA	NA	NA	NA	NA
Beta-BHC	0.072	0.36	< 0.00056	< 0.00056	NA	NA	NA	NA	NA	NA	NA	NA
Camphechlor	NS	NS	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA
Delta-BHC	100	100	< 0.00046	< 0.00046	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides												
Dieldrin	0.039	0.2	0.0012	0.128	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	4.8	24	< 0.00038	< 0.00038	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan II	4.8	24	< 0.00052	< 0.00052	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan Sulfate	4.8	24	< 0.00072	< 0.00072	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	2.2	11	< 0.00041	< 0.00041	NA	NA	NA	NA	NA	NA	NA	NA
Endrin Aldehyde	NS	NS	< 0.00075	< 0.00075	NA	NA	NA	NA	NA	NA	NA	NA
Endrin Ketone	NS	NS	< 0.00052	< 0.00052	NA	NA	NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	0.28	1.3	< 0.00036	< 0.00036	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-Chlordane	NS	NS	< 0.00041	< 0.00041	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.42	2.1	< 0.00049	< 0.00049	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide	NS	NS	< 0.00039	< 0.00039	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	NS	NS	< 0.00056	< 0.00056	NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls												
Aroclor 1016	1	1	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1221	1	1	< 0.023	< 0.023	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1232	1	1	< 0.019	< 0.02	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	1	1	< 0.012	< 0.012	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1248	1	1	< 0.012	< 0.012	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254	1	1	< 0.018	< 0.018	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1260	1	1	< 0.013	< 0.013	NA	NA	NA	NA	NA	NA	NA	NA

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-6 OU2-SB-6(0.0-0.6) 5/22/2012 0.0 - 0.6	OU2-SB-6 OU2-SB-6(1.5-2.0) 5/22/2012 1.5 - 2.0	OU2-SB-7 OU2-SB-7(0.0-0.6) 5/22/2012 0.0 - 0.6	OU2-SB-7 OU2-SB-7(1.5-2.0) 5/22/2012 1.5 - 2.0	OU2-SB-8 OU2-SB-8(0.0-0.6) 5/22/2012 0.0 - 0.6	OU2-SB-8 OU2-SB-8(1.5-2.0) 5/22/2012 1.5 - 2.0	OU2-SB-9 OU2-SB-9(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-9 OU2-SB-9(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-10 OU2-SB-10(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-10 OU2-SB-10(1.5-2.0) 5/23/2012 1.5 - 2.0
Metals												
Aluminum	NS	NS	11600	14100	14000	15000	5190	6150	6370 J	7530 J	23700 J	19000 J
Antimony	NS	NS	< 2.4	< 2.5	< 2.6	< 2.4	< 2.4	< 2.4	< 2.5 J	< 2.5 J	< 2.8 J	< 2.8 J
Arsenic	16	16	3.7	3.3	3.2	3	< 2.4	< 2.4	3.3	3.4	5.7	4.7
Barium	350	400	64.7	87.5	43.8	44.3	30.3	27.3	278 J	256 J	58.9 J	51.5 J
Beryllium	14	72	0.68	0.6	0.59	0.62	0.35	0.42	0.41	0.51	1.1	0.7
Cadmium	2.5	4.3	< 0.6	< 0.63	< 0.64	< 0.59	< 0.6	< 0.6	2.7	1.3	< 0.7	< 0.69
Calcium	NS	NS	3410	3610	2210	1660	2000	1840	3000	2920	823	857
Chromium	NS	NS	17.3	16.8	17.2	17.2	11.3	12.3	15.7	19.4	23.3	20
Cobalt	NS	NS	7.2	< 6.3	< 6.4	< 5.9	< 6	< 6	< 6.3	6.5	8.4	< 6.9
Copper	270	270	23.9	18.8	16.2	14.7	10.7	12.9	28.8 J	29.5 J	11.6 J	11.2 J
Iron	NS	NS	20500	18100	17400	18300	12800	14900	13900 J	16900 J	25500 J	18200 J
Lead	400	400	22.2	44.8	11.8	11.1	12	17.3	140	117	16.8	25.4
Magnesium	NS	NS	3820	2780	2690	2800	2220	2270	2680 J	2720 J	1990 J	1980 J
Manganese	2000	2000	410	204	197	186	196	237	348	444	1180	185
Mercury	0.81	0.81	0.053	0.063	< 0.041	0.038	< 0.037	< 0.037	< 0.041	< 0.039	0.092	0.073
Nickel	140	310	16.1	11.9	11.3	11.5	8.4	9.1	12.6	13.9	12.4	11.7
Potassium	NS	NS	1220	< 1300	< 1300	< 1200	< 1200	< 1200	< 1300 J	< 1200 J	< 1400 J	< 1400 J
Selenium	36	180	< 2.4	< 2.5	< 2.6	< 2.4	< 2.4	< 2.4	< 2.5	< 2.5	< 2.8	< 2.8
Silver	36	180	1.2	0.65	< 0.64	< 0.59	< 0.6	< 0.6	1	0.95	< 0.7	0.83
Sodium	NS	NS	< 1200	< 1300	< 1300	< 1200	< 1200	< 1200	< 1300	< 1200	< 1400	< 1400
Thallium	NS	NS	< 1.2	< 1.3	< 1.3	< 1.2	< 1.2	< 1.2	< 1.3	< 1.2	< 1.4	< 1.4
Vanadium	NS	NS	29.7	26.4	28.1	29.9	17.6	18.4	18	23.4	46.1	32.9
Zinc	2200	10000	60.3	163	39.9	36.8	31.2	29.6	273	212	49.6	42.8
Other												
Cyanide	27	27	< 0.28	< 0.3	NA	NA	NA	NA	NA	NA	NA	NA
Solids, Percent	NS	NS	83.3	82.3	78.7	86.8	86.5	83	78	81.7	72.4	73.3

Notes:
Results reported in milligrams per kilogram (mg/kg).
Field Blank and Trip Blank reported in micrograms per liter (ug/l).
NS No standard
NA Not analyzed
J Estimated result
JN Estimated result
R Rejected result
UB Analyte considered non-detect at the listed value due to assor
Bold Result exceeds 375-6.8(b) residential use soil cleanup objecti
Shade Result exceeds 375-6.8(b) restricted residential use soil clean

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-11 OU2-SB-11(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-11 OU2-SB-11(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-12 OU2-SB-12(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-12 OU2-SB-12(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-13 OU2-SB-13(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-13 OU2-SB-13(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-14 OU2-SB-14(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-14 OU2-SB-14(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-15 OU2-SB-15(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-15 OU2-SB-15(1.5-2.0) 5/23/2012 1.5 - 2.0
Volatile Organic Compounds												
1,1,1-Trichloroethane	100	100	< 0.00013	< 0.00011	< 0.000098	< 0.00013	< 0.00013	< 0.00013	< 0.00018	< 0.00012	< 0.00011	< 0.00012
1,1,2,2-Tetrachloroethane	NS	NS	< 0.00016	< 0.00014	< 0.00012	< 0.00016	< 0.00016	< 0.00016	< 0.00022	< 0.00015	< 0.00014	< 0.00015
1,1,2-Trichloroethane	NS	NS	< 0.00021	< 0.00018	< 0.00016	< 0.00021	< 0.00021	< 0.00021	< 0.00029	< 0.0002	< 0.00018	< 0.0002
1,1-Dichloroethane	19	26	< 0.00016	< 0.00014	< 0.00013	< 0.00016	< 0.00016	< 0.00017	< 0.00023	< 0.00016	< 0.00014	< 0.00016
1,1-Dichloroethene	100	100	< 0.00031	< 0.00027	< 0.00024	< 0.00031	< 0.00031	< 0.00032	< 0.00043	< 0.0003	< 0.00027	< 0.00029
1,2,4-Trichlorobenzene	NS	NS	< 0.00017	< 0.00015	< 0.00013	< 0.00017	< 0.00017	< 0.00017	< 0.00023	< 0.00016	< 0.00015	< 0.00016
1,2-Dibromo-3-chloropropane	NS	NS	< 0.0011	< 0.00094	< 0.00083	< 0.0011	< 0.0011	< 0.0011	< 0.0015	< 0.001	< 0.00094	< 0.001
1,2-Dibromoethane	NS	NS	< 0.00015	< 0.00013	< 0.00012	< 0.00015	< 0.00015	< 0.00016	< 0.00021	< 0.00015	< 0.00013	< 0.00014
1,2-Dichlorobenzene	100	100	< 0.00023	< 0.0002	< 0.00018	< 0.00022	< 0.00023	< 0.00023	< 0.00031	< 0.00022	< 0.0002	< 0.00021
1,2-Dichloroethane	2.3	3.1	< 0.00016	< 0.00014	< 0.00013	< 0.00016	< 0.00016	< 0.00017	< 0.00022	< 0.00016	< 0.00014	< 0.00015
1,2-Dichloropropane	NS	NS	< 0.00018	< 0.00016	< 0.00014	< 0.00018	< 0.00019	< 0.00019	< 0.00026	< 0.00018	< 0.00016	< 0.00017
1,3-Dichlorobenzene	17	49	< 0.00022	< 0.0002	< 0.00017	< 0.00022	< 0.00022	< 0.00023	< 0.00031	< 0.00022	< 0.0002	< 0.00021
1,4-Dichlorobenzene	9.8	13	< 0.00021	< 0.00019	< 0.00016	< 0.00021	< 0.00021	< 0.00022	< 0.00029	< 0.0002	< 0.00019	< 0.0002
2-Butanone (MEK)	100	100	< 0.0029	< 0.0025	< 0.0022	< 0.0028	< 0.0029	< 0.0029	< 0.004	< 0.0028	< 0.0025	< 0.0027
2-Hexanone	NS	NS	< 0.00074	< 0.00065	< 0.00058	< 0.00074	< 0.00075	< 0.00076	< 0.001	< 0.00072	< 0.00066	< 0.0007
4-Methyl-2-pentanone(MIBK)	NS	NS	< 0.0009	< 0.00079	< 0.0007	< 0.00089	< 0.0009	< 0.00092	< 0.0012	< 0.00087	< 0.00079	< 0.00085
Acetone	100	100	< 0.002	< 0.0018	< 0.0016	< 0.002	< 0.002	< 0.0021	< 0.0028	< 0.002	< 0.0018	< 0.0019
Benzene	2.9	4.8	< 0.00014	< 0.00013	< 0.00011	< 0.00014	< 0.00014	< 0.00015	< 0.0002	< 0.00014	< 0.00013	< 0.00013
Bromodichloromethane	NS	NS	< 0.00013	< 0.00011	< 0.000098	< 0.00012	< 0.00013	< 0.00013	< 0.00017	< 0.00012	< 0.00011	< 0.00012
Bromoform	NS	NS	< 0.00018	< 0.00016	< 0.00014	< 0.00018	< 0.00018	< 0.00019	< 0.00025	< 0.00018	< 0.00016	< 0.00017
Bromomethane	NS	NS	< 0.00033	< 0.00029	< 0.00025	< 0.00032	< 0.00033	< 0.00033	< 0.00045	< 0.00032	< 0.00029	< 0.00031
Carbon disulfide	NS	NS	< 0.00014	< 0.00012	< 0.00011	< 0.00014	< 0.00014	< 0.00014	< 0.00019	< 0.00014	< 0.00012	< 0.00013
Carbon tetrachloride	1.4	2.4	< 0.00016	< 0.00014	< 0.00012	< 0.00016	< 0.00016	< 0.00016	< 0.00022	< 0.00015	< 0.00014	< 0.00015
Chlorobenzene	100	100	< 0.00013	< 0.00011	< 0.0001	< 0.00013	< 0.00013	< 0.00013	< 0.00018	< 0.00013	< 0.00011	< 0.00012
Chloroethane	NS	NS	< 0.00027	< 0.00024	< 0.00021	< 0.00027	< 0.00027	< 0.00028	< 0.00038	< 0.00026	< 0.00024	< 0.00026
Chloroform	10	49	< 0.000099	< 0.000087	< 0.000077	< 0.000098	< 0.000099	< 0.0001	< 0.00014	< 0.000096	< 0.000087	< 0.000093
Chloromethane	NS	NS	< 0.00022	< 0.0002	< 0.00017	< 0.00022	< 0.00022	< 0.00023	< 0.00031	< 0.00022	< 0.0002	< 0.00021
cis-1,2-Dichloroethene	59	100	< 0.00022	< 0.00019	< 0.00017	< 0.00022	< 0.00022	< 0.00022	< 0.0003	< 0.00021	< 0.00019	< 0.00021
cis-1,3-Dichloropropene	NS	NS	< 0.00017	< 0.00015	< 0.00013	< 0.00017	< 0.00017	< 0.00017	< 0.00023	< 0.00016	< 0.00015	< 0.00016
Cyclohexane	NS	NS	< 0.00015	< 0.00013	< 0.00012	< 0.00015	< 0.00015	< 0.00015	< 0.00021	< 0.00014	< 0.00013	< 0.00014
Dibromochloromethane	NS	NS	< 0.0002	< 0.00017	< 0.00015	< 0.00019	< 0.0002	< 0.0002	< 0.00027	< 0.00019	< 0.00017	< 0.00019
Dichlorodifluoromethane	NS	NS	< 0.00027	< 0.00024	< 0.00021	< 0.00027	< 0.00027	< 0.00028	< 0.00038	< 0.00026	< 0.00024	< 0.00026
Ethylbenzene	30	41	< 0.00031	< 0.00028	< 0.00024	< 0.00031	< 0.00032	< 0.00032	< 0.00044	< 0.00031	< 0.00028	< 0.0003
Freon 113	NS	NS	< 0.00051	< 0.00045	< 0.0004	< 0.00051	< 0.00052	< 0.00053	< 0.00071	< 0.0005	< 0.00045	< 0.00049
Isopropylbenzene	NS	NS	< 0.000089	< 0.000078	< 0.000069	< 0.000088	< 0.000089	< 0.000091	< 0.00012	< 0.000086	< 0.000078	< 0.000084
Methyl Acetate	NS	NS	< 0.0031	< 0.0027	< 0.0024	< 0.0031	< 0.0031	< 0.0032	< 0.0043	< 0.003	< 0.0027	< 0.0029
Methyl Tert Butyl Ether	62	100	< 0.00028	< 0.00025	< 0.00022	< 0.00028	< 0.00028	< 0.00029	< 0.00039	< 0.00027	< 0.00025	< 0.00027
Methylcyclohexane	NS	NS	< 0.0002	< 0.00018	< 0.00016	< 0.0002	< 0.0002	< 0.00021	< 0.00028	< 0.0002	< 0.00018	< 0.00019
Methylene chloride	51	100	< 0.0015	< 0.0013	< 0.0012	< 0.0015	< 0.0015	< 0.0016	< 0.0021	< 0.0015	< 0.0013	< 0.0014
Styrene	NS	NS	< 0.00011	< 0.000096	< 0.000085	< 0.00011	< 0.00011	< 0.00011	< 0.00015	< 0.00011	< 0.000097	< 0.0001
Tetrachloroethene	5.5	19	< 0.00021	< 0.00018	< 0.00016	< 0.0002	< 0.00021	< 0.00021	< 0.00029	< 0.0002	< 0.00018	< 0.00019
Toluene	100	100	< 0.00013	< 0.00011	< 0.000098	< 0.00012	< 0.00013	< 0.00013	< 0.00017	< 0.00012	< 0.00011	< 0.00012
trans-1,2-Dichloroethene	100	100	< 0.00028	< 0.00025	< 0.00022	< 0.00028	< 0.00029	< 0.00029	< 0.0004	< 0.00028	< 0.00025	< 0.00027
trans-1,3-Dichloropropene	NS	NS	< 0.00019	< 0.00016	< 0.00014	< 0.00018	< 0.00019	< 0.00019	< 0.00026	< 0.00018	< 0.00016	< 0.00018
Trichloroethene	10	21	< 0.00021	< 0.00018	< 0.00016	< 0.00021	< 0.00021	< 0.00021	< 0.00029	< 0.0002	< 0.00018	< 0.0002
Trichlorofluoromethane	NS	NS	< 0.00036	< 0.00031	< 0.00028	< 0.00035	< 0.00036	< 0.00037	< 0.0005	< 0.00035	< 0.00031	< 0.00034
Vinyl chloride	0.21	0.9	< 0.00017	< 0.00015	< 0.00013	< 0.00017	< 0.00017	< 0.00018	< 0.00024	< 0.00017	< 0.00015	< 0.00016
Xylene (total)	100	100	< 0.00017	< 0.00015	< 0.00013	< 0.00017	< 0.00017	< 0.00017	< 0.00023	< 0.00016	< 0.00015	< 0.00016
Total TIC, Volatile	NS	NS	0	0	0	0	0	0	0	0	0	0

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-11 OU2-SB-11(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-11 OU2-SB-11(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-12 OU2-SB-12(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-12 OU2-SB-12(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-13 OU2-SB-13(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-13 OU2-SB-13(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-14 OU2-SB-14(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-14 OU2-SB-14(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-15 OU2-SB-15(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-15 OU2-SB-15(1.5-2.0) 5/23/2012 1.5 - 2.0
Semi-volatile Organic Compounds												
1,1'-Biphenyl	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-o-cresol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methyl phenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetophenone	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	1	3.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	1	3.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	0.33	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	14	59	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-11 OU2-SB-11(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-11 OU2-SB-11(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-12 OU2-SB-12(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-12 OU2-SB-12(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-13 OU2-SB-13(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-13 OU2-SB-13(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-14 OU2-SB-14(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-14 OU2-SB-14(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-15 OU2-SB-15(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-15 OU2-SB-15(1.5-2.0) 5/23/2012 1.5 - 2.0
Semi-volatile Organic Compounds												
Hexachlorocyclopentadiene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	2.4	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total TIC, Semi-Volatile	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides												
4,4'-DDD	2.6	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	1.8	8.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	1.7	7.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aldrin	0.019	0.097	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha-BHC	0.097	0.48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane	0.91	4.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beta-BHC	0.072	0.36	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Camphechlor	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Delta-BHC	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides												
Dieldrin	0.039	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	4.8	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan II	4.8	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan Sulfate	4.8	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	2.2	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin Aldehyde	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin Ketone	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	0.28	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-Chlordane	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.42	2.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls												
Aroclor 1016	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1221	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1232	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1248	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1260	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-11 OU2-SB-11(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-11 OU2-SB-11(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-12 OU2-SB-12(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-12 OU2-SB-12(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-13 OU2-SB-13(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-13 OU2-SB-13(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-14 OU2-SB-14(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-14 OU2-SB-14(1.5-2.0) 5/23/2012 1.5 - 2.0	OU2-SB-15 OU2-SB-15(0.0-0.6) 5/23/2012 0.0 - 0.6	OU2-SB-15 OU2-SB-15(1.5-2.0) 5/23/2012 1.5 - 2.0
Metals												
Aluminum	NS	NS	13800 J	13800 J	6170 J	7010 J	8600 J	18200 J	9300 J	7580 J	12400 J	13300 J
Antimony	NS	NS	< 2.4 J	< 2.5 J	< 2.2 J	< 2.5 J	< 2.5 J	< 2.7 J	< 3.1 J	< 2.8 J	< 2.5 J	< 2.5 J
Arsenic	16	16	3.9	< 2.5	2.3	2.5	4.4	5.9	< 3.1	3.4	< 2.5	3
Barium	350	400	62 J	58.1 J	50.3 J	45.6 J	53.1 J	80.1 J	57.7 J	< 28 J	51.3 J	59 J
Beryllium	14	72	0.66	0.66	0.4	0.5	0.49	0.9	0.59	0.37	0.57	0.67
Cadmium	2.5	4.3	< 0.61	< 0.64	< 0.55	< 0.62	< 0.61	< 0.69	< 0.77	< 0.69	< 0.62	< 0.63
Calcium	NS	NS	2410	1770	3040	4290	2130	1290	< 770	1020	947	1340
Chromium	NS	NS	17.5	17.8	11.1	14.3	15.4	24.2	13.1	11.4	16.1	17.3
Cobalt	NS	NS	6.4	< 6.4	< 5.5	6.3	< 6.1	17.2	< 7.7	< 6.9	< 6.2	< 6.3
Copper	270	270	16 J	6.4 J	12.7 J	13.3 J	15.8 J	12.4 J	< 3.9 J	8.6 J	6.6 J	9.2 J
Iron	NS	NS	19500 J	16500 J	14000 J	16300 J	19300 J	27200 J	13100 J	12500 J	15300 J	17000 J
Lead	400	400	52	7.7	4.4	5.4	43.5	15.1	3.2	43.2	10.5	23.3
Magnesium	NS	NS	2520 J	2800 J	2640 J	3380 J	2270 J	2460 J	1070 J	1100 J	1960 J	2130 J
Manganese	2000	2000	340	169	806	409	460	1530	54.7	79	147	201
Mercury	0.81	0.81	0.058	< 0.042	< 0.035	< 0.041	0.066	< 0.047	< 0.048	0.081	< 0.039	0.05
Nickel	140	310	12.1	10.4	9.2	10.6	10.8	12.3	< 6.2	< 5.6	9	10.1
Potassium	NS	NS	< 1200 J	< 1300 J	< 1100 J	< 1200 J	< 1200 J	< 1400 J	< 1500 J	< 1400 J	< 1200 J	< 1300 J
Selenium	36	180	< 2.4	< 2.5	< 2.2	< 2.5	< 2.5	< 2.7	< 3.1	< 2.8	< 2.5	< 2.5
Silver	36	180	0.83	0.97	1.1	0.96	1.1	1.5	0.86	0.94	1	0.82
Sodium	NS	NS	< 1200	< 1300	< 1100	< 1200	< 1200	< 1400	< 1500	< 1400	< 1200	< 1300
Thallium	NS	NS	< 1.2	< 1.3	< 1.1	< 1.2	< 1.2	< 1.4	< 1.5	< 1.4	< 1.2	< 1.3
Vanadium	NS	NS	29.7	26.4	17.7	21.6	23.8	40.9	16.6	19.6	21.3	23.3
Zinc	2200	10000	79.1	39.3	24.2	31.7	66.5	49.3	23	22.2	36.7	45.2
Other												
Cyanide	27	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Solids, Percent	NS	NS	80.3	77.9	89.7	79.4	81.6	71.5	65.4	74.3	83.1	78.9

Notes:
Results reported in milligrams per kilogram (mg/kg).
Field Blank and Trip Blank reported in micrograms per liter (ug/l).
NS No standard
NA Not analyzed
J Estimated result
JN Estimated result
R Rejected result
UB Analyte considered non-detect at the listed value due to assor
Bold Result exceeds 375-6.8(b) residential use soil cleanup objecti
Shade Result exceeds 375-6.8(b) restricted residential use soil clean

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-16 OU2-SB-16(0.0-1.6) 5/24/2012 0.0 - 0.6	OU2-SB-16 OU2-SB-16(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-17 OU2-SB-17(0.0-0.6) 5/24/2012 0.0 - 0.6	OU2-SB-17 OU2-DUP20120524(0.0-0.6) 5/24/2012 1.5 - 2.0	OU2-SB-17 OU2-SB-17(1.5-2.0) 5/24/2012 0.0 - 0.6	OU2-SB-17 OU2-DUP20120524(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-18 OU2-SB-18(0.0-0.6) 5/24/2012 1.5 - 2.0	OU2-SB-18 OU2-SB-18(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-19 OU2-SB-19(0.0-0.6) 5/24/2012 0.0 - 0.6
Volatile Organic Compounds											
1,1,1-Trichloroethane	100	100	< 0.0003	< 0.00025	< 0.00029	< 0.00031	< 0.00026	< 0.00025	< 0.0003	< 0.00028	< 0.0001
1,1,2,2-Tetrachloroethane	NS	NS	< 0.00022	< 0.00018	< 0.00022	< 0.00023	< 0.00019	< 0.00019	< 0.00022	< 0.00021	< 0.00012
1,1,2-Trichloroethane	NS	NS	< 0.00053	< 0.00044	< 0.00053	< 0.00056	< 0.00047	< 0.00045	< 0.00054	< 0.00051	< 0.00016
1,1-Dichloroethane	19	26	< 0.00027	< 0.00022	< 0.00027	< 0.00028	< 0.00024	< 0.00023	< 0.00027	< 0.00026	< 0.00013
1,1-Dichloroethene	100	100	< 0.00075	< 0.00062	< 0.00075	< 0.00079	< 0.00067	< 0.00064	< 0.00076	< 0.00072	< 0.00024
1,2,4-Trichlorobenzene	NS	NS	< 0.00042	< 0.00035	< 0.00042	< 0.00044	< 0.00037	< 0.00036	< 0.00042	< 0.0004	< 0.00013
1,2-Dibromo-3-chloropropane	NS	NS	< 0.0019	< 0.0015	< 0.0018	< 0.0019	< 0.0016	< 0.0016	< 0.0019	< 0.0018	< 0.00084
1,2-Dibromoethane	NS	NS	< 0.00029	< 0.00024	< 0.00029	< 0.00031	< 0.00026	< 0.00025	< 0.0003	< 0.00028	< 0.00012
1,2-Dichlorobenzene	100	100	< 0.00034	< 0.00028	< 0.00034	< 0.00036	< 0.0003	< 0.00029	< 0.00035	< 0.00032	< 0.00018
1,2-Dichloroethane	2.3	3.1	< 0.00022	< 0.00019	< 0.00022	< 0.00023	< 0.0002	< 0.00019	< 0.00023	< 0.00021	< 0.00013
1,2-Dichloropropane	NS	NS	< 0.00033	< 0.00027	< 0.00032	< 0.00034	< 0.00029	< 0.00028	< 0.00033	< 0.00031	< 0.00015
1,3-Dichlorobenzene	17	49	< 0.00024	< 0.0002	< 0.00023	< 0.00025	< 0.00021	< 0.0002	< 0.00024	< 0.00022	< 0.00018
1,4-Dichlorobenzene	9.8	13	< 0.00021	< 0.00017	< 0.00021	< 0.00022	< 0.00018	< 0.00018	< 0.00021	< 0.0002	< 0.00017
2-Butanone (MEK)	100	100	< 0.0053	< 0.0044	< 0.0053	< 0.0056	< 0.0047	< 0.0045	< 0.0054	< 0.0051	< 0.0023
2-Hexanone	NS	NS	< 0.0031	< 0.0025	< 0.003	< 0.0032	< 0.0027	< 0.0026	< 0.0031	< 0.0029	< 0.00059
4-Methyl-2-pentanone(MIBK)	NS	NS	< 0.0032	< 0.0027	< 0.0032	< 0.0034	< 0.0029	< 0.0027	< 0.0033	< 0.0031	< 0.00071
Acetone	100	100	< 0.0082	< 0.0067	< 0.0081	< 0.0085	< 0.0072	< 0.0069	0.119	0.138	< 0.0016
Benzene	2.9	4.8	< 0.00016	< 0.00014	< 0.00016	< 0.00017	< 0.00014	< 0.00014	< 0.00017	< 0.00016	< 0.00011
Bromodichloromethane	NS	NS	< 0.00028	< 0.00023	< 0.00027	< 0.00029	< 0.00024	< 0.00023	< 0.00028	< 0.00026	< 0.000099
Bromoform	NS	NS	< 0.00093	< 0.00077	< 0.00092	< 0.00097	< 0.00082	< 0.00079	< 0.00094	< 0.00088	< 0.00014
Bromomethane	NS	NS	< 0.00049	< 0.0004	< 0.00048	< 0.00051	< 0.00043	< 0.00041	< 0.00049	< 0.00046	< 0.00026
Carbon disulfide	NS	NS	< 0.00024	< 0.0002	< 0.00024	< 0.00025	< 0.00021	< 0.0002	< 0.00024	< 0.00023	< 0.00011
Carbon tetrachloride	1.4	2.4	< 0.00043	< 0.00035	< 0.00042	< 0.00045	< 0.00038	< 0.00036	< 0.00043	< 0.00041	< 0.00013
Chlorobenzene	100	100	< 0.0004	< 0.00033	< 0.00039	< 0.00041	< 0.00035	< 0.00034	< 0.0004	< 0.00038	< 0.0001
Chloroethane	NS	NS	< 0.0005	< 0.00041	< 0.0005	< 0.00053	< 0.00044	< 0.00043	< 0.00051	< 0.00048	< 0.00021
Chloroform	10	49	< 0.00059	< 0.00049	< 0.00059	< 0.00062	< 0.00053	< 0.0005	< 0.0006	< 0.00057	< 0.000078
Chloromethane	NS	NS	< 0.00077	< 0.00063	< 0.00076	< 0.0008	< 0.00068	< 0.00065	< 0.00078	< 0.00073	< 0.00018
cis-1,2-Dichloroethene	59	100	< 0.0004	< 0.00033	< 0.00039	< 0.00041	< 0.00035	< 0.00034	< 0.0004	< 0.00038	< 0.00017
cis-1,3-Dichloropropene	NS	NS	< 0.00019	< 0.00015	< 0.00019	< 0.0002	< 0.00017	< 0.00016	< 0.00019	< 0.00018	< 0.00013
Cyclohexane	NS	NS	< 0.00047	< 0.00039	< 0.00046	< 0.00049	< 0.00041	< 0.0004	< 0.00047	< 0.00044	< 0.00012
Dibromochloromethane	NS	NS	< 0.00021	< 0.00017	< 0.00021	< 0.00022	< 0.00018	< 0.00018	< 0.00021	< 0.0002	< 0.00015
Dichlorodifluoromethane	NS	NS	< 0.0004	< 0.00033	< 0.00039	< 0.00041	< 0.00035	< 0.00034	< 0.0004	< 0.00038	< 0.00022
Ethylbenzene	30	41	< 0.00018	< 0.00015	< 0.00018	< 0.00019	< 0.00016	< 0.00015	< 0.00018	< 0.00017	< 0.00025
Freon 113	NS	NS	< 0.00088	< 0.00073	< 0.00088	< 0.00092	< 0.00078	< 0.00075	< 0.00089	< 0.00084	< 0.00041
Isopropylbenzene	NS	NS	< 0.00017	< 0.00014	< 0.00017	< 0.00018	< 0.00015	< 0.00014	< 0.00017	< 0.00016	< 0.00007
Methyl Acetate	NS	NS	< 0.0027	< 0.0023	< 0.0027	< 0.0029	< 0.0024	< 0.0023	< 0.0028	< 0.0026	< 0.0025
Methyl Tert Butyl Ether	62	100	< 0.00022	< 0.00018	< 0.00022	< 0.00023	< 0.00019	< 0.00019	< 0.00022	< 0.00021	< 0.00022
Methylcyclohexane	NS	NS	< 0.0003	< 0.00025	< 0.0003	< 0.00032	< 0.00027	< 0.00026	< 0.00031	< 0.00029	< 0.00016
Methylene chloride	51	100	< 0.00028	< 0.00023	< 0.00028	< 0.0003	< 0.00025	< 0.00024	< 0.00029	< 0.00027	< 0.0012
Styrene	NS	NS	< 0.00023	< 0.00019	< 0.00023	< 0.00024	< 0.0002	< 0.00019	< 0.00023	< 0.00022	< 0.000087
Tetrachloroethene	5.5	19	< 0.00024	< 0.00019	< 0.00023	< 0.00025	< 0.00021	< 0.0002	< 0.00024	< 0.00022	< 0.00016
Toluene	100	100	< 0.00047	< 0.00038	< 0.00046	< 0.00049	< 0.00041	< 0.00039	< 0.00047	< 0.00044	< 0.000099
trans-1,2-Dichloroethene	100	100	< 0.00052	< 0.00043	< 0.00052	< 0.00055	< 0.00046	< 0.00044	< 0.00053	< 0.0005	< 0.00022
trans-1,3-Dichloropropene	NS	NS	< 0.00041	< 0.00034	< 0.00041	< 0.00043	< 0.00037	< 0.00035	< 0.00042	< 0.00039	< 0.00015
Trichloroethene	10	21	< 0.0003	< 0.00025	< 0.0003	< 0.00032	< 0.00027	< 0.00026	< 0.00031	< 0.00029	< 0.00016
Trichlorofluoromethane	NS	NS	< 0.00059	< 0.00049	< 0.00059	< 0.00062	< 0.00052	< 0.0005	< 0.0006	< 0.00056	< 0.00028
Vinyl chloride	0.21	0.9	< 0.00057	< 0.00047	< 0.00056	< 0.00059	< 0.0005	< 0.00048	< 0.00057	< 0.00054	< 0.00014
Xylene (total)	100	100	< 0.00023	< 0.00019	< 0.00022	< 0.00024	< 0.0002	< 0.00019	< 0.00023	< 0.00022	< 0.00013
Total TIC, Volatile	NS	NS	0	0	0	0	0	0	0	0	0

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-16 OU2-SB-16(0.0-1.6) 5/24/2012 0.0 - 0.6	OU2-SB-16 OU2-SB-16(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-17 OU2-SB-17(0.0-0.6) 5/24/2012 0.0 - 0.6	OU2-SB-17 OU2-DUP20120524(0.0-0.6) 5/24/2012 1.5 - 2.0	OU2-SB-17 OU2-SB-17(1.5-2.0) 5/24/2012 0.0 - 0.6	OU2-SB-17 OU2-DUP20120524(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-18 OU2-SB-18(0.0-0.6) 5/24/2012 1.5 - 2.0	OU2-SB-18 OU2-SB-18(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-19 OU2-SB-19(0.0-0.6) 5/24/2012 0.0 - 0.6
Semi-volatile Organic Compounds											
1,1'-Biphenyl	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-o-cresol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methyl phenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetophenone	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	1	3.9	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	1	3.9	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	0.33	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	14	59	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-16 OU2-SB-16(0.0-1.6) 5/24/2012 0.0 - 0.6	OU2-SB-16 OU2-SB-16(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-17 OU2-SB-17(0.0-0.6) 5/24/2012 0.0 - 0.6	OU2-SB-17 OU2-DUP20120524(0.0-0.6) 5/24/2012 1.5 - 2.0	OU2-SB-17 OU2-SB-17(1.5-2.0) 5/24/2012 0.0 - 0.6	OU2-SB-17 OU2-DUP20120524(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-18 OU2-SB-18(0.0-0.6) 5/24/2012 1.5 - 2.0	OU2-SB-18 OU2-SB-18(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-19 OU2-SB-19(0.0-0.6) 5/24/2012 0.0 - 0.6
Semi-volatile Organic Compounds											
Hexachlorocyclopentadiene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	2.4	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total TIC, Semi-Volatile	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides											
4,4'-DDD	2.6	13	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	1.8	8.9	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	1.7	7.9	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aldrin	0.019	0.097	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha-BHC	0.097	0.48	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane	0.91	4.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beta-BHC	0.072	0.36	NA	NA	NA	NA	NA	NA	NA	NA	NA
Camphechlor	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Delta-BHC	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides											
Dieldrin	0.039	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	4.8	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan II	4.8	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan Sulfate	4.8	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	2.2	11	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin Aldehyde	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin Ketone	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	0.28	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-Chlordane	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.42	2.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls											
Aroclor 1016	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1221	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1232	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1248	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1260	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-16 OU2-SB-16(0.0-1.6) 5/24/2012 0.0 - 0.6	OU2-SB-16 OU2-SB-16(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-17 OU2-SB-17(0.0-0.6) 5/24/2012 0.0 - 0.6	OU2-SB-17 OU2-DUP20120524(0.0-0.6) 5/24/2012 1.5 - 2.0	OU2-SB-17 OU2-SB-17(1.5-2.0) 5/24/2012 0.0 - 0.6	OU2-SB-17 OU2-DUP20120524(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-18 OU2-SB-18(0.0-0.6) 5/24/2012 1.5 - 2.0	OU2-SB-18 OU2-SB-18(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-19 OU2-SB-19(0.0-0.6) 5/24/2012 0.0 - 0.6
Metals											
Aluminum	NS	NS	5230	7590	22300	21900	22600	20700	14000	12400	9170
Antimony	NS	NS	< 2.4 J	< 2.5 J	< 2.6 J	< 2.5 J	< 2.4 J	< 2.4 J	< 2.4 J	< 2.3 J	< 2.2 J
Arsenic	16	16	< 2.4	3.6	4.4	4.4	4.5	3.8	3.3	3.2	2.6
Barium	350	400	< 24	37.3	53.1	53.1	61.7	63.6	36.8	35.4	34.4
Beryllium	14	72	0.38	0.66	0.83	0.83	0.75	0.65	0.73	0.7	0.54
Cadmium	2.5	4.3	< 0.61	< 0.64	< 0.66	< 0.64	< 0.6	< 0.61	< 0.6	< 0.58	< 0.56
Calcium	NS	NS	4840 J	3290 J	R	R	R	R	1120 J	1370 J	2050 J
Chromium	NS	NS	18.1	18	21.8	21.4	23.8	21.3	19.7	17	17.2
Cobalt	NS	NS	< 6.1	< 6.4	< 6.6	< 6.4	< 6	< 6.1	< 6	< 5.8	< 5.6
Copper	270	270	11.1	14.6	9.5	9.2	11.9	9.3	12.1	12.2	14.7
Iron	NS	NS	16200 J	13600 J	21700 J	21200 J	25300 J	22600 J	19200	17600	17800
Lead	400	400	7.5	87.7	16.3	20.2	8.7	7.7	15.5	20.7	10.1
Magnesium	NS	NS	3480 J	2540 J	2320 J	2240 J	3000 J	2480 J	2530 J	2370 J	2700 J
Manganese	2000	2000	186	279	176	180	158	125	195	242	319
Mercury	0.81	0.81	0.052	0.089	0.065	0.047	< 0.037	< 0.037	0.047	0.051	< 0.033
Nickel	140	310	8.5	11	11.3	11.1	12.8	10.8	12.5	10.9	11.5
Potassium	NS	NS	< 1200	< 1300	< 1300	< 1300	< 1200	< 1200	< 1200	< 1200	< 1100
Selenium	36	180	< 2.4	< 2.5	< 2.6	< 2.5	< 2.4	< 2.4	< 2.4	< 2.3	< 2.2
Silver	36	180	< 0.61	< 0.64	0.67	0.7	0.68	0.63	0.68	< 0.58	0.57
Sodium	NS	NS	< 1200	< 1300	< 1300	< 1300	< 1200	< 1200	< 1200	< 1200	< 1100
Thallium	NS	NS	< 1.2	< 1.3	< 1.3	< 1.3	< 1.2	< 1.2	< 1.2	< 1.2	< 1.1
Vanadium	NS	NS	31.9	22.5	37.6	37.4	39.9	36.6	30.5	28.8	28.6
Zinc	2200	10000	25.1	47.7	56.1	55.1	53.1	50.3	43.1	41	35.6
Other											
Cyanide	27	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
Solids, Percent	NS	NS	81.2	79.3	77.3	79.3	82.1	81.1	83.6	83.7	88.2

Notes:
Results reported in milligrams per kilogram (mg/kg).
Field Blank and Trip Blank reported in micrograms per liter (ug/l).
NS No standard
NA Not analyzed
J Estimated result
JN Estimated result
R Rejected result
UB Analyte considered non-detect at the listed value due to assor
Bold Result exceeds 375-6.8(b) residential use soil cleanup objecti
Shade Result exceeds 375-6.8(b) restricted residential use soil clean

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-19 OU2-SB-19(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-20 OU2-SB-20(0.0-0.6) 5/24/2012 0.0 - 0.6	OU2-SB-20 OU2-SB-20(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-21 OU2-SB-21 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-21 OU2-SB-21 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-22 OU2-SB-22 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-22 OU2-SB-22 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-23 OU2-SB-23 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-23 OU2-SB-23 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-24 OU2-SB-24 (0.0-0.6) 5/25/2012 0.0 - 0.6
Volatile Organic Compounds												
1,1,1-Trichloroethane	100	100	< 0.000099	< 0.00011	< 0.0001	< 0.000095	< 0.0001	< 0.00011	< 0.000093	< 0.00012	< 0.00011	< 0.00016
1,1,2,2-Tetrachloroethane	NS	NS	< 0.00012	< 0.00014	< 0.00013	< 0.00012	< 0.00013	< 0.00014	< 0.00012	< 0.00015	< 0.00014	< 0.0002
1,1,2-Trichloroethane	NS	NS	< 0.00016	< 0.00019	< 0.00017	< 0.00016	< 0.00017	< 0.00018	< 0.00015	< 0.0002	< 0.00019	< 0.00027
1,1-Dichloroethane	19	26	< 0.00013	< 0.00015	< 0.00013	< 0.00012	< 0.00013	< 0.00014	< 0.00012	< 0.00016	< 0.00015	< 0.00021
1,1-Dichloroethene	100	100	< 0.00024	< 0.00028	< 0.00025	< 0.00023	< 0.00025	< 0.00027	< 0.00023	< 0.00029	< 0.00027	< 0.00039
1,2,4-Trichlorobenzene	NS	NS	< 0.00013	< 0.00015	< 0.00014	< 0.00012	< 0.00013	< 0.00015	< 0.00012	< 0.00016	< 0.00015	< 0.00021
1,2-Dibromo-3-chloropropane	NS	NS	< 0.00083	< 0.00096	< 0.00087	< 0.0008	< 0.00086	< 0.00094	< 0.00078	< 0.001	< 0.00095	< 0.0014
1,2-Dibromoethane	NS	NS	< 0.00012	< 0.00014	< 0.00012	< 0.00011	< 0.00012	< 0.00013	< 0.00011	< 0.00014	< 0.00014	< 0.0002
1,2-Dichlorobenzene	100	100	< 0.00018	< 0.0002	< 0.00018	< 0.00017	< 0.00018	< 0.0002	< 0.00017	< 0.00022	< 0.0002	< 0.00029
1,2-Dichloroethane	2.3	3.1	< 0.00013	< 0.00015	< 0.00013	< 0.00012	< 0.00013	< 0.00014	< 0.00012	< 0.00015	< 0.00014	< 0.00021
1,2-Dichloropropane	NS	NS	< 0.00014	< 0.00017	< 0.00015	< 0.00014	< 0.00015	< 0.00016	< 0.00014	< 0.00018	< 0.00016	< 0.00024
1,3-Dichlorobenzene	17	49	< 0.00017	< 0.0002	< 0.00018	< 0.00017	< 0.00018	< 0.0002	< 0.00016	< 0.00021	< 0.0002	< 0.00029
1,4-Dichlorobenzene	9.8	13	< 0.00016	< 0.00019	< 0.00017	< 0.00016	< 0.00017	< 0.00019	< 0.00015	< 0.0002	< 0.00019	< 0.00027
2-Butanone (MEK)	100	100	< 0.0022	< 0.0026	< 0.0023	< 0.0021	< 0.0023	< 0.0025	< 0.0021	< 0.0027	< 0.0026	< 0.0037
2-Hexanone	NS	NS	< 0.00058	< 0.00067	< 0.00061	< 0.00056	< 0.0006	< 0.00066	< 0.00055	< 0.00071	< 0.00066	< 0.00096
4-Methyl-2-pentanone(MIBK)	NS	NS	< 0.0007	< 0.00081	< 0.00073	< 0.00067	< 0.00072	< 0.00079	< 0.00066	< 0.00085	< 0.0008	< 0.0012
Acetone	100	100	< 0.0016	< 0.0018	< 0.0017	0.0071 J	< 0.0016	0.062	< 0.0015	< 0.0019	< 0.0018	< 0.0026
Benzene	2.9	4.8	< 0.00011	< 0.00013	< 0.00012	< 0.00011	< 0.00011	< 0.00013	< 0.0001	< 0.00014	< 0.00013	< 0.00018
Bromodichloromethane	NS	NS	< 0.000098	< 0.00011	< 0.0001	< 0.000094	< 0.0001	< 0.00011	< 0.000092	< 0.00012	< 0.00011	< 0.00016
Bromoform	NS	NS	< 0.00014	< 0.00016	< 0.00015	< 0.00014	< 0.00015	< 0.00016	< 0.00013	< 0.00017	< 0.00016	< 0.00023
Bromomethane	NS	NS	< 0.00026	< 0.00029	< 0.00027	< 0.00024	< 0.00026	< 0.00029	< 0.00024	< 0.00031	< 0.00029	< 0.00042
Carbon disulfide	NS	NS	< 0.00011	< 0.00013	< 0.00011	< 0.0001	< 0.00011	< 0.00012	< 0.0001	< 0.00013	< 0.00013	< 0.00018
Carbon tetrachloride	1.4	2.4	< 0.00012	< 0.00014	< 0.00013	< 0.00012	< 0.00013	< 0.00014	< 0.00012	< 0.00015	< 0.00014	< 0.0002
Chlorobenzene	100	100	< 0.0001	< 0.00012	< 0.00011	< 0.000097	< 0.0001	< 0.00011	< 0.000095	< 0.00012	< 0.00012	< 0.00017
Chloroethane	NS	NS	< 0.00021	< 0.00024	< 0.00022	< 0.0002	< 0.00022	< 0.00024	< 0.0002	< 0.00026	< 0.00024	< 0.00035
Chloroform	10	49	< 0.000077	< 0.000089	< 0.000081	< 0.000074	< 0.00008	< 0.000087	< 0.000073	< 0.000094	< 0.000088	< 0.00013
Chloromethane	NS	NS	< 0.00017	< 0.0002	< 0.00018	< 0.00017	< 0.00018	< 0.0002	< 0.00016	< 0.00021	< 0.0002	< 0.00029
cis-1,2-Dichloroethene	59	100	< 0.00017	< 0.0002	< 0.00018	< 0.00016	< 0.00018	< 0.00019	< 0.00016	< 0.00021	< 0.0002	< 0.00028
cis-1,3-Dichloropropene	NS	NS	< 0.00013	< 0.00015	< 0.00014	< 0.00012	< 0.00013	< 0.00015	< 0.00012	< 0.00016	< 0.00015	< 0.00021
Cyclohexane	NS	NS	< 0.00012	< 0.00013	< 0.00012	< 0.00011	< 0.00012	< 0.00013	< 0.00011	< 0.00014	< 0.00013	< 0.00019
Dibromochloromethane	NS	NS	< 0.00015	< 0.00018	< 0.00016	< 0.00015	< 0.00016	< 0.00017	< 0.00014	< 0.00019	< 0.00018	< 0.00025
Dichlorodifluoromethane	NS	NS	< 0.00021	< 0.00024	< 0.00022	< 0.0002	< 0.00022	< 0.00024	< 0.0002	< 0.00026	< 0.00024	< 0.00035
Ethylbenzene	30	41	< 0.00025	< 0.00028	< 0.00026	< 0.00024	< 0.00025	< 0.00028	< 0.00023	< 0.0003	< 0.00028	< 0.0004
Freon 113	NS	NS	< 0.0004	< 0.00046	< 0.00042	< 0.00039	< 0.00041	< 0.00045	< 0.00038	< 0.00049	< 0.00046	< 0.00066
Isopropylbenzene	NS	NS	< 0.00007	< 0.00008	< 0.000073	< 0.000067	< 0.000072	< 0.000078	< 0.000065	< 0.000085	< 0.000079	< 0.00011
Methyl Acetate	NS	NS	< 0.0024	< 0.0028	< 0.0025	< 0.0023	< 0.0025	< 0.0027	< 0.0023	< 0.003	< 0.0028	< 0.004
Methyl Tert Butyl Ether	62	100	< 0.00022	0.0003 J	< 0.00023	< 0.00021	< 0.00023	< 0.00025	< 0.00021	< 0.00027	< 0.00025	< 0.00036
Methylcyclohexane	NS	NS	< 0.00016	< 0.00018	< 0.00017	< 0.00015	< 0.00016	< 0.00018	< 0.00015	< 0.00019	< 0.00018	< 0.00026
Methylene chloride	51	100	< 0.0012	< 0.0014	< 0.0012	< 0.0011	< 0.0012	< 0.0013	< 0.0011	< 0.0014	< 0.0014	< 0.002
Styrene	NS	NS	< 0.000086	< 0.000099	< 0.00009	< 0.000082	< 0.000088	< 0.000097	< 0.00008	< 0.0001	< 0.000098	< 0.00014
Tetrachloroethene	5.5	19	< 0.00016	< 0.00018	< 0.00017	< 0.00015	< 0.00017	< 0.00018	< 0.00015	< 0.0002	< 0.00018	< 0.00026
Toluene	100	100	0.0013	0.0013	< 0.0001	0.00056 J	< 0.0001	0.00087 J	0.00041 J	< 0.00012	< 0.00011	0.00038 J
trans-1,2-Dichloroethene	100	100	< 0.00022	< 0.00026	< 0.00023	< 0.00021	< 0.00023	< 0.00025	< 0.00021	< 0.00027	< 0.00025	< 0.00037
trans-1,3-Dichloropropene	NS	NS	< 0.00015	< 0.00017	< 0.00015	< 0.00014	< 0.00015	< 0.00016	< 0.00014	< 0.00018	< 0.00017	< 0.00024
Trichloroethene	10	21	< 0.00016	< 0.00019	< 0.00017	< 0.00016	< 0.00017	< 0.00018	< 0.00015	< 0.0002	< 0.00019	< 0.00027
Trichlorofluoromethane	NS	NS	< 0.00028	< 0.00032	< 0.00029	< 0.00027	< 0.00029	< 0.00031	< 0.00026	< 0.00034	< 0.00032	< 0.00046
Vinyl chloride	0.21	0.9	< 0.00013	< 0.00015	< 0.00014	< 0.00013	< 0.00014	< 0.00015	< 0.00013	< 0.00016	< 0.00015	< 0.00022
Xylene (total)	100	100	< 0.00013	< 0.00015	< 0.00014	< 0.00012	< 0.00013	< 0.00015	< 0.00012	< 0.00016	< 0.00015	< 0.00021
Total TIC, Volatile	NS	NS	0	0	0	0	0	0.52 JN	0	0	0	0

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-19 OU2-SB-19(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-20 OU2-SB-20(0.0-0.6) 5/24/2012 0.0 - 0.6	OU2-SB-20 OU2-SB-20(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-21 OU2-SB-21 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-21 OU2-SB-21 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-22 OU2-SB-22 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-22 OU2-SB-22 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-23 OU2-SB-23 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-23 OU2-SB-23 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-24 OU2-SB-24 (0.0-0.6) 5/25/2012 0.0 - 0.6
Semi-volatile Organic Compounds												
1,1'-Biphenyl	NS	NS	NA	NA	NA	NA	NA	< 0.0043	< 0.0039	NA	NA	NA
2,4,5-Trichlorophenol	NS	NS	NA	NA	NA	NA	NA	< 0.043	< 0.039	NA	NA	NA
2,4,6-Trichlorophenol	NS	NS	NA	NA	NA	NA	NA	< 0.035	< 0.031	NA	NA	NA
2,4-Dichlorophenol	NS	NS	NA	NA	NA	NA	NA	< 0.06	< 0.054	NA	NA	NA
2,4-Dimethylphenol	NS	NS	NA	NA	NA	NA	NA	< 0.062	< 0.056	NA	NA	NA
2,4-Dinitrophenol	NS	NS	NA	NA	NA	NA	NA	< 0.045	< 0.041	NA	NA	NA
2,4-Dinitrotoluene	NS	NS	NA	NA	NA	NA	NA	< 0.016	< 0.015	NA	NA	NA
2,6-Dinitrotoluene	NS	NS	NA	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA	NA
2-Chloronaphthalene	NS	NS	NA	NA	NA	NA	NA	< 0.012	< 0.01	NA	NA	NA
2-Chlorophenol	NS	NS	NA	NA	NA	NA	NA	< 0.038	< 0.034	NA	NA	NA
2-Methylnaphthalene	NS	NS	NA	NA	NA	NA	NA	< 0.021	< 0.019	NA	NA	NA
2-Methylphenol	100	100	NA	NA	NA	NA	NA	< 0.042	< 0.038	NA	NA	NA
2-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	< 0.016	< 0.015	NA	NA	NA
2-Nitrophenol	NS	NS	NA	NA	NA	NA	NA	< 0.039	< 0.035	NA	NA	NA
3&4-Methylphenol	NS	NS	NA	NA	NA	NA	NA	< 0.047	< 0.043	NA	NA	NA
3,3'-Dichlorobenzidine	NS	NS	NA	NA	NA	NA	NA	< 0.0094	< 0.0085	NA	NA	NA
3-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	< 0.015	< 0.013	NA	NA	NA
4,6-Dinitro-o-cresol	NS	NS	NA	NA	NA	NA	NA	< 0.045	< 0.041	NA	NA	NA
4-Bromophenyl phenyl ether	NS	NS	NA	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA	NA
4-Chloro-3-methyl phenol	NS	NS	NA	NA	NA	NA	NA	< 0.037	< 0.033	NA	NA	NA
4-Chloroaniline	NS	NS	NA	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA
4-Chlorophenyl phenyl ether	NS	NS	NA	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA
4-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA	NA
4-Nitrophenol	NS	NS	NA	NA	NA	NA	NA	< 0.063	< 0.057	NA	NA	NA
Acenaphthene	100	100	NA	NA	NA	NA	NA	< 0.011	< 0.0097	NA	NA	NA
Acenaphthylene	100	100	NA	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA
Acetophenone	NS	NS	NA	NA	NA	NA	NA	< 0.0065	< 0.0059	NA	NA	NA
Anthracene	100	100	NA	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA	NA
Atrazine	NS	NS	NA	NA	NA	NA	NA	< 0.0073	< 0.0066	NA	NA	NA
Benzaldehyde	NS	NS	NA	NA	NA	NA	NA	< 0.0086	< 0.0077	NA	NA	NA
Benzo(a)anthracene	1	1	NA	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA
Benzo(b)fluoranthene	1	1	NA	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA
Benzo(g,h,i)perylene	100	100	NA	NA	NA	NA	NA	< 0.014	< 0.012	NA	NA	NA
Benzo(k)fluoranthene	1	3.9	NA	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA	NA
bis(2-Chloroethoxy)methane	NS	NS	NA	NA	NA	NA	NA	< 0.015	< 0.014	NA	NA	NA
bis(2-Chloroethyl)ether	NS	NS	NA	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA
bis(2-Chloroisopropyl)ether	NS	NS	NA	NA	NA	NA	NA	< 0.011	< 0.0099	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NS	NS	NA	NA	NA	NA	NA	< 0.033	< 0.03	NA	NA	NA
Butyl benzyl phthalate	NS	NS	NA	NA	NA	NA	NA	< 0.022	< 0.019	NA	NA	NA
Caprolactam	NS	NS	NA	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA
Carbazole	NS	NS	NA	NA	NA	NA	NA	< 0.017	< 0.016	NA	NA	NA
Chrysene	1	3.9	NA	NA	NA	NA	NA	< 0.013	< 0.011	NA	NA	NA
Dibenzo(a,h)anthracene	0.33	0.33	NA	NA	NA	NA	NA	< 0.013	< 0.011	NA	NA	NA
Dibenzofuran	14	59	NA	NA	NA	NA	NA	< 0.011	< 0.0099	NA	NA	NA
Diethyl phthalate	NS	NS	NA	NA	NA	NA	NA	< 0.013	< 0.011	NA	NA	NA
Dimethyl phthalate	NS	NS	NA	NA	NA	NA	NA	0.0963	0.186	NA	NA	NA
Di-n-butyl phthalate	NS	NS	NA	NA	NA	NA	NA	< 0.0083	< 0.0074	NA	NA	NA
Di-n-octyl phthalate	NS	NS	NA	NA	NA	NA	NA	< 0.018	< 0.016	NA	NA	NA
Fluoranthene	100	100	NA	NA	NA	NA	NA	< 0.016	< 0.015	NA	NA	NA
Fluorene	100	100	NA	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA
Hexachlorobenzene	0.33	1.2	NA	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA
Hexachlorobutadiene	NS	NS	NA	NA	NA	NA	NA	< 0.01	< 0.0093	NA	NA	NA

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Soil Sampling Report
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Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-19 OU2-SB-19(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-20 OU2-SB-20(0.0-0.6) 5/24/2012 0.0 - 0.6	OU2-SB-20 OU2-SB-20(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-21 OU2-SB-21 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-21 OU2-SB-21 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-22 OU2-SB-22 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-22 OU2-SB-22 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-23 OU2-SB-23 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-23 OU2-SB-23 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-24 OU2-SB-24 (0.0-0.6) 5/25/2012 0.0 - 0.6
Semi-volatile Organic Compounds												
Hexachlorocyclopentadiene	NS	NS	NA	NA	NA	NA	NA	< 0.038	< 0.034	NA	NA	NA
Hexachloroethane	NS	NS	NA	NA	NA	NA	NA	< 0.01	< 0.0093	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.5	0.5	NA	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA	NA
Isophorone	NS	NS	NA	NA	NA	NA	NA	< 0.01	< 0.009	NA	NA	NA
Naphthalene	100	100	NA	NA	NA	NA	NA	< 0.01	< 0.0091	NA	NA	NA
Nitrobenzene	NS	NS	NA	NA	NA	NA	NA	< 0.011	< 0.0097	NA	NA	NA
N-Nitroso-di-n-propylamine	NS	NS	NA	NA	NA	NA	NA	< 0.0091	< 0.0082	NA	NA	NA
N-Nitrosodiphenylamine	NS	NS	NA	NA	NA	NA	NA	< 0.022	< 0.02	NA	NA	NA
Pentachlorophenol	2.4	6.7	NA	NA	NA	NA	NA	< 0.064 J	< 0.057 J	NA	NA	NA
Phenanthrene	100	100	NA	NA	NA	NA	NA	< 0.017	< 0.015	NA	NA	NA
Phenol	100	100	NA	NA	NA	NA	NA	< 0.039	< 0.035	NA	NA	NA
Pyrene	100	100	NA	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA	NA
Total TIC, Semi-Volatile	NS	NS	NA	NA	NA	NA	NA	0.85 JN	0.17 JN	NA	NA	NA
Pesticides												
4,4'-DDD	2.6	13	NA	NA	NA	NA	NA	< 0.00039	< 0.00036	NA	NA	NA
4,4'-DDE	1.8	8.9	NA	NA	NA	NA	NA	< 0.00045	< 0.00041	NA	NA	NA
4,4'-DDT	1.7	7.9	NA	NA	NA	NA	NA	< 0.00056	< 0.00051	NA	NA	NA
Aldrin	0.019	0.097	NA	NA	NA	NA	NA	< 0.00038	< 0.00035	NA	NA	NA
alpha-BHC	0.097	0.48	NA	NA	NA	NA	NA	< 0.00057	< 0.00052	NA	NA	NA
alpha-Chlordane	0.91	4.2	NA	NA	NA	NA	NA	< 0.0005	< 0.00045	NA	NA	NA
Beta-BHC	0.072	0.36	NA	NA	NA	NA	NA	< 0.00054	< 0.00049	NA	NA	NA
Camphechlor	NS	NS	NA	NA	NA	NA	NA	< 0.0096	< 0.0088	NA	NA	NA
Delta-BHC	100	100	NA	NA	NA	NA	NA	< 0.00045	< 0.00041	NA	NA	NA
Pesticides												
Dieldrin	0.039	0.2	NA	NA	NA	NA	NA	< 0.00059	< 0.00054	NA	NA	NA
Endosulfan I	4.8	24	NA	NA	NA	NA	NA	< 0.00037	< 0.00034	NA	NA	NA
Endosulfan II	4.8	24	NA	NA	NA	NA	NA	< 0.0005	< 0.00046	NA	NA	NA
Endosulfan Sulfate	4.8	24	NA	NA	NA	NA	NA	< 0.00069	< 0.00063	NA	NA	NA
Endrin	2.2	11	NA	NA	NA	NA	NA	< 0.00039	< 0.00036	NA	NA	NA
Endrin Aldehyde	NS	NS	NA	NA	NA	NA	NA	< 0.00072	< 0.00066	NA	NA	NA
Endrin Ketone	NS	NS	NA	NA	NA	NA	NA	< 0.0005	< 0.00045	NA	NA	NA
gamma-BHC (Lindane)	0.28	1.3	NA	NA	NA	NA	NA	< 0.00035	< 0.00032	NA	NA	NA
Gamma-Chlordane	NS	NS	NA	NA	NA	NA	NA	< 0.00039	< 0.00036	NA	NA	NA
Heptachlor	0.42	2.1	NA	NA	NA	NA	NA	< 0.00047	< 0.00043	NA	NA	NA
Heptachlor Epoxide	NS	NS	NA	NA	NA	NA	NA	< 0.00038	< 0.00034	NA	NA	NA
Methoxychlor	NS	NS	NA	NA	NA	NA	NA	< 0.00054	< 0.00049	NA	NA	NA
Polychlorinated Biphenyls												
Aroclor 1016	1	1	NA	NA	NA	NA	NA	< 0.011	< 0.0098	NA	NA	NA
Aroclor 1221	1	1	NA	NA	NA	NA	NA	< 0.024	< 0.023	NA	NA	NA
Aroclor 1232	1	1	NA	NA	NA	NA	NA	< 0.021	< 0.019	NA	NA	NA
Aroclor 1242	1	1	NA	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA	NA
Aroclor 1248	1	1	NA	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA
Aroclor 1254	1	1	NA	NA	NA	NA	NA	< 0.019	< 0.018	NA	NA	NA
Aroclor 1260	1	1	NA	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA	NA

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-19 OU2-SB-19(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-20 OU2-SB-20(0.0-0.6) 5/24/2012 0.0 - 0.6	OU2-SB-20 OU2-SB-20(1.5-2.0) 5/24/2012 1.5 - 2.0	OU2-SB-21 OU2-SB-21 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-21 OU2-SB-21 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-22 OU2-SB-22 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-22 OU2-SB-22 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-23 OU2-SB-23 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-23 OU2-SB-23 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-24 OU2-SB-24 (0.0-0.6) 5/25/2012 0.0 - 0.6
Metals												
Aluminum	NS	NS	9270	7220	5790	13700	13000	10900	8810	6060	5810	12200
Antimony	NS	NS	< 2.3 J	< 2.5 J	< 2.2 J	< 2.5	< 2.4	< 2.5	< 2.2	< 2.3	< 2.2	< 2.8
Arsenic	16	16	2.7	< 2.5	< 2.2	3.8	3.4	3	2.4	2.4	< 2.2	6.1
Barium	350	400	36.1	45	29.7	49.7	51.3	56.2	40.8	31.8	24.6	79.9
Beryllium	14	72	0.59	0.48	0.39	0.76	0.73	0.7	0.63	0.56	0.48	1.1
Cadmium	2.5	4.3	< 0.56	< 0.63	< 0.54	< 0.63	< 0.6	< 0.63	< 0.56	< 0.56	< 0.56	< 0.69
Calcium	NS	NS	2370 J	2440 J	2320 J	1870	1940	2240	2340	1620	1460	2570
Chromium	NS	NS	17.1	18.2	18.3	23.5	25.5	20.6	18.9	26.6	17.1	33.1
Cobalt	NS	NS	5.9	< 6.3	< 5.4	7.8	7.9	6.6	5.7	< 5.6	< 5.6	9
Copper	270	270	15.6	16.9	15.4	25.3	101	22	17.3	16.1	14.4	38.7
Iron	NS	NS	19300	17900	14800	24100	22700	21200	18200	17000	18300	23600
Lead	400	400	6.2	12.3	10.5	21.8	31.2	16.8	7.3	26.1	97.4	99
Magnesium	NS	NS	3190 J	3030 J	2590 J	4000	3910	3510	2950	2520	2440	3370
Manganese	2000	2000	365	288	237	363	416	406	296	429	385	1010
Mercury	0.81	0.81	< 0.037	< 0.038	< 0.035	0.059	0.071	0.055	< 0.038	0.055	< 0.036	0.28
Nickel	140	310	11.9	11.9	11.3	17.3	17.8	15	13.8	11	10.1	18.4
Potassium	NS	NS	< 1100	1560	< 1100	< 1300	< 1200	1350	< 1100	< 1100	< 1100	< 1400
Selenium	36	180	< 2.3	< 2.5	< 2.2	< 2.5	< 2.4	< 2.5	< 2.2	< 2.3	< 2.2	< 2.8
Silver	36	180	< 0.56	< 0.63	< 0.54	< 0.63	0.74	< 0.63	< 0.56	0.99	0.86	0.76
Sodium	NS	NS	< 1100	< 1300	< 1100	< 1300	< 1200	< 1300	< 1100	< 1100	< 1100	< 1400
Thallium	NS	NS	< 1.1	< 1.3	< 1.1	< 1.3	< 1.2	< 1.3	< 1.1	< 1.1	< 1.1	< 1.4
Vanadium	NS	NS	28.1	33.7	29.5	38.3	35.5	33	28.3	25	27.2	43
Zinc	2200	10000	34.2	35.9	29.9	54	97.5	50.2	38.6	64.5	43.3	104
Other												
Cyanide	27	27	NA	NA	NA	NA	NA	< 0.29	< 0.26	NA	NA	NA
Solids, Percent	NS	NS	86.2	83.1	91.3	80.8	85	80.3	86.3	89.7	90	72.3

Notes:
Results reported in milligrams per kilogram (mg/kg).
Field Blank and Trip Blank reported in micrograms per liter (ug/l).
NS No standard
NA Not analyzed
J Estimated result
JN Estimated result
R Rejected result
UB Analyte considered non-detect at the listed value due to assor
Bold Result exceeds 375-6.8(b) residential use soil cleanup objecti
Shade Result exceeds 375-6.8(b) restricted residential use soil clean

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-24 OU2-SB-24 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-25 OU2-SB-25 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-25 OU2-SB-25 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-26 OU2-SB-26 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-26 OU2-SB-26 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-27 OU2-SB-27 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-27 OU2-SB-27 (1.5-2.0) 5/25/2012 1.5 - 2.0
Volatile Organic Compounds									
1,1,1-Trichloroethane	100	100	< 0.00016	< 0.00014	< 0.00019	< 0.00014	< 0.00014	< 0.00015	< 0.00015
1,1,2,2-Tetrachloroethane	NS	NS	< 0.0002	< 0.00017	< 0.00024	< 0.00017	< 0.00018	< 0.00019	< 0.00018
1,1,2-Trichloroethane	NS	NS	< 0.00026	< 0.00023	< 0.00031	< 0.00023	< 0.00024	< 0.00025	< 0.00024
1,1-Dichloroethane	19	26	< 0.0002	< 0.00018	< 0.00024	< 0.00018	< 0.00019	< 0.0002	< 0.00019
1,1-Dichloroethene	100	100	< 0.00038	< 0.00033	< 0.00046	< 0.00034	< 0.00035	< 0.00037	< 0.00036
1,2,4-Trichlorobenzene	NS	NS	< 0.00021	< 0.00018	< 0.00025	< 0.00018	< 0.00019	< 0.0002	< 0.00019
1,2-Dibromo-3-chloropropane	NS	NS	< 0.0013	< 0.0012	< 0.0016	< 0.0012	< 0.0012	< 0.0013	< 0.0012
1,2-Dibromoethane	NS	NS	< 0.00019	< 0.00017	< 0.00023	< 0.00017	< 0.00017	< 0.00018	< 0.00018
1,2-Dichlorobenzene	100	100	< 0.00028	< 0.00025	< 0.00034	< 0.00025	< 0.00026	< 0.00027	< 0.00026
1,2-Dichloroethane	2.3	3.1	< 0.0002	< 0.00018	< 0.00024	< 0.00018	< 0.00018	< 0.00019	< 0.00019
1,2-Dichloropropane	NS	NS	< 0.00023	< 0.0002	< 0.00027	< 0.0002	< 0.00021	< 0.00022	< 0.00022
1,3-Dichlorobenzene	17	49	< 0.00028	< 0.00024	< 0.00033	< 0.00025	< 0.00025	< 0.00027	< 0.00026
1,4-Dichlorobenzene	9.8	13	< 0.00026	< 0.00023	< 0.00031	< 0.00023	< 0.00024	< 0.00025	< 0.00025
2-Butanone (MEK)	100	100	< 0.0036	< 0.0031	< 0.0043	< 0.0031	< 0.0032	< 0.0034	< 0.0033
2-Hexanone	NS	NS	< 0.00093	< 0.00081	< 0.0011	< 0.00082	< 0.00084	< 0.00089	< 0.00087
4-Methyl-2-pentanone(MIBK)	NS	NS	< 0.0011	< 0.00098	< 0.0013	< 0.00099	< 0.001	< 0.0011	< 0.0011
Acetone	100	100	< 0.0025	0.0365	0.0971	< 0.0022	< 0.0023	< 0.0024	< 0.0024
Benzene	2.9	4.8	< 0.00018	< 0.00015	< 0.00021	< 0.00016	< 0.00016	< 0.00017	< 0.00017
Bromodichloromethane	NS	NS	< 0.00016	< 0.00014	< 0.00019	< 0.00014	< 0.00014	< 0.00015	< 0.00015
Bromoform	NS	NS	< 0.00023	< 0.0002	< 0.00027	< 0.0002	< 0.00021	< 0.00022	< 0.00021
Bromomethane	NS	NS	< 0.00041	< 0.00036	< 0.00049	< 0.00036	< 0.00037	< 0.00039	< 0.00038
Carbon disulfide	NS	NS	< 0.00017	< 0.00015	< 0.00021	< 0.00015	< 0.00016	< 0.00017	< 0.00016
Carbon tetrachloride	1.4	2.4	< 0.0002	< 0.00017	< 0.00024	< 0.00017	< 0.00018	< 0.00019	< 0.00019
Chlorobenzene	100	100	< 0.00016	< 0.00014	< 0.00019	< 0.00014	< 0.00015	< 0.00015	< 0.00015
Chloroethane	NS	NS	< 0.00034	< 0.0003	< 0.0004	< 0.0003	< 0.00031	< 0.00032	< 0.00032
Chloroform	10	49	< 0.00012	< 0.00011	< 0.00015	< 0.00011	< 0.00011	< 0.00012	< 0.00012
Chloromethane	NS	NS	< 0.00028	< 0.00024	< 0.00033	< 0.00024	< 0.00025	< 0.00027	< 0.00026
cis-1,2-Dichloroethene	59	100	< 0.00027	< 0.00024	< 0.00033	< 0.00024	< 0.00025	< 0.00026	< 0.00026
cis-1,3-Dichloropropene	NS	NS	< 0.00021	< 0.00018	< 0.00025	< 0.00018	< 0.00019	< 0.0002	< 0.00019
Cyclohexane	NS	NS	< 0.00019	< 0.00016	< 0.00022	< 0.00016	< 0.00017	< 0.00018	< 0.00017
Dibromochloromethane	NS	NS	< 0.00024	< 0.00021	< 0.00029	< 0.00022	< 0.00022	< 0.00023	< 0.00023
Dichlorodifluoromethane	NS	NS	< 0.00034	< 0.0003	< 0.00041	< 0.0003	< 0.00031	< 0.00033	< 0.00032
Ethylbenzene	30	41	< 0.00039	< 0.00034	< 0.00047	< 0.00035	< 0.00036	< 0.00038	< 0.00037
Freon 113	NS	NS	< 0.00064	< 0.00056	< 0.00077	< 0.00057	< 0.00058	< 0.00062	< 0.0006
Isopropylbenzene	NS	NS	< 0.00011	< 0.000097	< 0.00013	< 0.000098	< 0.0001	< 0.00011	< 0.0001
Methyl Acetate	NS	NS	< 0.0039	< 0.0034	< 0.0046	< 0.0034	< 0.0035	< 0.0037	< 0.0036
Methyl Tert Butyl Ether	62	100	< 0.00035	< 0.00031	< 0.00042	< 0.00031	< 0.00032	< 0.00034	< 0.00033
Methylcyclohexane	NS	NS	< 0.00025	< 0.00022	< 0.0003	< 0.00022	< 0.00023	< 0.00024	< 0.00024
Methylene chloride	51	100	< 0.0019	< 0.0017	< 0.0023	0.0042 J	< 0.0017	< 0.0018	< 0.0018
Styrene	NS	NS	< 0.00014	< 0.00012	< 0.00016	< 0.00012	< 0.00012	< 0.00013	< 0.00013
Tetrachloroethene	5.5	19	< 0.00026	< 0.00022	< 0.00031	< 0.00023	< 0.00023	< 0.00025	< 0.00024
Toluene	100	100	0.00045 J	0.00035 J	< 0.00019	0.002	< 0.00014	0.00034 J	< 0.00015
trans-1,2-Dichloroethene	100	100	< 0.00036	< 0.00031	< 0.00042	< 0.00031	< 0.00032	< 0.00034	< 0.00033
trans-1,3-Dichloropropene	NS	NS	< 0.00023	< 0.0002	< 0.00028	< 0.0002	< 0.00021	< 0.00022	< 0.00022
Trichloroethene	10	21	< 0.00026	< 0.00023	< 0.00031	< 0.00023	< 0.00024	< 0.00025	< 0.00024
Trichlorofluoromethane	NS	NS	< 0.00044	< 0.00039	< 0.00053	< 0.00039	< 0.0004	< 0.00043	< 0.00042
Vinyl chloride	0.21	0.9	< 0.00022	< 0.00019	< 0.00026	< 0.00019	< 0.0002	< 0.00021	< 0.0002
Xylene (total)	100	100	< 0.00021	< 0.00018	< 0.00025	< 0.00018	< 0.00019	< 0.0002	< 0.00019
Total TIC, Volatile	NS	NS	0	0	0	0	0	0	0

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-24 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-25 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-25 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-26 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-26 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-27 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-27 (1.5-2.0) 5/25/2012 1.5 - 2.0
Semi-volatile Organic Compounds									
1,1'-Biphenyl	NS	NS	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NS	NS	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NS	NS	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NS	NS	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NS	NS	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NS	NS	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	100	100	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	NS	NS	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NS	NS	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-o-cresol	NS	NS	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NS	NS	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methyl phenol	NS	NS	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NS	NS	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	100	100	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	100	100	NA	NA	NA	NA	NA	NA	NA
Acetophenone	NS	NS	NA	NA	NA	NA	NA	NA	NA
Anthracene	100	100	NA	NA	NA	NA	NA	NA	NA
Atrazine	NS	NS	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NS	NS	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1	1	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	1	1	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	100	100	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	1	3.9	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NS	NS	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NS	NS	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether	NS	NS	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NS	NS	NA	NA	NA	NA	NA	NA	NA
Carbazole	NS	NS	NA	NA	NA	NA	NA	NA	NA
Chrysene	1	3.9	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	0.33	0.33	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	14	59	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	100	100	NA	NA	NA	NA	NA	NA	NA
Fluorene	100	100	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	1.2	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NS	NS	NA	NA	NA	NA	NA	NA	NA

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-24 OU2-SB-24 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-25 OU2-SB-25 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-25 OU2-SB-25 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-26 OU2-SB-26 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-26 OU2-SB-26 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-27 OU2-SB-27 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-27 OU2-SB-27 (1.5-2.0) 5/25/2012 1.5 - 2.0
Semi-volatile Organic Compounds									
Hexachlorocyclopentadiene	NS	NS	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NS	NS	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.5	0.5	NA	NA	NA	NA	NA	NA	NA
Isophorone	NS	NS	NA	NA	NA	NA	NA	NA	NA
Naphthalene	100	100	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NS	NS	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NS	NS	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NS	NS	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	2.4	6.7	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	100	100	NA	NA	NA	NA	NA	NA	NA
Phenol	100	100	NA	NA	NA	NA	NA	NA	NA
Pyrene	100	100	NA	NA	NA	NA	NA	NA	NA
Total TIC, Semi-Volatile	NS	NS	NA	NA	NA	NA	NA	NA	NA
Pesticides									
4,4'-DDD	2.6	13	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	1.8	8.9	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	1.7	7.9	NA	NA	NA	NA	NA	NA	NA
Aldrin	0.019	0.097	NA	NA	NA	NA	NA	NA	NA
alpha-BHC	0.097	0.48	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane	0.91	4.2	NA	NA	NA	NA	NA	NA	NA
Beta-BHC	0.072	0.36	NA	NA	NA	NA	NA	NA	NA
Camphechlor	NS	NS	NA	NA	NA	NA	NA	NA	NA
Delta-BHC	100	100	NA	NA	NA	NA	NA	NA	NA
Pesticides									
Dieldrin	0.039	0.2	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	4.8	24	NA	NA	NA	NA	NA	NA	NA
Endosulfan II	4.8	24	NA	NA	NA	NA	NA	NA	NA
Endosulfan Sulfate	4.8	24	NA	NA	NA	NA	NA	NA	NA
Endrin	2.2	11	NA	NA	NA	NA	NA	NA	NA
Endrin Aldehyde	NS	NS	NA	NA	NA	NA	NA	NA	NA
Endrin Ketone	NS	NS	NA	NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	0.28	1.3	NA	NA	NA	NA	NA	NA	NA
Gamma-Chlordane	NS	NS	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.42	2.1	NA	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide	NS	NS	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	NS	NS	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls									
Aroclor 1016	1	1	NA	NA	NA	NA	NA	NA	NA
Aroclor 1221	1	1	NA	NA	NA	NA	NA	NA	NA
Aroclor 1232	1	1	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	1	1	NA	NA	NA	NA	NA	NA	NA
Aroclor 1248	1	1	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254	1	1	NA	NA	NA	NA	NA	NA	NA
Aroclor 1260	1	1	NA	NA	NA	NA	NA	NA	NA

Table 1. Summary of Soil Analytical Results
Soil Sampling Report
Ramapo Paint Sludge Site - Operable Unit 2 (OU-2)
Rockland County, New York

Location ID Sample ID Sample Date Depth Interval	375-6.8(b) Residential	375-6.8(b) Restricted Residential	OU2-SB-24 OU2-SB-24 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-25 OU2-SB-25 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-25 OU2-SB-25 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-26 OU2-SB-26 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-26 OU2-SB-26 (1.5-2.0) 5/25/2012 1.5 - 2.0	OU2-SB-27 OU2-SB-27 (0.0-0.6) 5/25/2012 0.0 - 0.6	OU2-SB-27 OU2-SB-27 (1.5-2.0) 5/25/2012 1.5 - 2.0
Metals									
Aluminum	NS	NS	12300	21000	34000	30000	32400	15100	14600
Antimony	NS	NS	< 2.7	< 3	< 3	< 2.7	< 2.9	< 2.8	< 2.9
Arsenic	16	16	7	7.1	7.8	6	6.3	3.4	< 2.9
Barium	350	400	80.5	74.9	89.4	54.5	110	33.7	41.2
Beryllium	14	72	1.2	0.62	0.84	0.6	0.62	0.54	0.5
Cadmium	2.5	4.3	< 0.67	< 0.74	< 0.75	< 0.66	< 0.72	< 0.71	< 0.71
Calcium	NS	NS	2570	1010	< 750	< 660	< 720	875	1200
Chromium	NS	NS	32.2	31.2	44.3	30.1	37.6	23.9	22.8
Cobalt	NS	NS	9.5	7.8	13.6	9	9.7	< 7.1	< 7.1
Copper	270	270	40.2	31.1	38.9	20.9	20.7	15.3	10.7
Iron	NS	NS	24100	24600	30300	26300	30000	19300	14900
Lead	400	400	110	91.6	42.8	12.5	16.3	26	11.8
Magnesium	NS	NS	3410	3590	3540	2580	4630	2960	3180
Manganese	2000	2000	1030	180	225	128	136	92.9	86.6
Mercury	0.81	0.81	0.3	0.11	0.1	0.12	0.11	0.25	0.074
Nickel	140	310	19.4	20.5	30.7	23.7	24.4	12.9	12.6
Potassium	NS	NS	< 1300	< 1500	< 1500	< 1300	3010	< 1400	< 1400
Selenium	36	180	< 2.7	< 3	< 3	< 2.7	< 2.9	< 2.8	< 2.9
Silver	36	180	1.5	1	1.2	0.76	< 0.72	< 0.71	0.74
Sodium	NS	NS	< 1300	< 1500	< 1500	< 1300	< 1400	< 1400	< 1400
Thallium	NS	NS	< 1.3	< 1.5	< 1.5	< 1.3	< 1.4	< 1.4	< 1.4
Vanadium	NS	NS	40	50.6	60.1	50.4	78.2	38.4	34.3
Zinc	2200	10000	112	53.6	73.1	56.6	67.3	46.4	48.1
Other									
Cyanide	27	27	NA	NA	NA	NA	NA	NA	NA
Solids, Percent	NS	NS	72.8	69.8	65.2	74.6	70.8	72.8	71.4

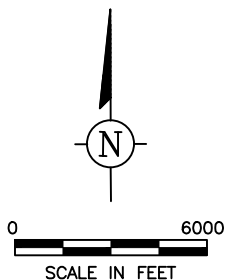
Notes:
Results reported in milligrams per kilogram (mg/kg).
Field Blank and Trip Blank reported in micrograms per liter (ug/l).
NS No standard
NA Not analyzed
J Estimated result
JN Estimated result
R Rejected result
UB Analyte considered non-detect at the listed value due to assay
Bold Result exceeds 375-6.8(b) residential use soil cleanup objective
Shade Result exceeds 375-6.8(b) restricted residential use soil cleanup objective

Figures

PROJECTNAME: ---

XREFS:
 IMAGES:
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 04107442.TIF
 04107481.TIF
 04107482.TIF

SOURCE:
 USGS 7.5 MIN.:
 SLOATSBURG QUADRANGLE, SLOATSBURG, NY-NJ, 1952,
 PARK RIDGE QUADRANGLE, PARK RIDGE, NJ-NY, 1955,
 RAMSEY QUADRANGLE, RAMSEY, NJ-NY, 1955,
 THIELS QUADRANGLE, THIELS, NJ-NY, 1955

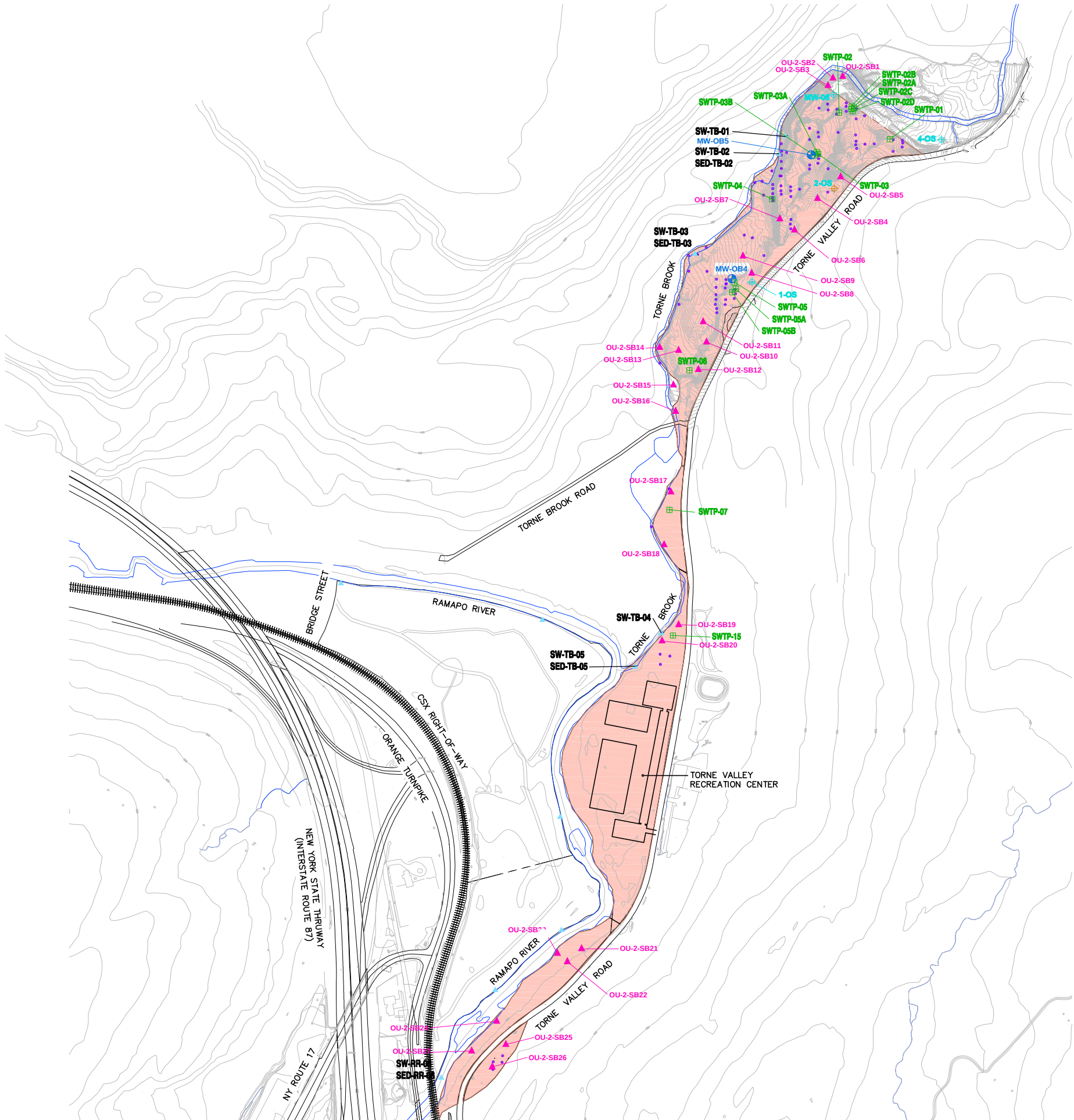


RAMAPO PAINT SLUDGE SITE - OPERABLE UNIT 2 ROCKLAND COUNTY, NEW YORK SOIL SAMPLING REPORT

LOCATION MAP

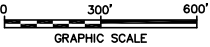


FIGURE
1



- LEGEND
- EXISTING OU-2 LIMITS
 - PROPERTY BOUNDARY
 - GROUNDWATER MONITORING WELL LOCATION
 - SURVEY NODE WHERE IMPACTED MATERIAL WAS OBSERVED
 - APPROXIMATE PRE-EXISTING MONITORING WELL, PUMPING WELLS, OVERBURDEN PIEZOMETERS
 - SURFACE WATER OR SEDIMENT SAMPLE LOCATIONS
 - TEST PIT LOCATION
 - SOIL SAMPLE LOCATION (2012)

NOTE:
1. SOIL BORINGS WERE SURVEYED BY BORBAS SURVEYING AND MAPPING, LLC, JUNE 14, 2012.



RAMAPO PAINT SLUDGE SITE - OPERABLE UNIT 2
ROCKLAND COUNTY, NEW YORK
SOIL SAMPLING REPORT

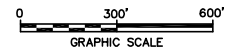
SOIL SAMPLE LOCATIONS

FIGURE
2



PROPERTY BOUNDARY

1. SOIL BORINGS WERE SURVEYED BY BORBAS SURVEYING AND MAPPING, LLC, JUNE 14, 2012.



Attachment 1

Soil Boring Logs

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-1 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	OU-2 Soil Sampling Plan	Started 5/21/2012	Completed 5/21/2012

Total Depth Drilled	2	Feet	Hole Diameter	4	inches	Type of Sample/ Coring Device	Hand Auger

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1	feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling			
Contractor	N/A	Driller	N/A
		Helper	N/A

Prepared			Hammer		Hammer
By	A. Barrio		Weight	N/A	Drop N/A inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS
Sample/Core Log

Boring/Well OU2-SB-3 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	OU-2 Soil Sampling Plan	Started 5/21/2012	Completed 5/21/2012

Total Depth Drilled	2	Feet	Hole Diameter	4	inches	Type of Sample/ Coring Device	Hand Auger

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1	feet

Land-Surface Elev. feet Surveyed Estimated Datum

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling							
Contractor	N/A			Driller	N/A	Helper	N/A

Prepared		Hammer		Hammer	
By	A. Barrio	Weight	N/A	Drop	N/A inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-4 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	<u>OU-2 Soil Sampling Plan</u>	<u>Started 5/22/2012</u>	<u>Completed 5/22/2012</u>

Total Depth Drilled 2 Feet Hole Diameter 4 inches Type of Sample/
Coring Device Hand Auger

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling Contractor	N/A	Driller	N/A	Helper	N/A

Prepared		Hammer		Hammer	
By	A. Barrio	Weight	N/A	Drop	N/A inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-5 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	OU-2 Soil Sampling Plan	Started 5/22/2012	Completed 5/22/2012

Total Depth Drilled	<u>2</u>	Feet	Hole Diameter	<u>4</u>	inches	Type of Sample/ Coring Device	<u>Hand Auger</u>

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling			
Contractor	N/A	Driller	N/A
		Helper	N/A

Prepared		Hammer		Hammer	
By	A. Barrio	Weight	N/A	Drop	N/A inches

Sample/Core Depth

(feet below land surface)

Core

Recovery

PID

(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-6 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	<u>OU-2 Soil Sampling Plan</u>	Started <u>5/22/2012</u>	Completed <u>5/22/2012</u>

Total Depth Drilled 2 Feet Hole Diameter 4 inches Type of Sample/
Coring Device Hand Auger

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling Contractor	N/A	Driller	N/A	Helper	N/A

Prepared		Hammer		Hammer	
By	A. Barrio	Weight	N/A	Drop	N/A inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-7 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	OU-2 Soil Sampling Plan	Started 5/22/2012	Completed 5/22/2012

Total Depth Drilled	2	Feet	Hole Diameter	4	inches	Type of Sample/ Coring Device	Hand Auger

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1	feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling			
Contractor	N/A	Driller	N/A
		Helper	N/A

[illegible]

Sample/Core Depth

(feet below land surface)

Core

Recovery

PID

(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-9 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	OU-2 Soil Sampling Plan	Started 5/23/2012	Completed 5/23/2012

Total Depth Drilled	2	Feet	Hole Diameter	4	inches	Type of Sample/ Coring Device	Hand Auger

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling Contractor	N/A	Driller	N/A	Helper	N/A

Prepared		Hammer		Hammer		
By	A. Barrio	Weight	N/A	Drop	N/A	inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-10 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	<u>OU-2 Soil Sampling Plan</u>	Started 5/23/2012	Completed 5/23/2012

Total Depth Drilled 2 Feet Hole Diameter 4 inches Type of Sample/
Coring Device Hand Auger

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling			
Contractor	N/A	Driller	N/A
		Helper	N/A

Prepared		Hammer		Hammer		
By	A. Barrio	Weight	N/A	Drop	N/A	inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-11 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	OU-2 Soil Sampling Plan	Started 5/23/2012	Completed 5/23/2012

Total Depth Drilled 2 Feet Hole Diameter 4 inches Type of Sample/
Coring Device Hand Auger

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling Contractor	N/A	Driller	N/A	Helper	N/A

Prepared		Hammer		Hammer	
By	A. Barrio	Weight	N/A	Drop	N/A inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS
Sample/Core Log

Boring/Well OU2-SB-12 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	OU-2 Soil Sampling Plan	Started 5/23/2012	Completed 5/23/2012

Total Depth Drilled	2	Feet	Hole Diameter	4	inches	Type of Sample/ Coring Device	Hand Auger

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1	feet

Land-Surface Elev. feet Surveyed Estimated Datum

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling							
Contractor	N/A			Driller	N/A	Helper	N/A

[illegible]

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-13 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	OU-2 Soil Sampling Plan	Started 5/23/2012	Completed 5/23/2012

Total Depth Drilled	2	Feet	Hole Diameter	4	inches	Type of Sample/ Coring Device	Hand Auger

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling			
Contractor	N/A	Driller	N/A
		Helper	N/A

Prepared		Hammer		Hammer	
By	A. Barrio	Weight	N/A	Drop	N/A inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-14 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	OU-2 Soil Sampling Plan	Started 5/23/2012	Completed 5/23/2012

Total Depth Drilled	<u>2</u>	Feet	Hole Diameter	<u>4</u>	inches	Type of Sample/ Coring Device	<u>Hand Auger</u>

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1 feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling							
Contractor	N/A			Driller	N/A	Helper	N/A

Prepared		Hammer		Hammer	
By	A. Barrio	Weight	N/A	Drop	N/A inches

Sample/Core Depth

(feet below land surface)

Core

Recovery

PID

(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-15 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	<u>OU-2 Soil Sampling Plan</u>	Started 5/23/2012	Completed 5/23/2012

Total Depth Drilled 2 Feet Hole Diameter 4 inches Type of Sample/
Coring Device Hand Auger

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling Contractor	N/A	Driller	N/A	Helper	N/A

Prepared		Hammer		Hammer	
By	A. Barrio	Weight	N/A	Drop	N/A inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-17 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	<u>OU-2 Soil Sampling Plan</u>	Started 5/24/2012	Completed 5/24/2012

Total Depth Drilled 2 Feet Hole Diameter 4 inches Type of Sample/
Coring Device Hand Auger

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling Contractor	N/A	Driller	N/A	Helper	N/A

Prepared		Hammer		Hammer	
By	A. Barrio	Weight	N/A	Drop	N/A inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-18 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	OU-2 Soil Sampling Plan	Started 5/24/2012	Completed 5/24/2012

Total Depth Drilled	<u>2</u>	Feet	Hole Diameter	<u>4</u>	inches	Type of Sample/ Coring Device	<u>Hand Auger</u>

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling							
Contractor	N/A			Driller	N/A	Helper	N/A

Prepared		Hammer		Hammer	
By	A. Barrio	Weight	N/A	Drop	N/A inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-19 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	OU-2 Soil Sampling Plan	Started 5/24/2012	Completed 5/24/2012

Total Depth Drilled	2	Feet	Hole Diameter	4	inches	Type of Sample/ Coring Device	Hand Auger

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1 feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling			
Contractor	N/A	Driller	N/A
		Helper	N/A

Prepared		Hammer		Hammer	
By	A. Barrio	Weight	N/A	Drop	N/A inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-20 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	<u>OU-2 Soil Sampling Plan</u>	Started 5/24/2012	Completed 5/24/2012

Total Depth Drilled 2 Feet Hole Diameter 4 inches Type of Sample/
Coring Device Hand Auger

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling Contractor	N/A	Driller	N/A	Helper	N/A

Prepared		Hammer		Hammer	
By	A. Barrio	Weight	N/A	Drop	N/A inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-21 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	OU-2 Soil Sampling Plan	Started 5/25/2012	Completed 5/25/2012

Total Depth Drilled	2	Feet	Hole Diameter	4	inches	Type of Sample/ Coring Device	Hand Auger

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1	feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling			
Contractor	N/A	Driller	N/A
		Helper	N/A

Prepared			Hammer		Hammer	
By	A. Barrio		Weight	N/A	Drop	N/A inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-22 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	<u>OU-2 Soil Sampling Plan</u>	Started <u>5/25/2012</u>	Completed <u>5/25/2012</u>

Total Depth Drilled 2 Feet Hole Diameter 4 inches Type of Sample/
Coring Device Hand Auger

Length and Diameter of Coring Device 1 ft by 4 inch dia Sampling Interval 1 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling			
Contractor	N/A	Driller	N/A
		Helper	N/A

Prepared		Hammer		Hammer	
By	A. Barrio	Weight	N/A	Drop	N/A inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-24 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	OU-2 Soil Sampling Plan	Started 5/25/2012	Completed 5/25/2012

Total Depth Drilled	<u>2</u>	Feet	Hole Diameter	<u>4</u>	inches	Type of Sample/ Coring Device	<u>Hand Auger</u>

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1 feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling			
Contractor	N/A	Driller	N/A
		Helper	N/A

Prepared		Hammer		Hammer	
By	A. Barrio	Weight	N/A	Drop	N/A inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

ARCADIS

Sample/Core Log

Boring/Well OU2-SB-26 Project/No. NJ000602.0004.0003 Page 1 of 1

Site		Drilling	Drilling
Location	OU-2 Soil Sampling Plan	Started 5/25/2012	Completed 5/25/2012

Total Depth Drilled	2	Feet	Hole Diameter	4	inches	Type of Sample/ Coring Device	Hand Auger

Length and Diameter of Coring Device	1 ft by 4 inch dia	Sampling Interval	1	feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Drilling Fluid Used	None	Drilling Method	Hand Auger

Drilling			
Contractor	N/A	Driller	N/A
		Helper	N/A

Prepared						Hammer			Hammer		
By	A. Barrio					Weight	N/A		Drop	N/A	inches

Sample/Core Depth
(feet below land surface)

Core
Recovery
(feet)

PID
(ppm)

[illegible]

Attachment 2

Laboratory Reports



06/13/12

Technical Report for

Arcadis

Ramapo, NY

NJ000602.0002 OU-2 Soil Sample Work Plan Site # 3-44-064

Accutest Job Number: JB7078

Sampling Date: 05/21/12

Report to:

Arcadis Geraghty & Miller

Matt.Gress@arcadis-us.com

ATTN: Matt Gress

Total number of pages in report: **47**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Paul Ioannidis
Lab Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), PA, RI, SC, TN, VA, WV

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Test results relate only to samples analyzed.

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Sample Summary

Arcadis

Job No: JB7078

Ramapo, NY

Project No: NJ000602.0002 OU-2 Soil Sample Work Plan Site # 3-44-064

Sample Number	Collected			Received	Matrix		Client Sample ID
	Date	Time	By		Code	Type	
JB7078-1	05/21/12	13:00	AAB	05/22/12	SO	Soil	OU2-SB-1 (0.0-0.6)
JB7078-2	05/21/12	13:30	AAB	05/22/12	SO	Soil	OU2-SB-1 (1.5-2.0)
JB7078-3	05/21/12	15:00	AAB	05/22/12	SO	Soil	OU2-SB-3 (0.0-0.6)
JB7078-4	05/21/12	15:30	AAB	05/22/12	SO	Soil	OU2-SB-3 (1.5-2.0)
JB7078-5	05/21/12	14:10	AAB	05/22/12	AQ	Field Blank Soil	FB 20120521
JB7078-6	05/21/12	15:30	AAB	05/22/12	AQ	Trip Blank Soil	TB

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Arcadis**Job No** JB7078**Site:** Ramapo, NY**Report Date** 6/5/2012 12:25:34 PM

On 05/22/2012, 4 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at Accutest Laboratories at a temperature of 4.8 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB7078 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ**Batch ID:** V4D1086

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB7270-1MS, JB7270-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO**Batch ID:** VY5279

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB7188-1MS, JB7188-3DUP, JB7188-1MS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Acetone, Methyl Acetate are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for Duplicate for Methylene chloride are outside control limits for sample JB7188-3DUP. High RPD due to low concentration of hit

Extractables by GCMS By Method SW846 8270D

Matrix: AQ**Batch ID:** OP57222

- All samples were extracted within the recommended method holding time.
- Sample(s) JB7127-1MS, JB7127-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for MSD for 3,3'-Dichlorobenzidine are outside of in house control limits for sample OP57222-MSD.

Matrix: SO**Batch ID:** OP57241

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7078-3MS, JB7078-3MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8081B

Matrix: AQ

Batch ID: OP57277

- All samples were extracted within the recommended method holding time.
- Sample(s) JB7268-7MS, JB7268-7MSD, OP57277-MSMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- OP57277-BS1 for Endrin: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for alpha-Chlordane: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Endosulfan-I: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Dieldrin: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for beta-BHC: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Endosulfan-II: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for alpha-BHC: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Aldrin: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for 4,4'-DDT: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for 4,4'-DDD: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Endrin aldehyde: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Endosulfan sulfate: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for 4,4'-DDE: The recovery re-calculated based on the spike amount.
- OP57277-MS for Endrin: The recovery re-calculated based on the spike amount.
- OP57277-MS for Methoxychlor: The recovery re-calculated based on the spike amount.
- OP57277-MS for Heptachlor epoxide: The recovery re-calculated based on the spike amount.
- OP57277-MS for Heptachlor: The recovery re-calculated based on the spike amount.
- OP57277-MS for gamma-Chlordane: The recovery re-calculated based on the spike amount.
- OP57277-MS for gamma-BHC (Lindane): The recovery re-calculated based on the spike amount.
- OP57277-MS for Endrin ketone: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for delta-BHC: The recovery re-calculated based on the spike amount.
- OP57277-MS for Endrin aldehyde: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Endrin ketone: The recovery re-calculated based on the spike amount.
- OP57277-MS for Endosulfan-II: The recovery re-calculated based on the spike amount.
- OP57277-MS for Endosulfan-I: The recovery re-calculated based on the spike amount.
- OP57277-MS for Endosulfan sulfate: The recovery re-calculated based on the spike amount.
- OP57277-MS for Dieldrin: The recovery re-calculated based on the spike amount.
- OP57277-MS for delta-BHC: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Heptachlor: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for gamma-Chlordane: The recovery re-calculated based on the spike amount.
- OP57277-MS for beta-BHC: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Heptachlor epoxide: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Methoxychlor: The recovery re-calculated based on the spike amount.
- OP57277-MS for 4,4'-DDD: The recovery re-calculated based on the spike amount.
- OP57277-MS for 4,4'-DDT: The recovery re-calculated based on the spike amount.
- OP57277-MS for Aldrin: The recovery re-calculated based on the spike amount.
- OP57277-MS for alpha-BHC: The recovery re-calculated based on the spike amount.
- OP57277-MS for alpha-Chlordane: The recovery re-calculated based on the spike amount.

Extractables by GC By Method SW846 8081B

Matrix: AQ

Batch ID: OP57277

- OP57277-MS for 4,4'-DDE: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for gamma-BHC (Lindane): The recovery re-calculated based on the spike amount.

Matrix: SO

Batch ID: OP57246

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7128-1MS, JB7128-1MSD, OP57246-MSMSD were used as the QC samples indicated.
- OP57246-BS1 for 4,4'-DDD: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for Endosulfan sulfate: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for Dieldrin: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for delta-BHC: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for beta-BHC: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for alpha-Chlordane: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for alpha-BHC: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for Aldrin: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for 4,4'-DDE: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for Heptachlor: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for Endosulfan-I: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for 4,4'-DDT: The recovery re-calculated based on the spike amount.
- OP57246-MS for Dieldrin: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for gamma-BHC (Lindane): The recovery re-calculated based on the spike amount.
- OP57246-MS for Heptachlor: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for Endosulfan-II: The recovery re-calculated based on the spike amount.
- OP57246-MS for Heptachlor epoxide: The recovery re-calculated based on the spike amount.
- OP57246-MS for Methoxychlor: The recovery re-calculated based on the spike amount.
- OP57246-MS for gamma-BHC (Lindane): The recovery re-calculated based on the spike amount.
- OP57246-MS for Endrin ketone: The recovery re-calculated based on the spike amount.
- OP57246-MS for Endrin aldehyde: The recovery re-calculated based on the spike amount.
- OP57246-MS for Endrin: The recovery re-calculated based on the spike amount.
- OP57246-MS for Endosulfan-II: The recovery re-calculated based on the spike amount.
- OP57246-MS for Endosulfan-I: The recovery re-calculated based on the spike amount.
- OP57246-MS for gamma-Chlordane: The recovery re-calculated based on the spike amount.
- OP57246-MS for Endosulfan sulfate: The recovery re-calculated based on the spike amount.
- OP57246-MS for delta-BHC: The recovery re-calculated based on the spike amount.
- OP57246-MS for 4,4'-DDE: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for Endrin: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for Endrin aldehyde: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for Endrin ketone: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for gamma-Chlordane: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for Heptachlor epoxide: The recovery re-calculated based on the spike amount.
- OP57246-MS for 4,4'-DDD: The recovery re-calculated based on the spike amount.
- OP57246-MS for beta-BHC: The recovery re-calculated based on the spike amount.

Extractables by GC By Method SW846 8081B

Matrix: SO

Batch ID: OP57246

- OP57246-MS for 4,4'-DDT: The recovery re-calculated based on the spike amount.
- OP57246-MS for Aldrin: The recovery re-calculated based on the spike amount.
- OP57246-MS for alpha-BHC: The recovery re-calculated based on the spike amount.
- OP57246-MS for alpha-Chlordane: The recovery re-calculated based on the spike amount.
- OP57246-BS1 for Methoxychlor: The recovery re-calculated based on the spike amount.

Extractables by GC By Method SW846 8082A

Matrix: AQ

Batch ID: OP57276

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7197-6MS, JB7197-6MSD, OP57276-MSMSD were used as the QC samples indicated.

Matrix: SO

Batch ID: OP57245

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7081-12MS, JB7081-12MSD, OP57245-MSMSD were used as the QC samples indicated.

Metals By Method SW846 6010C

Matrix: AQ

Batch ID: MP64596

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7171-1MS, JB7171-1MSD, JB7171-1SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Sodium are outside control limits. Spike recovery indicates possible matrix interference.
- RPD(s) for Serial Dilution for Arsenic, Beryllium, Cadmium, Cobalt, Copper, Lead, Selenium, Zinc are outside control limits for sample MP64596-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP64596-SD1 for Magnesium: Serial dilution indicates possible matrix interference.
- MP64596-SD1 for Aluminum: Serial dilution indicates possible matrix interference.

Matrix: SO

Batch ID: MP64573

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB6969-1MS, JB6969-1MSD, JB6969-1SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Antimony, Manganese, Zinc are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike Duplicate Recovery(s) for Antimony, Iron, Zinc are outside control limits. Probable cause due to matrix interference.
- RPD(s) for MSD for Zinc are outside control limits for sample MP64573-S2. High rpd due to possible sample nonhomogeneity.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Beryllium, Cadmium, Silver, Thallium are outside control limits for sample MP64573-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP64573-SD1 for Iron: Serial dilution indicates possible matrix interference.
- MP64573-SD1 for Zinc: Serial dilution indicates possible matrix interference.
- MP64573-SD1 for Manganese: Serial dilution indicates possible matrix interference.

Metals By Method SW846 7470A

Matrix: AQ

Batch ID: MP64716

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB6881-21AMS, JB6881-21AMSD were used as the QC samples for metals.

Metals By Method SW846 7471B

Matrix: SO

Batch ID: MP64703

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB6971-3MS, JB6971-3MSD were used as the QC samples for metals.

Wet Chemistry By Method EPA 335.4/LACHAT

Matrix: AQ

Batch ID: GP65003

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB6815-1QDUP, JB6815-1QMS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

Matrix: AQ

Batch ID: GP65063

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method SM18 2540G

Matrix: SO

Batch ID: GN66927

- The data for SM18 2540G meets quality control requirements.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 2

Client Sample ID:	OU2-SB-1 (0.0-0.6)	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-1	Date Received:	05/22/12
Matrix:	SO - Soil	Percent Solids:	71.8
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y123049.D	1	05/24/12	RS	05/22/12 16:00	n/a	VY5279
Run #2							

	Initial Weight
Run #1	5.3 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	175	13	8.7	ug/kg	
71-43-2	Benzene	ND	1.3	0.17	ug/kg	
75-27-4	Bromodichloromethane	ND	6.6	0.29	ug/kg	
75-25-2	Bromoform	ND	6.6	0.99	ug/kg	
74-83-9	Bromomethane	ND	6.6	0.52	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	5.7	ug/kg	
75-15-0	Carbon disulfide	ND	6.6	0.26	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.6	0.45	ug/kg	
108-90-7	Chlorobenzene	ND	6.6	0.42	ug/kg	
75-00-3	Chloroethane	ND	6.6	0.54	ug/kg	
67-66-3	Chloroform	ND	6.6	0.63	ug/kg	
74-87-3	Chloromethane	ND	6.6	0.82	ug/kg	
110-82-7	Cyclohexane	ND	6.6	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	13	2.0	ug/kg	
124-48-1	Dibromochloromethane	ND	6.6	0.22	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.3	0.31	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.6	0.36	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.6	0.25	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.6	0.22	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.6	0.42	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.6	0.29	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.24	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.6	0.81	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.6	0.42	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.6	0.56	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.6	0.35	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.6	0.20	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.6	0.44	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.19	ug/kg	
76-13-1	Freon 113	ND	6.6	0.94	ug/kg	
591-78-6	2-Hexanone	ND	6.6	3.3	ug/kg	
98-82-8	Isopropylbenzene	ND	6.6	0.18	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-1 (0.0-0.6)
Lab Sample ID: JB7078-1
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/21/12
Date Received: 05/22/12
Percent Solids: 71.8

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	6.6	2.9	ug/kg	
108-87-2	Methylcyclohexane	ND	6.6	0.32	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.24	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.6	3.5	ug/kg	
75-09-2	Methylene chloride	ND	6.6	0.30	ug/kg	
100-42-5	Styrene	ND	6.6	0.24	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.6	0.24	ug/kg	
127-18-4	Tetrachloroethene	ND	6.6	0.25	ug/kg	
108-88-3	Toluene	ND	1.3	0.50	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.6	0.45	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.6	0.32	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.6	0.57	ug/kg	
79-01-6	Trichloroethene	ND	6.6	0.32	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.6	0.63	ug/kg	
75-01-4	Vinyl chloride	ND	6.6	0.61	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		67-131%
17060-07-0	1,2-Dichloroethane-D4	85%		66-130%
2037-26-5	Toluene-D8	103%		76-125%
460-00-4	4-Bromofluorobenzene	95%		53-142%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	19.24	7.7	ug/kg	JN
76-22-2	Camphor	18.03	6	ug/kg	JN
	Total TIC, Volatile		13.7	ug/kg	J

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-1 (0.0-0.6)

Lab Sample ID: JB7078-1

Matrix: SO - Soil

Project: Ramapo, NY

Date Sampled: 05/21/12

Date Received: 05/22/12

Percent Solids: 71.8

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	7930	69	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Antimony	< 2.8	2.8	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Arsenic	6.0	2.8	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Barium	46.2	28	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Beryllium	0.44	0.28	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Cadmium	< 0.69	0.69	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Calcium	< 690	690	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Chromium	10.7	1.4	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Cobalt	< 6.9	6.9	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Copper	20.6	3.5	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Iron	9390	69	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Lead	165	2.8	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Magnesium	< 690	690	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Manganese	42.6	2.1	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Mercury	0.19	0.043	mg/kg	1	05/31/12	05/31/12	JW	SW846 7471B ¹
Nickel	10.8	5.5	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Potassium	< 1400	1400	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Selenium	< 2.8	2.8	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Silver	< 0.69	0.69	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Sodium	< 1400	1400	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Thallium	< 1.4	1.4	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Vanadium	28.2	6.9	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Zinc	28.4	2.8	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²

(1) Instrument QC Batch: MA28693

(2) Instrument QC Batch: MA28696

(3) Prep QC Batch: MP64573

(4) Prep QC Batch: MP64703

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	OU2-SB-1 (1.5-2.0)	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-2	Date Received:	05/22/12
Matrix:	SO - Soil	Percent Solids:	66.1
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y123050.D	1	05/24/12	RS	05/22/12 16:00	n/a	VY5279
Run #2							

	Initial Weight
Run #1	4.5 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	300	17	11	ug/kg	
71-43-2	Benzene	ND	1.7	0.22	ug/kg	
75-27-4	Bromodichloromethane	ND	8.4	0.38	ug/kg	
75-25-2	Bromoform	ND	8.4	1.3	ug/kg	
74-83-9	Bromomethane	ND	8.4	0.66	ug/kg	
78-93-3	2-Butanone (MEK)	ND	17	7.3	ug/kg	
75-15-0	Carbon disulfide	ND	8.4	0.33	ug/kg	
56-23-5	Carbon tetrachloride	ND	8.4	0.58	ug/kg	
108-90-7	Chlorobenzene	ND	8.4	0.54	ug/kg	
75-00-3	Chloroethane	ND	8.4	0.69	ug/kg	
67-66-3	Chloroform	ND	8.4	0.81	ug/kg	
74-87-3	Chloromethane	ND	8.4	1.0	ug/kg	
110-82-7	Cyclohexane	ND	8.4	0.64	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	17	2.5	ug/kg	
124-48-1	Dibromochloromethane	ND	8.4	0.28	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.7	0.40	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	8.4	0.47	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	8.4	0.32	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	8.4	0.29	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	8.4	0.54	ug/kg	
75-34-3	1,1-Dichloroethane	ND	8.4	0.37	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.7	0.31	ug/kg	
75-35-4	1,1-Dichloroethene	ND	8.4	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	8.4	0.54	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	8.4	0.71	ug/kg	
78-87-5	1,2-Dichloropropane	ND	8.4	0.45	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	8.4	0.26	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	8.4	0.56	ug/kg	
100-41-4	Ethylbenzene	ND	1.7	0.25	ug/kg	
76-13-1	Freon 113	ND	8.4	1.2	ug/kg	
591-78-6	2-Hexanone	ND	8.4	4.2	ug/kg	
98-82-8	Isopropylbenzene	ND	8.4	0.23	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-1 (1.5-2.0)
Lab Sample ID: JB7078-2
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/21/12**Date Received:** 05/22/12**Percent Solids:** 66.1

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	8.4	3.7	ug/kg	
108-87-2	Methylcyclohexane	ND	8.4	0.41	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.7	0.30	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	8.4	4.4	ug/kg	
75-09-2	Methylene chloride	ND	8.4	0.39	ug/kg	
100-42-5	Styrene	ND	8.4	0.31	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	8.4	0.30	ug/kg	
127-18-4	Tetrachloroethene	ND	8.4	0.32	ug/kg	
108-88-3	Toluene	ND	1.7	0.64	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	8.4	0.57	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	8.4	0.41	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	8.4	0.73	ug/kg	
79-01-6	Trichloroethene	ND	8.4	0.42	ug/kg	
75-69-4	Trichlorofluoromethane	ND	8.4	0.81	ug/kg	
75-01-4	Vinyl chloride	ND	8.4	0.77	ug/kg	
1330-20-7	Xylene (total)	ND	1.7	0.31	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		67-131%
17060-07-0	1,2-Dichloroethane-D4	87%		66-130%
2037-26-5	Toluene-D8	102%		76-125%
460-00-4	4-Bromofluorobenzene	94%		53-142%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
106-68-3	3-Octanone	15.62	17	ug/kg	JN
76-22-2	Camphor	18.03	31	ug/kg	JN
94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	19.24	40	ug/kg	JN
	Total TIC, Volatile		88	ug/kg	J

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-1 (1.5-2.0)**Lab Sample ID:** JB7078-2**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/21/12**Date Received:** 05/22/12**Percent Solids:** 66.1

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	10600	77	mg/kg	1	05/23/12	06/02/12	ND	SW846 6010C ³
Antimony	< 3.1	3.1	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Arsenic	4.8	3.1	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Barium	< 31	31	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Beryllium	0.41	0.31	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Cadmium	< 0.77	0.77	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Calcium	< 770	770	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Chromium	12.8	1.5	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Cobalt	< 7.7	7.7	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Copper	11.5	3.8	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Iron	16200	77	mg/kg	1	05/23/12	06/02/12	ND	SW846 6010C ³
Lead	92.9	3.1	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Magnesium	930	770	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Manganese	42.7	2.3	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Mercury	0.069	0.045	mg/kg	1	05/31/12	05/31/12	JW	SW846 7471B ¹
Nickel	6.5	6.1	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Potassium	< 1500	1500	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Selenium	< 3.1	3.1	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Silver	< 0.77	0.77	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Sodium	< 1500	1500	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Thallium	< 1.5	1.5	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Vanadium	34.5	7.7	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²
Zinc	23.5	3.1	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ²

(1) Instrument QC Batch: MA28693

(2) Instrument QC Batch: MA28696

(3) Instrument QC Batch: MA28708

(4) Prep QC Batch: MP64573

(5) Prep QC Batch: MP64703

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	OU2-SB-3 (0.0-0.6)	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-3	Date Received:	05/22/12
Matrix:	SO - Soil	Percent Solids:	77.1
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y123051.D	1	05/24/12	RS	05/22/12 16:00	n/a	VY5279
Run #2							

	Initial Weight
Run #1	5.2 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	8.3	ug/kg	
71-43-2	Benzene	ND	1.2	0.17	ug/kg	
75-27-4	Bromodichloromethane	ND	6.2	0.28	ug/kg	
75-25-2	Bromoform	ND	6.2	0.94	ug/kg	
74-83-9	Bromomethane	ND	6.2	0.49	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	5.4	ug/kg	
75-15-0	Carbon disulfide	ND	6.2	0.24	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.2	0.43	ug/kg	
108-90-7	Chlorobenzene	ND	6.2	0.40	ug/kg	
75-00-3	Chloroethane	ND	6.2	0.51	ug/kg	
67-66-3	Chloroform	ND	6.2	0.60	ug/kg	
74-87-3	Chloromethane	ND	6.2	0.78	ug/kg	
110-82-7	Cyclohexane	ND	6.2	0.47	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.9	ug/kg	
124-48-1	Dibromochloromethane	ND	6.2	0.21	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.30	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.2	0.35	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.2	0.24	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.2	0.21	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.2	0.40	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.2	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.23	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.2	0.76	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.2	0.40	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.2	0.53	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.2	0.33	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.2	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.2	0.42	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.18	ug/kg	
76-13-1	Freon 113	ND	6.2	0.89	ug/kg	
591-78-6	2-Hexanone	ND	6.2	3.1	ug/kg	
98-82-8	Isopropylbenzene	ND	6.2	0.17	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-3 (0.0-0.6)
Lab Sample ID: JB7078-3
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/21/12
Date Received: 05/22/12
Percent Solids: 77.1

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	6.2	2.8	ug/kg	
108-87-2	Methylcyclohexane	ND	6.2	0.31	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.22	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.2	3.3	ug/kg	
75-09-2	Methylene chloride	ND	6.2	0.29	ug/kg	
100-42-5	Styrene	ND	6.2	0.23	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.2	0.22	ug/kg	
127-18-4	Tetrachloroethene	ND	6.2	0.24	ug/kg	
108-88-3	Toluene	ND	1.2	0.47	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.2	0.43	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.2	0.30	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.2	0.54	ug/kg	
79-01-6	Trichloroethene	ND	6.2	0.31	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.2	0.60	ug/kg	
75-01-4	Vinyl chloride	ND	6.2	0.57	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		67-131%
17060-07-0	1,2-Dichloroethane-D4	86%		66-130%
2037-26-5	Toluene-D8	102%		76-125%
460-00-4	4-Bromofluorobenzene	95%		53-142%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	OU2-SB-3 (0.0-0.6)	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-3	Date Received:	05/22/12
Matrix:	SO - Soil	Percent Solids:	77.1
Method:	SW846 8270D SW846 3550C		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M86577.D	1	05/25/12	OYA	05/24/12	OP57241	EM3475
Run #2							

	Initial Weight	Final Volume
Run #1	35.4 g	1.0 ml
Run #2		

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	180	37	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	37	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	59	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	62	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	730	45	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	730	45	ug/kg	
95-48-7	2-Methylphenol	ND	73	42	ug/kg	
	3&4-Methylphenol	ND	73	47	ug/kg	
88-75-5	2-Nitrophenol	ND	180	39	ug/kg	
100-02-7	4-Nitrophenol	ND	370	62	ug/kg	
87-86-5	Pentachlorophenol	ND	370	63	ug/kg	
108-95-2	Phenol	ND	73	38	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	43	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	34	ug/kg	
83-32-9	Acenaphthene	ND	37	11	ug/kg	
208-96-8	Acenaphthylene	ND	37	12	ug/kg	
98-86-2	Acetophenone	ND	180	6.4	ug/kg	
120-12-7	Anthracene	ND	37	13	ug/kg	
1912-24-9	Atrazine	ND	180	7.2	ug/kg	
56-55-3	Benzo(a)anthracene	ND	37	12	ug/kg	
50-32-8	Benzo(a)pyrene	ND	37	11	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	37	12	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	37	14	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	37	14	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	73	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	73	21	ug/kg	
92-52-4	1,1'-Biphenyl	ND	73	4.3	ug/kg	
100-52-7	Benzaldehyde	ND	180	8.4	ug/kg	
91-58-7	2-Chloronaphthalene	ND	73	11	ug/kg	
106-47-8	4-Chloroaniline	ND	180	12	ug/kg	
86-74-8	Carbazole	ND	73	17	ug/kg	
105-60-2	Caprolactam	ND	73	12	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OU2-SB-3 (0.0-0.6)	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-3	Date Received:	05/22/12
Matrix:	SO - Soil	Percent Solids:	77.1
Method:	SW846 8270D SW846 3550C		
Project:	Ramapo, NY		

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	37	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	73	15	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	73	11	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	73	11	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	73	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	73	16	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	73	14	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	180	9.3	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	37	12	ug/kg	
132-64-9	Dibenzofuran	ND	73	11	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	73	8.1	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	73	18	ug/kg	
84-66-2	Diethyl phthalate	ND	73	12	ug/kg	
131-11-3	Dimethyl phthalate	55.5	73	13	ug/kg	J
117-81-7	bis(2-Ethylhexyl)phthalate	ND	73	32	ug/kg	
206-44-0	Fluoranthene	ND	37	16	ug/kg	
86-73-7	Fluorene	ND	37	12	ug/kg	
118-74-1	Hexachlorobenzene	ND	73	12	ug/kg	
87-68-3	Hexachlorobutadiene	ND	37	10	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	370	37	ug/kg	
67-72-1	Hexachloroethane	ND	180	10	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	37	13	ug/kg	
78-59-1	Isophorone	ND	73	9.9	ug/kg	
91-57-6	2-Methylnaphthalene	ND	73	20	ug/kg	
88-74-4	2-Nitroaniline	ND	180	16	ug/kg	
99-09-2	3-Nitroaniline	ND	180	15	ug/kg	
100-01-6	4-Nitroaniline	ND	180	14	ug/kg	
91-20-3	Naphthalene	ND	37	10	ug/kg	
98-95-3	Nitrobenzene	ND	73	11	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	73	8.9	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	22	ug/kg	
85-01-8	Phenanthrene	ND	37	17	ug/kg	
129-00-0	Pyrene	ND	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	60%		21-116%
4165-62-2	Phenol-d5	62%		19-117%
118-79-6	2,4,6-Tribromophenol	82%		24-136%
4165-60-0	Nitrobenzene-d5	64%		21-122%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID: OU2-SB-3 (0.0-0.6)
Lab Sample ID: JB7078-3
Matrix: SO - Soil
Method: SW846 8270D SW846 3550C
Project: Ramapo, NY

Date Sampled: 05/21/12
Date Received: 05/22/12
Percent Solids: 77.1

ABN TCL List (CLP4.2 list)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	62%		30-117%
1718-51-0	Terphenyl-d14	91%		31-129%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.05	150	ug/kg	J
	system artifact	3.38	210	ug/kg	J
	system artifact/aldol-condensation	3.60	9200	ug/kg	J
	unknown acid	15.38	190	ug/kg	J
	unknown	22.38	180	ug/kg	J
	Total TIC, Semi-Volatile		370	ug/kg	J

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	OU2-SB-3 (0.0-0.6)	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-3	Date Received:	05/22/12
Matrix:	SO - Soil	Percent Solids:	77.1
Method:	SW846 8081B SW846 3546		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G79838.D	1	05/25/12	DS	05/24/12	OP57246	G1G2666
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.83	0.41	ug/kg	
319-84-6	alpha-BHC	ND	0.83	0.62	ug/kg	
319-85-7	beta-BHC	ND	0.83	0.58	ug/kg	
319-86-8	delta-BHC	ND	0.83	0.48	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.83	0.38	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.83	0.54	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.83	0.42	ug/kg	
60-57-1	Dieldrin	ND	0.83	0.64	ug/kg	
72-54-8	4,4' -DDD	ND	0.83	0.42	ug/kg	
72-55-9	4,4' -DDE	12.1	0.83	0.49	ug/kg	
50-29-3	4,4' -DDT	14.9	0.83	0.61	ug/kg	
72-20-8	Endrin	ND	0.83	0.42	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.83	0.75	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.83	0.78	ug/kg	
959-98-8	Endosulfan-I	ND	0.83	0.40	ug/kg	
33213-65-9	Endosulfan-II	ND	0.83	0.54	ug/kg	
76-44-8	Heptachlor	ND	0.83	0.51	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.83	0.41	ug/kg	
72-43-5	Methoxychlor	ND	1.7	0.58	ug/kg	
53494-70-5	Endrin ketone	ND	0.83	0.54	ug/kg	
8001-35-2	Toxaphene	ND	21	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		23-137%
877-09-8	Tetrachloro-m-xylene	68%		23-137%
2051-24-3	Decachlorobiphenyl	82%		22-160%
2051-24-3	Decachlorobiphenyl	78%		22-160%

ND = Not detected MDL - Method Detection Limit

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Report of Analysis

Page 1 of 1

Client Sample ID:	OU2-SB-3 (0.0-0.6)	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-3	Date Received:	05/22/12
Matrix:	SO - Soil	Percent Solids:	77.1
Method:	SW846 8082A SW846 3546		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G1228.D	1	05/26/12	HQ	05/24/12	OP57245	G5G27
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	41	11	ug/kg	
11104-28-2	Aroclor 1221	ND	41	25	ug/kg	
11141-16-5	Aroclor 1232	ND	41	21	ug/kg	
53469-21-9	Aroclor 1242	52.9	41	13	ug/kg	
12672-29-6	Aroclor 1248	ND	41	13	ug/kg	
11097-69-1	Aroclor 1254	ND	41	19	ug/kg	
11096-82-5	Aroclor 1260	ND	41	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		22-141%
877-09-8	Tetrachloro-m-xylene	84%		22-141%
2051-24-3	Decachlorobiphenyl	74%		18-163%
2051-24-3	Decachlorobiphenyl	79%		18-163%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-3 (0.0-0.6)**Lab Sample ID:** JB7078-3**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/21/12**Date Received:** 05/22/12**Percent Solids:** 77.1

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	10500	64	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.6	2.6	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	< 2.6	2.6	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Barium	38.9	26	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.55	0.26	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.64	0.64	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	2380	640	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	17.2	1.3	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	7.2	6.4	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Copper	18.2	3.2	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Iron	18700	64	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Lead	22.2	2.6	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	3190	640	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	240	1.9	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	< 0.040	0.040	mg/kg	1	05/31/12	05/31/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	12.6	5.2	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1300	1300	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.6	2.6	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Silver	< 0.64	0.64	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1300	1300	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.3	1.3	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	31.4	6.4	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	35.4	2.6	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28693

(2) Instrument QC Batch: MA28696

(3) Prep QC Batch: MP64573

(4) Prep QC Batch: MP64703

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-3 (0.0-0.6)**Lab Sample ID:** JB7078-3**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/21/12**Date Received:** 05/22/12**Percent Solids:** 77.1**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.31	0.31	mg/kg	1	05/28/12 10:50	CW	SW846 9012 M/LACHAT
Solids, Percent	77.1		%	1	05/29/12	PF	SM18 2540G

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-3 (1.5-2.0)	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-4	Date Received:	05/22/12
Matrix:	SO - Soil	Percent Solids:	84.7
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y123052.D	1	05/24/12	RS	05/22/12 16:00	n/a	VY5279
Run #2							

	Initial Weight
Run #1	5.5 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	7.1	ug/kg	
71-43-2	Benzene	ND	1.1	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.4	0.24	ug/kg	
75-25-2	Bromoform	ND	5.4	0.81	ug/kg	
74-83-9	Bromomethane	ND	5.4	0.42	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	4.6	ug/kg	
75-15-0	Carbon disulfide	ND	5.4	0.21	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.4	0.37	ug/kg	
108-90-7	Chlorobenzene	ND	5.4	0.35	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.44	ug/kg	
67-66-3	Chloroform	ND	5.4	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.4	0.67	ug/kg	
110-82-7	Cyclohexane	ND	5.4	0.41	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	1.6	ug/kg	
124-48-1	Dibromochloromethane	ND	5.4	0.18	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.26	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.4	0.30	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.4	0.21	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.4	0.18	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.4	0.34	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.4	0.23	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.20	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.4	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.4	0.35	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.4	0.46	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.4	0.29	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.4	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.4	0.36	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.16	ug/kg	
76-13-1	Freon 113	ND	5.4	0.77	ug/kg	
591-78-6	2-Hexanone	ND	5.4	2.7	ug/kg	
98-82-8	Isopropylbenzene	ND	5.4	0.15	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-3 (1.5-2.0)
Lab Sample ID: JB7078-4
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/21/12**Date Received:** 05/22/12**Percent Solids:** 84.7

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.4	2.4	ug/kg	
108-87-2	Methylcyclohexane	ND	5.4	0.26	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.19	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	2.8	ug/kg	
75-09-2	Methylene chloride	ND	5.4	0.25	ug/kg	
100-42-5	Styrene	ND	5.4	0.20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.4	0.19	ug/kg	
127-18-4	Tetrachloroethene	ND	5.4	0.21	ug/kg	
108-88-3	Toluene	ND	1.1	0.41	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	0.37	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.4	0.26	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.4	0.46	ug/kg	
79-01-6	Trichloroethene	ND	5.4	0.27	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.4	0.52	ug/kg	
75-01-4	Vinyl chloride	ND	5.4	0.49	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		67-131%
17060-07-0	1,2-Dichloroethane-D4	85%		66-130%
2037-26-5	Toluene-D8	102%		76-125%
460-00-4	4-Bromofluorobenzene	93%		53-142%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	.alpha.-Pinene	14.74	6.4	ug/kg	J
79-92-5	Camphene	15.05	9.8	ug/kg	JN
	Total TIC, Volatile		16.2	ug/kg	J

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	OU2-SB-3 (1.5-2.0)	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-4	Date Received:	05/22/12
Matrix:	SO - Soil	Percent Solids:	84.7
Method:	SW846 8270D SW846 3550C		
Project:	Ramapo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M86598.D	1	05/26/12	KLS	05/24/12	OP57241	EM3476
Run #2							

Run #	Initial Weight	Final Volume
Run #1	35.0 g	1.0 ml
Run #2		

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	170	34	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	34	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	54	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	57	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	670	41	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	670	41	ug/kg	
95-48-7	2-Methylphenol	ND	67	38	ug/kg	
	3&4-Methylphenol	ND	67	43	ug/kg	
88-75-5	2-Nitrophenol	ND	170	36	ug/kg	
100-02-7	4-Nitrophenol	ND	340	57	ug/kg	
87-86-5	Pentachlorophenol	ND	340	58	ug/kg	
108-95-2	Phenol	ND	67	35	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	39	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	32	ug/kg	
83-32-9	Acenaphthene	ND	34	9.8	ug/kg	
208-96-8	Acenaphthylene	ND	34	11	ug/kg	
98-86-2	Acetophenone	ND	170	5.9	ug/kg	
120-12-7	Anthracene	ND	34	12	ug/kg	
1912-24-9	Atrazine	ND	170	6.6	ug/kg	
56-55-3	Benzo(a)anthracene	ND	34	11	ug/kg	
50-32-8	Benzo(a)pyrene	ND	34	10	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	34	11	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	34	13	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	34	13	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	67	12	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	67	20	ug/kg	
92-52-4	1,1'-Biphenyl	ND	67	3.9	ug/kg	
100-52-7	Benzaldehyde	ND	170	7.8	ug/kg	
91-58-7	2-Chloronaphthalene	ND	67	10	ug/kg	
106-47-8	4-Chloroaniline	ND	170	11	ug/kg	
86-74-8	Carbazole	ND	67	16	ug/kg	
105-60-2	Caprolactam	ND	67	11	ug/kg	

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-3 (1.5-2.0)
Lab Sample ID: JB7078-4
Matrix: SO - Soil
Method: SW846 8270D SW846 3550C
Project: Ramapo, NY

Date Sampled: 05/21/12

Date Received: 05/22/12

Percent Solids: 84.7

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	34	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	67	14	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	67	10	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	67	10	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	67	10	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	67	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	67	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	8.6	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	34	12	ug/kg	
132-64-9	Dibenzofuran	ND	67	10	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	67	7.5	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	67	16	ug/kg	
84-66-2	Diethyl phthalate	ND	67	12	ug/kg	
131-11-3	Dimethyl phthalate	35.3	67	12	ug/kg	J
117-81-7	bis(2-Ethylhexyl)phthalate	ND	67	30	ug/kg	
206-44-0	Fluoranthene	ND	34	15	ug/kg	
86-73-7	Fluorene	ND	34	11	ug/kg	
118-74-1	Hexachlorobenzene	ND	67	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	34	9.4	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	340	34	ug/kg	
67-72-1	Hexachloroethane	ND	170	9.4	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	34	12	ug/kg	
78-59-1	Isophorone	ND	67	9.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	67	19	ug/kg	
88-74-4	2-Nitroaniline	ND	170	15	ug/kg	
99-09-2	3-Nitroaniline	ND	170	13	ug/kg	
100-01-6	4-Nitroaniline	ND	170	13	ug/kg	
91-20-3	Naphthalene	ND	34	9.2	ug/kg	
98-95-3	Nitrobenzene	ND	67	9.7	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	67	8.2	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	20	ug/kg	
85-01-8	Phenanthrene	ND	34	15	ug/kg	
129-00-0	Pyrene	ND	34	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		21-116%
4165-62-2	Phenol-d5	44%		19-117%
118-79-6	2,4,6-Tribromophenol	70%		24-136%
4165-60-0	Nitrobenzene-d5	48%		21-122%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-3 (1.5-2.0)	
Lab Sample ID: JB7078-4	Date Sampled: 05/21/12
Matrix: SO - Soil	Date Received: 05/22/12
Method: SW846 8270D SW846 3550C	Percent Solids: 84.7
Project: Ramapo, NY	

ABN TCL List (CLP4.2 list)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	47%		30-117%
1718-51-0	Terphenyl-d14	81%		31-129%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
57-10-3	system artifact/aldol-condensation	3.51	4000	ug/kg	J
	n-Hexadecanoic acid	15.38	140	ug/kg	JN
	unknown	19.16	150	ug/kg	J
	Total TIC, Semi-Volatile		290	ug/kg	J

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	OU2-SB-3 (1.5-2.0)	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-4	Date Received:	05/22/12
Matrix:	SO - Soil	Percent Solids:	84.7
Method:	SW846 8081B SW846 3546		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G79839.D	1	05/25/12	DS	05/24/12	OP57246	G1G2666
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.77	0.39	ug/kg	
319-84-6	alpha-BHC	ND	0.77	0.58	ug/kg	
319-85-7	beta-BHC	ND	0.77	0.54	ug/kg	
319-86-8	delta-BHC	ND	0.77	0.45	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.77	0.35	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.77	0.50	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.77	0.39	ug/kg	
60-57-1	Dieldrin	ND	0.77	0.60	ug/kg	
72-54-8	4,4' -DDD	ND	0.77	0.40	ug/kg	
72-55-9	4,4' -DDE	7.1	0.77	0.46	ug/kg	
50-29-3	4,4' -DDT	7.6	0.77	0.57	ug/kg	
72-20-8	Endrin	ND	0.77	0.39	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.77	0.70	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.77	0.73	ug/kg	
959-98-8	Endosulfan-I	ND	0.77	0.37	ug/kg	
33213-65-9	Endosulfan-II	ND	0.77	0.51	ug/kg	
76-44-8	Heptachlor	ND	0.77	0.47	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.77	0.38	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.54	ug/kg	
53494-70-5	Endrin ketone	ND	0.77	0.50	ug/kg	
8001-35-2	Toxaphene	ND	19	9.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		23-137%
877-09-8	Tetrachloro-m-xylene	82%		23-137%
2051-24-3	Decachlorobiphenyl	101%		22-160%
2051-24-3	Decachlorobiphenyl	95%		22-160%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	OU2-SB-3 (1.5-2.0)	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-4	Date Received:	05/22/12
Matrix:	SO - Soil	Percent Solids:	84.7
Method:	SW846 8082A SW846 3546		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G1229.D	1	05/26/12	HQ	05/24/12	OP57245	G5G27
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	39	10	ug/kg	
11104-28-2	Aroclor 1221	ND	39	23	ug/kg	
11141-16-5	Aroclor 1232	ND	39	20	ug/kg	
53469-21-9	Aroclor 1242	75.0	39	12	ug/kg	
12672-29-6	Aroclor 1248	ND	39	12	ug/kg	
11097-69-1	Aroclor 1254	ND	39	18	ug/kg	
11096-82-5	Aroclor 1260	ND	39	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	75%		22-141%
877-09-8	Tetrachloro-m-xylene	79%		22-141%
2051-24-3	Decachlorobiphenyl	74%		18-163%
2051-24-3	Decachlorobiphenyl	82%		18-163%

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RL = Reporting Limit

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-3 (1.5-2.0)**Lab Sample ID:** JB7078-4**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/21/12**Date Received:** 05/22/12**Percent Solids:** 84.7**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	13800	60	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.4	2.4	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	< 2.4	2.4	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Barium	39.5	24	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.56	0.24	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.60	0.60	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	1720	600	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	17.3	1.2	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	7.6	6.0	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Copper	19.8	3.0	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Iron	18400	60	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Lead	8.2	2.4	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	2830	600	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	137	1.8	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	< 0.037	0.037	mg/kg	1	05/31/12	05/31/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	13.8	4.8	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1200	1200	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.4	2.4	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Silver	< 0.60	0.60	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1200	1200	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.2	1.2	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	30.7	6.0	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	29.1	2.4	mg/kg	1	05/23/12	06/01/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28693

(2) Instrument QC Batch: MA28696

(3) Prep QC Batch: MP64573

(4) Prep QC Batch: MP64703

RL = Reporting Limit

Report of Analysis

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Client Sample ID: OU2-SB-3 (1.5-2.0)**Lab Sample ID:** JB7078-4**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/21/12**Date Received:** 05/22/12**Percent Solids:** 84.7**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.27	0.27	mg/kg	1	05/28/12 10:51	CW	SW846 9012 M/LACHAT
Solids, Percent	84.7		%	1	05/29/12	PF	SM18 2540G

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	FB 20120521	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-5	Date Received:	05/22/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D24010.D	1	05/26/12	JTP	n/a	n/a	V4D1086
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: FB 20120521

Lab Sample ID: JB7078-5

Matrix: AQ - Field Blank Soil

Method: SW846 8260B

Project: Ramapo, NY

Date Sampled: 05/21/12

Date Received: 05/22/12

Percent Solids: n/a

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		77-120%
17060-07-0	1,2-Dichloroethane-D4	101%		70-127%
2037-26-5	Toluene-D8	103%		79-120%
460-00-4	4-Bromofluorobenzene	95%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	FB 20120521	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-5	Date Received:	05/22/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	Ramapo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F14361.D	1	05/24/12	NAP	05/23/12	OP57222	EF4832
Run #2							

Run #	Initial Volume	Final Volume
Run #1	890 ml	1.0 ml
Run #2		

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.6	1.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.6	2.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.6	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.6	1.7	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	19	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	22	1.1	ug/l	
95-48-7	2-Methylphenol	ND	2.2	1.2	ug/l	
	3&4-Methylphenol	ND	2.2	1.0	ug/l	
88-75-5	2-Nitrophenol	ND	5.6	1.7	ug/l	
100-02-7	4-Nitrophenol	ND	11	5.8	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.6	ug/l	
108-95-2	Phenol	ND	2.2	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.6	1.8	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.6	1.4	ug/l	
83-32-9	Acenaphthene	ND	1.1	0.30	ug/l	
208-96-8	Acenaphthylene	ND	1.1	0.26	ug/l	
98-86-2	Acetophenone	ND	2.2	0.32	ug/l	
120-12-7	Anthracene	ND	1.1	0.32	ug/l	
1912-24-9	Atrazine	ND	5.6	0.55	ug/l	
100-52-7	Benzaldehyde	ND	5.6	3.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.1	0.25	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.1	0.25	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.1	0.51	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.1	0.36	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.1	0.57	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.32	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.1	0.34	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.2	0.33	ug/l	
106-47-8	4-Chloroaniline	ND	5.6	0.59	ug/l	
86-74-8	Carbazole	ND	1.1	0.40	ug/l	
105-60-2	Caprolactam	ND	2.2	0.77	ug/l	

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Report of Analysis

Client Sample ID:	FB 20120521	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-5	Date Received:	05/22/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	Ramapo, NY		

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	1.1	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.35	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.51	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.2	0.48	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.2	0.52	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	0.40	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.1	0.42	ug/l	
132-64-9	Dibenzofuran	ND	5.6	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.62	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.35	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.37	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.32	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.66	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.36	ug/l	
86-73-7	Fluorene	ND	1.1	0.31	ug/l	
118-74-1	Hexachlorobenzene	ND	1.1	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.58	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	8.0	ug/l	
67-72-1	Hexachloroethane	ND	2.2	0.62	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.1	0.42	ug/l	
78-59-1	Isophorone	ND	2.2	0.31	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.43	ug/l	
88-74-4	2-Nitroaniline	ND	5.6	1.2	ug/l	
99-09-2	3-Nitroaniline	ND	5.6	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	5.6	1.9	ug/l	
91-20-3	Naphthalene	ND	1.1	0.29	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.47	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.34	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.34	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.33	ug/l	
129-00-0	Pyrene	ND	1.1	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		10-83%
4165-62-2	Phenol-d5	28%		10-74%
118-79-6	2,4,6-Tribromophenol	105%		24-148%
4165-60-0	Nitrobenzene-d5	103%		38-129%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	FB 20120521	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-5	Date Received:	05/22/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	Ramapo, NY		

ABN TCL List (CLP4.2 list)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	90%		42-117%
1718-51-0	Terphenyl-d14	111%		14-132%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	2.16	4.9	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	FB 20120521	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-5	Date Received:	05/22/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8081B SW846 3510C		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G19009.D	1	05/30/12	DS	05/25/12	OP57277	G4G499
Run #2							

	Initial Volume	Final Volume
Run #1	760 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.013	0.012	ug/l	
319-84-6	alpha-BHC	ND	0.013	0.0052	ug/l	
319-85-7	beta-BHC	ND	0.013	0.0049	ug/l	
319-86-8	delta-BHC	ND	0.013	0.0081	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.013	0.0054	ug/l	
5103-71-9	alpha-Chlordane	ND	0.013	0.0065	ug/l	
5103-74-2	gamma-Chlordane	ND	0.013	0.0031	ug/l	
60-57-1	Dieldrin	ND	0.013	0.0043	ug/l	
72-54-8	4,4' -DDD	ND	0.013	0.0048	ug/l	
72-55-9	4,4' -DDE	ND	0.013	0.0039	ug/l	
50-29-3	4,4' -DDT	ND	0.013	0.0078	ug/l	
72-20-8	Endrin	ND	0.013	0.0084	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.013	0.0085	ug/l	
7421-93-4	Endrin aldehyde	ND	0.013	0.0038	ug/l	
53494-70-5	Endrin ketone	ND	0.013	0.0054	ug/l	
959-98-8	Endosulfan-I	ND	0.013	0.0040	ug/l	
33213-65-9	Endosulfan-II	ND	0.013	0.0037	ug/l	
76-44-8	Heptachlor	ND	0.013	0.011	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.013	0.0050	ug/l	
72-43-5	Methoxychlor	ND	0.026	0.011	ug/l	
8001-35-2	Toxaphene	ND	0.33	0.19	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	111%		26-145%
877-09-8	Tetrachloro-m-xylene	97%		26-145%
2051-24-3	Decachlorobiphenyl	66%		10-141%
2051-24-3	Decachlorobiphenyl	80%		10-141%

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	FB 20120521	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-5	Date Received:	05/22/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G67759.D	1	05/29/12	AZ	05/25/12	OP57276	G2G2380
Run #2							

	Initial Volume	Final Volume
Run #1	760 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.66	0.17	ug/l	
11104-28-2	Aroclor 1221	ND	0.66	0.36	ug/l	
11141-16-5	Aroclor 1232	ND	0.66	0.51	ug/l	
53469-21-9	Aroclor 1242	ND	0.66	0.11	ug/l	
12672-29-6	Aroclor 1248	ND	0.66	0.19	ug/l	
11097-69-1	Aroclor 1254	ND	0.66	0.19	ug/l	
11096-82-5	Aroclor 1260	ND	0.66	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	105%		27-144%
877-09-8	Tetrachloro-m-xylene	102%		27-144%
2051-24-3	Decachlorobiphenyl	60%		10-139%
2051-24-3	Decachlorobiphenyl	64%		10-139%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: FB 20120521

Lab Sample ID: JB7078-5

Matrix: AQ - Field Blank Soil

Project: Ramapo, NY

Date Sampled: 05/21/12

Date Received: 05/22/12

Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 200	200	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Antimony	< 6.0	6.0	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Arsenic	< 3.0	3.0	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Barium	< 200	200	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Beryllium	< 1.0	1.0	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Cadmium	< 3.0	3.0	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Calcium	< 5000	5000	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Chromium	< 10	10	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Cobalt	< 50	50	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Copper	< 10	10	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Iron	< 100	100	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Lead	< 3.0	3.0	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Magnesium	< 5000	5000	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Manganese	< 15	15	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	05/31/12	05/31/12	DP	SW846 7470A ² SW846 7470A ⁴
Nickel	< 10	10	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Potassium	< 10000	10000	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Selenium	< 10	10	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Silver	< 10	10	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Sodium	< 10000	10000	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Thallium	< 2.0	2.0	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Vanadium	< 50	50	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³
Zinc	< 20	20	ug/l	1	05/24/12	06/01/12	ND	SW846 6010C ¹ SW846 3010A ³

(1) Instrument QC Batch: MA28696

(2) Instrument QC Batch: MA28700

(3) Prep QC Batch: MP64596

(4) Prep QC Batch: MP64716

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FB 20120521	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-5	Date Received:	05/22/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Project:	Ramapo, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.010	0.010	mg/l	1	05/28/12 10:31	CW	EPA 335.4/LACHAT

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	TB	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-6	Date Received:	05/22/12
Matrix:	AQ - Trip Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D24011.D	1	05/26/12	JTP	n/a	n/a	V4D1086
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	

ND = Not detected MDL - Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	TB	Date Sampled:	05/21/12
Lab Sample ID:	JB7078-6	Date Received:	05/22/12
Matrix:	AQ - Trip Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Ramapo, NY		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		77-120%
17060-07-0	1,2-Dichloroethane-D4	101%		70-127%
2037-26-5	Toluene-D8	105%		79-120%
460-00-4	4-Bromofluorobenzene	95%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

Accutest New Jersey
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE ____ OF ____

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)												Matrix Codes													
Company Name: ARCADIS-US		Project Name: OU-2 Soil Sample work plan Site # 3-44-064														DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank													
Street Address: 17-17 Route 208 North 2nd FL Suite 201		Street: TOLE VALLEY RD																											
City: FAIR LAWN NJ 07410		City: RAMAPO NJ																											
Project Contact: JOE ROCKIOW		CLAIM ADJUSTER CONTACT NAME:																											
Phone #: 201-398-4364		CLAIMS NUMBER #																											
Sampler(s) Name(s): ADGEWS & BACCIO		CHARTIS PRICING NEEDED: ☐																											
Field ID / Point of Collection: 00-7		MECH/ID Vial #														LAB USE ONLY													
		Date		Time		Sampled by		Matrix		# of bottles		PC		NH3		HNO3		H2SO4		NONE		DI Water		MEOH		ENGORE			
-1		OU2-SB-1 (0.0-0.6)		5/21/12		1300		AAB		SO		A(5)																	
-2		OU2-SB-1 (1.5-2.0)		5/21/12		1330		AAB		SO		A(5)																EX65	
-3		OU2-SB-3 (0.0-0.6)		5/21/12		1500		AAB		SO		5																166	
-4		OU2-SB-3 (1.5-2.0)		5/21/12		1530		AAB		SO		5(6)																1404	
-5		FB 2012.05.21		5/21/12		1410		MS		AQ		8																4960	
-6		TB		5/18/12		0900				AQ		22																	
																												EX8	
																												AMET7	
																												1031	
																												835	
Turnaround Time (Business days)		Approved By (Accutest PM): / Date:		Data Deliverable Information												Comments / Special Instructions													
☒ Std. 10 Business Days ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ other				☐ Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☐ FULLT1 (Level 3+4) ☐ NJ Reduced ☐ Commercial "C" ☐ NYASP Category A ☐ NYASP Category B ☐ State Forms ☐ EDD Format ☐ Other												03 matrices 5/22/12													
Emergency & Rush T/A data available VIA Lablink				Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data																									
Relinquished by: Joe Rockiow		Date Time: 5/21/12 1700		Received By: STX at 5:22-12 8:30												Relinquished By: 2													
Relinquished by: 3		Date Time:		Received By: 3												Relinquished By: 4													
Relinquished by: 5		Date Time:		Received By: 5												Relinquished By: 4													
				Custody Seal # N/A												☐ Intact ☐ Not intact													
				Preserved where applicable (initials)												On Ice INQ													
																Cooler Temp. 4.8°C													

2A

4.1
4

JB7078: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB7078 Client: _____ Project: _____
 Date / Time Received: 5/22/2012 Delivery Method: _____ Airbill #'s: _____
 Cooler Temps (Initial/Adjusted): #1: (4.8/4.8); 0

Cooler Security

<table border="0"> <tr> <th style="text-align: left;">Y or N</th> <th style="text-align: left;">Y or N</th> </tr> <tr> <td>1. Custody Seals Present: ☒ ☐</td> <td>3. COC Present: ☒ ☐</td> </tr> <tr> <td>2. Custody Seals Intact: ☒ ☐</td> <td>4. Smpl Dates/Time OK: ☒ ☐</td> </tr> </table>	Y or N	Y or N	1. Custody Seals Present: ☒ ☐	3. COC Present: ☒ ☐	2. Custody Seals Intact: ☒ ☐	4. Smpl Dates/Time OK: ☒ ☐	
Y or N	Y or N						
1. Custody Seals Present: ☒ ☐	3. COC Present: ☒ ☐						
2. Custody Seals Intact: ☒ ☐	4. Smpl Dates/Time OK: ☒ ☐						

Cooler Temperature

Y or N
1. Temp criteria achieved: ☒ ☐
2. Cooler temp verification: _____
3. Cooler media: <u>Ice (Bag)</u>
4. No. Coolers: <u>1</u>

Quality Control Preservation

Y or N	N/A
1. Trip Blank present / cooler: ☒ ☐ ☐	
2. Trip Blank listed on COC: ☒ ☐ ☐	
3. Samples preserved properly: ☒ ☐ ☐	
4. VOCs headspace free: ☒ ☐ ☐	

Sample Integrity - Documentation

Y or N
1. Sample labels present on bottles: ☒ ☐
2. Container labeling complete: ☒ ☐
3. Sample container label / COC agree: ☒ ☐

Sample Integrity - Condition

Y or N
1. Sample recvd within HT: ☒ ☐
2. All containers accounted for: ☒ ☐
3. Condition of sample: <u>Intact</u>

Sample Integrity - Instructions

Y or N	N/A
1. Analysis requested is clear: ☒ ☐	
2. Bottles received for unspecified tests: ☐ ☒	
3. Sufficient volume recvd for analysis: ☒ ☐	
4. Compositing instructions clear: ☐ ☐ ☒	
5. Filtering instructions clear: ☐ ☐ ☒	

Comments

Technical Report for

Arcadis

Ramapo, NY

OU-2 Soil Sampling Work Plain Site 3-44-064

Accutest Job Number: JB7192

Sampling Date: 05/22/12

Report to:

Arcadis Geraghty & Miller

Matt.Gress@arcadis-us.com

ATTN: Matt Gress

Total number of pages in report: **75**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Paul Ioannidis
Lab Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), PA, RI, SC, TN, VA, WV

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Test results relate only to samples analyzed.

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Sample Summary

Arcadis

Job No: JB7192

Ramapo, NY

Project No: OU-2 Soil Sampling Work Plain Site 3-44-064

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JB7192-1	05/22/12	14:10 AAB	05/23/12	AQ	Field Blank Soil	FB20120522
JB7192-2	05/22/12	14:00 AAB	05/23/12	SO	Soil	OU2-SB-2(0.0-0.6)
JB7192-3	05/22/12	14:30 AAB	05/23/12	SO	Soil	OU2-SB-2(1.5-2.0)
JB7192-4	05/22/12	11:00 AAB	05/23/12	SO	Soil	OU2-SB-4(0.0-0.6)
JB7192-5	05/22/12	11:30 AAB	05/23/12	SO	Soil	OU2-SB-4(1.5-2.0)
JB7192-6	05/22/12	10:00 AAB	05/23/12	SO	Soil	OU2-SB-5(0.0-0.6)
JB7192-7	05/22/12	10:30 AAB	05/23/12	SO	Soil	OU2-SB-5(1.5-2.0)
JB7192-8	05/22/12	12:00 AAB	05/23/12	SO	Soil	OU2-SB-6(0.0-0.6)
JB7192-9	05/22/12	12:30 AAB	05/23/12	SO	Soil	OU2-SB-6(1.5-2.0)
JB7192-10	05/22/12	13:00 AAB	05/23/12	SO	Soil	OU2-SB-7(0.0-0.6)
JB7192-11	05/22/12	13:30 AAB	05/23/12	SO	Soil	OU2-SB-7(1.5-2.0)
JB7192-12	05/22/12	15:00 AAB	05/23/12	SO	Soil	OU2-SB-8(0.0-0.6)
JB7192-13	05/22/12	15:30 AAB	05/23/12	SO	Soil	OU2-SB-8(1.5-2.0)

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

Arcadis

Job No: JB7192

Ramapo, NY

Project No: OU-2 Soil Sampling Work Plain Site 3-44-064

Sample Number	Collected		Matrix		Client	
	Date	Time By	Received	Code Type	Sample ID	
JB7192-14	05/22/12	15:30 AAB	05/23/12	AQ Trip Blank Soil	TB	

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Arcadis

Job No JB7192

Site: Ramapo, NY

Report Date 6/7/2012 2:28:07 PM

On 05/23/2012, 12 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at Accutest Laboratories at a temperature of 2 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB7192 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ

Batch ID: V2E3523

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7241-5MS, JB7241-5MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Ethylbenzene, Xylene (total) are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- Matrix Spike Duplicate Recovery(s) for Ethylbenzene, Xylene (total) are outside control limits. Probable cause due to matrix interference.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Styrene (total) are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for MS/MSD for 1,2-Dichloroethane are outside control limits. Outside control limits due to matrix interference.

Matrix: SO

Batch ID: VA6874

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7192-12MS, JB7192-5DUP were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Freon 113 are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for Duplicate for Toluene are outside control limits. High RPD due to possible sample analyzed from different vials.

Matrix: SO

Batch ID: VE8438

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7268-6MS, JB7268-6MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for 1,4-Dichlorobenzene are outside control limits. High percent recoveries and no associated positive found in the QC batch.
- RPD(s) for MS/MSD for Bromomethane are outside control limits. Outside control limits due to matrix interference.
- JB7192-10: Dilution required due to matrix interference.

Matrix: SO

Batch ID: VV5480

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7943-1MS, JB7943-1MSD were used as the QC samples indicated.

Extractables by GCMS By Method SW846 8270D**Matrix:** AQ**Batch ID:** OP57239

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7202-1MS, JB7202-1MSD were used as the QC samples indicated.

Matrix: SO**Batch ID:** OP57242

- All samples were extracted within the recommended method holding time.
- Sample(s) JB7141-2MS, JB7141-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method SW846 8081B

Matrix: AQ

Batch ID: OP57277

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7268-7MS, JB7268-7MSD were used as the QC samples indicated.
- OP57277-BS1 for alpha-BHC: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Aldrin: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for Methoxychlor: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for 4,4'-DDD: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for 4,4'-DDT: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for Endosulfan-II: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for 4,4'-DDE: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for alpha-BHC: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for alpha-Chlordane: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for beta-BHC: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for delta-BHC: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for Dieldrin: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for 4,4'-DDT: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for Endosulfan-I: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for 4,4'-DDE: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for Endrin: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for Endrin aldehyde: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for Endrin ketone: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for gamma-BHC (Lindane): The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for gamma-Chlordane: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for Heptachlor: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for Heptachlor epoxide: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for Endosulfan sulfate: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for gamma-BHC (Lindane): The recovery re-calculated based on the spike amount.
- OP57277-BS1 for beta-BHC: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for delta-BHC: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Dieldrin: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Endosulfan sulfate: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Endosulfan-I: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Endosulfan-II: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Endrin: The recovery re-calculated based on the spike amount.
- OP57277-MS/MSD for Aldrin: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Endrin ketone: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for alpha-Chlordane: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for gamma-Chlordane: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Heptachlor: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Heptachlor epoxide: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Methoxychlor: The recovery re-calculated based on the spike amount.

Extractables by GC By Method SW846 8081B

Matrix: AQ

Batch ID: OP57277

- OP57277-MS/MSD for 4,4'-DDD: The recovery re-calculated based on the spike amount.
- OP57277-BS1 for Endrin aldehyde: The recovery re-calculated based on the spike amount.

Matrix: SO

Batch ID: OP57258

- All samples were extracted within the recommended method holding time.
- Sample(s) JB7268-2MS, JB7268-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- OP57258-BS1 for Endosulfan sulfate: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for Endosulfan-I: The recovery re-calculated based on the spike amount.
- JB7192-8 for alpha-Chlordane: Reported from 2nd signal due to interference on 1st signal.
- JB7192-8 for 4,4'-DDT: More than 40 % RPD for detected concentrations between the two GC columns.
- OP57258-BS1 for Methoxychlor: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for Heptachlor epoxide: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for Heptachlor: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for gamma-Chlordane: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for gamma-BHC (Lindane): The recovery re-calculated based on the spike amount.
- OP57258-BS1 for Endrin ketone: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for Endrin aldehyde: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for Endrin: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for delta-BHC: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for Endosulfan-II: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for Dieldrin: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for 4,4'-DDT: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for alpha-Chlordane: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for alpha-BHC: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for Aldrin: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for beta-BHC: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for 4,4'-DDD: The recovery re-calculated based on the spike amount.
- OP57258-BS1 for 4,4'-DDE: The recovery re-calculated based on the spike amount.

Extractables by GC By Method SW846 8082A

Matrix: AQ

Batch ID: OP57276

- All samples were extracted within the recommended method holding time.
- Sample(s) JB7197-6MS, JB7197-6MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO

Batch ID: OP57298

- All samples were extracted within the recommended method holding time.
- Sample(s) JB6719-3MS, JB6719-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Metals By Method SW846 6010C

Matrix: AQ

Batch ID: MP64624

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7260-1FMS, JB7260-1FMSD, JB7260-1FSDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Thallium, Arsenic, Barium, Cadmium, Chromium, Selenium, Zinc are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP64624-SD1 for Copper: Serial dilution indicates possible matrix interference.
- MP64624-SD1 for Calcium: Serial dilution indicates possible matrix interference.
- MP64624-SD1 for Cobalt: Serial dilution indicates possible matrix interference.
- MP64624-SD1 for Manganese: Serial dilution indicates possible matrix interference.
- MP64624-SD1 for Iron: Serial dilution indicates possible matrix interference.
- MP64624-SD1 for Magnesium: Serial dilution indicates possible matrix interference.

Matrix: SO

Batch ID: MP64631

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7081-24MS, JB7081-24MSD, JB7081-24SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Copper, Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike Duplicate Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike Recovery(s) for Iron, Manganese, Calcium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for MS/MSD for Iron, Manganese, Calcium are outside control limits. High rpd due to possible sample nonhomogeneity.
- RPD(s) for Serial Dilution for Silver, Antimony, Cadmium are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP64631-SD1 for Sodium: Serial dilution indicates possible matrix interference.
- MP64631-SD1 for Zinc: Serial dilution indicates possible matrix interference.

Metals By Method SW846 7470A

Matrix: AQ

Batch ID: MP64764

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7540-2FMS, JB7540-2FMSD were used as the QC samples for metals.

Metals By Method SW846 7471B

Matrix: SO

Batch ID: MP64711

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7016-3MS, JB7016-3MSD were used as the QC samples for metals.

Wet Chemistry By Method EPA 335.4/LACHAT

Matrix: AQ

Batch ID: GP65186

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7211-2DUP, JB7211-2MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

Wet Chemistry By Method SM18 2540G

Matrix: SO

Batch ID: GN66961

- The data for SM18 2540G meets quality control requirements.

Matrix: SO

Batch ID: GN66964

- The data for SM18 2540G meets quality control requirements.

Wet Chemistry By Method SW846 9012 M/LACHAT

Matrix: SO

Batch ID: GP65148

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7443-2DUP, JB7443-2MS were used as the QC samples for Cyanide.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 2

Client Sample ID:	FB20120522	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-1	Date Received:	05/23/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E78509.D	1	05/26/12	MAH	n/a	n/a	V2E3523
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	FB20120522	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-1	Date Received:	05/23/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Ramapo, NY		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		77-120%
17060-07-0	1,2-Dichloroethane-D4	102%		70-127%
2037-26-5	Toluene-D8	108%		79-120%
460-00-4	4-Bromofluorobenzene	104%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	FB20120522	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-1	Date Received:	05/23/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	Ramapo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2M44212.D	1	05/26/12	KLS	05/24/12	OP57239	E2M1904
Run #2							

Run #	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	0.98	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	1.8	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.1	1.2	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	1.5	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	17	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	1.0	ug/l	
95-48-7	2-Methylphenol	ND	2.0	1.1	ug/l	
	3&4-Methylphenol	ND	2.0	0.93	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	1.5	ug/l	
100-02-7	4-Nitrophenol	ND	10	5.3	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
108-95-2	Phenol	ND	2.0	1.3	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	1.6	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	1.3	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.27	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.23	ug/l	
98-86-2	Acetophenone	ND	2.0	0.29	ug/l	
120-12-7	Anthracene	ND	1.0	0.29	ug/l	
1912-24-9	Atrazine	ND	5.1	0.49	ug/l	
100-52-7	Benzaldehyde	ND	5.1	3.3	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.23	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.23	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.46	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.33	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.51	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.36	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.29	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.31	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.30	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	0.53	ug/l	
86-74-8	Carbazole	ND	1.0	0.36	ug/l	
105-60-2	Caprolactam	ND	2.0	0.70	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB20120522	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-1	Date Received:	05/23/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	Ramapo, NY		

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	1.0	0.29	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.46	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.32	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.43	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.47	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.1	0.36	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.38	ug/l	
132-64-9	Dibenzofuran	ND	5.1	0.27	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.56	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.31	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.33	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.29	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	4.4	2.0	0.59	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.32	ug/l	
86-73-7	Fluorene	ND	1.0	0.28	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.34	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.52	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	7.2	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.56	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.38	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.39	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	1.1	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	1.7	ug/l	
91-20-3	Naphthalene	ND	1.0	0.26	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.31	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	0.31	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.29	ug/l	
129-00-0	Pyrene	ND	1.0	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		10-83%
4165-62-2	Phenol-d5	26%		10-74%
118-79-6	2,4,6-Tribromophenol	92%		24-148%
4165-60-0	Nitrobenzene-d5	87%		38-129%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	FB20120522	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-1	Date Received:	05/23/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	Ramapo, NY		

ABN TCL List (CLP4.2 list)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
321-60-8	2-Fluorobiphenyl	82%		42-117%		
1718-51-0	Terphenyl-d14	98%		14-132%		

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	.99	4.2	ug/l	J
	system artifact	1.09	4.9	ug/l	J
	system artifact	1.42	7.5	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	FB20120522	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-1	Date Received:	05/23/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8081B SW846 3510C		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G19113.D	1	06/01/12	DS	05/25/12	OP57277	G4G501
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.011	0.010	ug/l	
319-84-6	alpha-BHC	ND	0.011	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.011	0.0040	ug/l	
319-86-8	delta-BHC	ND	0.011	0.0066	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.011	0.0044	ug/l	
5103-71-9	alpha-Chlordane	ND	0.011	0.0053	ug/l	
5103-74-2	gamma-Chlordane	ND	0.011	0.0025	ug/l	
60-57-1	Dieldrin	ND	0.011	0.0035	ug/l	
72-54-8	4,4' -DDD	ND	0.011	0.0039	ug/l	
72-55-9	4,4' -DDE	ND	0.011	0.0031	ug/l	
50-29-3	4,4' -DDT	ND	0.011	0.0063	ug/l	
72-20-8	Endrin	ND	0.011	0.0068	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.011	0.0068	ug/l	
7421-93-4	Endrin aldehyde	ND	0.011	0.0031	ug/l	
53494-70-5	Endrin ketone	ND	0.011	0.0043	ug/l	
959-98-8	Endosulfan-I	ND	0.011	0.0032	ug/l	
33213-65-9	Endosulfan-II	ND	0.011	0.0030	ug/l	
76-44-8	Heptachlor	ND	0.011	0.0089	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.011	0.0040	ug/l	
72-43-5	Methoxychlor	ND	0.021	0.0087	ug/l	
8001-35-2	Toxaphene	ND	0.27	0.16	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	105%		26-145%
877-09-8	Tetrachloro-m-xylene	98%		26-145%
2051-24-3	Decachlorobiphenyl	50%		10-141%
2051-24-3	Decachlorobiphenyl	60%		10-141%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	FB20120522	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-1	Date Received:	05/23/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G67876.D	1	05/31/12	AZ	05/25/12	OP57276	G2G2382
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.14	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.29	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.41	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.091	ug/l	
12672-29-6	Aroclor 1248	ND	0.53	0.15	ug/l	
11097-69-1	Aroclor 1254	ND	0.53	0.15	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		27-144%
877-09-8	Tetrachloro-m-xylene	91%		27-144%
2051-24-3	Decachlorobiphenyl	26%		10-139%
2051-24-3	Decachlorobiphenyl	38%		10-139%

ND = Not detected MDL - Method Detection Limit

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: FB20120522

Lab Sample ID: JB7192-1

Matrix: AQ - Field Blank Soil

Project: Ramapo, NY

Date Sampled: 05/22/12

Date Received: 05/23/12

Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 200	200	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Antimony	< 6.0	6.0	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Arsenic	< 3.0	3.0	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Barium	< 200	200	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Beryllium	< 1.0	1.0	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Cadmium	< 3.0	3.0	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Calcium	< 5000	5000	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Chromium	< 10	10	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Cobalt	< 50	50	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Copper	< 10	10	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Iron	< 100	100	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Lead	< 3.0	3.0	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Magnesium	< 5000	5000	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Manganese	< 15	15	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	06/04/12	06/04/12	JW	SW846 7470A ² SW846 7470A ⁴
Nickel	< 10	10	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Potassium	< 10000	10000	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Selenium	< 10	10	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Silver	< 10	10	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Sodium	< 10000	10000	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Thallium	< 2.0	2.0	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Vanadium	< 50	50	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³
Zinc	< 20	20	ug/l	1	05/25/12	06/03/12	ND	SW846 6010C ¹ SW846 3010A ³

(1) Instrument QC Batch: MA28712

(2) Instrument QC Batch: MA28719

(3) Prep QC Batch: MP64624

(4) Prep QC Batch: MP64764

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FB20120522	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-1	Date Received:	05/23/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Project:	Ramapo, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.010	0.010	mg/l	1	05/30/12 15:58	VA	EPA 335.4/LACHAT

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	OU2-SB-2(0.0-0.6)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-2	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	35.8
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A183981.D	1	05/30/12	CL	05/23/12 15:00	n/a	VA6874
Run #2							

	Initial Weight
Run #1	3.6 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	39	26	ug/kg	
71-43-2	Benzene	ND	3.9	0.52	ug/kg	
75-27-4	Bromodichloromethane	ND	19	0.87	ug/kg	
75-25-2	Bromoform	ND	19	2.9	ug/kg	
74-83-9	Bromomethane	ND	19	1.5	ug/kg	
78-93-3	2-Butanone (MEK)	ND	39	17	ug/kg	
75-15-0	Carbon disulfide	ND	19	0.76	ug/kg	
56-23-5	Carbon tetrachloride	ND	19	1.3	ug/kg	
108-90-7	Chlorobenzene	ND	19	1.2	ug/kg	
75-00-3	Chloroethane	ND	19	1.6	ug/kg	
67-66-3	Chloroform	ND	19	1.9	ug/kg	
74-87-3	Chloromethane	ND	19	2.4	ug/kg	
110-82-7	Cyclohexane	ND	19	1.5	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	39	5.9	ug/kg	
124-48-1	Dibromochloromethane	ND	19	0.65	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.9	0.92	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	19	1.1	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	19	0.74	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	19	0.66	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	19	1.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	19	0.85	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.9	0.71	ug/kg	
75-35-4	1,1-Dichloroethene	ND	19	2.4	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	19	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	19	1.6	ug/kg	
78-87-5	1,2-Dichloropropane	ND	19	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	19	0.59	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	19	1.3	ug/kg	
100-41-4	Ethylbenzene	ND	3.9	0.57	ug/kg	
76-13-1	Freon 113	ND	19	2.8	ug/kg	
591-78-6	2-Hexanone	ND	19	9.6	ug/kg	
98-82-8	Isopropylbenzene	ND	19	0.53	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-2(0.0-0.6)
Lab Sample ID: JB7192-2
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/22/12
Date Received: 05/23/12
Percent Solids: 35.8

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	19	8.6	ug/kg	
108-87-2	Methylcyclohexane	ND	19	0.95	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.9	0.69	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	19	10	ug/kg	
75-09-2	Methylene chloride	ND	19	0.89	ug/kg	
100-42-5	Styrene	ND	19	0.72	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	19	0.69	ug/kg	
127-18-4	Tetrachloroethene	ND	19	0.74	ug/kg	
108-88-3	Toluene	ND	3.9	1.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	19	1.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	19	0.93	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	19	1.7	ug/kg	
79-01-6	Trichloroethene	ND	19	0.96	ug/kg	
75-69-4	Trichlorofluoromethane	ND	19	1.9	ug/kg	
75-01-4	Vinyl chloride	ND	19	1.8	ug/kg	
1330-20-7	Xylene (total)	ND	3.9	0.71	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		70-130%
17060-07-0	1,2-Dichloroethane-D4	92%		70-122%
2037-26-5	Toluene-D8	106%		81-127%
460-00-4	4-Bromofluorobenzene	98%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
75-18-3	Dimethyl sulfide	6.70	28	ug/kg	JN
	Total TIC, Volatile		28	ug/kg	J

ND = Not detected MDL - Method Detection Limit
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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-2(0.0-0.6)**Lab Sample ID:** JB7192-2**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/22/12**Date Received:** 05/23/12**Percent Solids:** 35.8

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	11500	140	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Antimony	< 5.6	5.6	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Arsenic	< 5.6	5.6	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Barium	91.1	56	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Beryllium	1.5	0.56	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Cadmium	< 1.4	1.4	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Calcium	5170	1400	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Chromium	15.5	2.8	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Cobalt	< 14	14	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Copper	20.5	7.0	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Iron	15500	140	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Lead	78.8	5.6	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Magnesium	2110	1400	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Manganese	1080	4.2	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Mercury	0.17	0.091	mg/kg	1	05/31/12	05/31/12	VK	SW846 7471B ¹
Nickel	14.1	11	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Potassium	< 2800	2800	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Selenium	< 5.6	5.6	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Silver	< 1.4	1.4	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Sodium	< 2800	2800	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Thallium	< 2.8	2.8	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Vanadium	29.5	14	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²
Zinc	155	5.6	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ²

(1) Instrument QC Batch: MA28694

(2) Instrument QC Batch: MA28711

(3) Prep QC Batch: MP64631

(4) Prep QC Batch: MP64711

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-2(1.5-2.0)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-3	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	77.9
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A183966.D	1	05/29/12	CL	05/23/12 15:00	n/a	VA6874
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	12.8	11	7.2	ug/kg	
71-43-2	Benzene	ND	1.1	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.4	0.24	ug/kg	
75-25-2	Bromoform	ND	5.4	0.82	ug/kg	
74-83-9	Bromomethane	ND	5.4	0.43	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	4.7	ug/kg	
75-15-0	Carbon disulfide	1.6	5.4	0.21	ug/kg	J
56-23-5	Carbon tetrachloride	ND	5.4	0.38	ug/kg	
108-90-7	Chlorobenzene	ND	5.4	0.35	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.44	ug/kg	
67-66-3	Chloroform	ND	5.4	0.53	ug/kg	
74-87-3	Chloromethane	ND	5.4	0.68	ug/kg	
110-82-7	Cyclohexane	ND	5.4	0.41	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	1.6	ug/kg	
124-48-1	Dibromochloromethane	ND	5.4	0.18	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.26	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.4	0.30	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.4	0.21	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.4	0.18	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.4	0.35	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.4	0.24	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.20	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.4	0.67	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.4	0.35	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.4	0.46	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.4	0.29	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.4	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.4	0.37	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.16	ug/kg	
76-13-1	Freon 113	ND	5.4	0.78	ug/kg	
591-78-6	2-Hexanone	ND	5.4	2.7	ug/kg	
98-82-8	Isopropylbenzene	ND	5.4	0.15	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-2(1.5-2.0)
Lab Sample ID: JB7192-3
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/22/12

Date Received: 05/23/12

Percent Solids: 77.9

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.4	2.4	ug/kg	
108-87-2	Methylcyclohexane	ND	5.4	0.27	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.19	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	2.9	ug/kg	
75-09-2	Methylene chloride	ND	5.4	0.25	ug/kg	
100-42-5	Styrene	ND	5.4	0.20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.4	0.19	ug/kg	
127-18-4	Tetrachloroethene	ND	5.4	0.21	ug/kg	
108-88-3	Toluene	ND	1.1	0.41	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	0.37	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.4	0.26	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.4	0.47	ug/kg	
79-01-6	Trichloroethene	ND	5.4	0.27	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.4	0.52	ug/kg	
75-01-4	Vinyl chloride	ND	5.4	0.50	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		70-130%
17060-07-0	1,2-Dichloroethane-D4	89%		70-122%
2037-26-5	Toluene-D8	106%		81-127%
460-00-4	4-Bromofluorobenzene	97%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-2(1.5-2.0)

Lab Sample ID: JB7192-3

Matrix: SO - Soil

Date Sampled: 05/22/12

Date Received: 05/23/12

Percent Solids: 77.9

Project: Ramapo, NY

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	14000	68	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.7	2.7	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	< 2.7	2.7	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Barium	40.3	27	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.64	0.27	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.68	0.68	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	1240	680	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	16.6	1.4	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	< 6.8	6.8	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Copper	11.5	3.4	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Iron	12000	68	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Lead	144	2.7	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	2060	680	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	65.2	2.0	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	0.044	0.040	mg/kg	1	05/31/12	05/31/12	VK	SW846 7471B ¹ SW846 7471B ⁴
Nickel	9.9	5.4	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1400	1400	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.7	2.7	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Silver	0.80	0.68	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1400	1400	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.4	1.4	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	27.1	6.8	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	41.7	2.7	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28694

(2) Instrument QC Batch: MA28711

(3) Prep QC Batch: MP64631

(4) Prep QC Batch: MP64711

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-4(0.0-0.6)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-4	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A183964.D	1	05/29/12	CL	05/23/12 15:00	n/a	VA6874
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.6	ug/kg	
71-43-2	Benzene	ND	1.0	0.13	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.22	ug/kg	
75-25-2	Bromoform	ND	5.0	0.75	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.39	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	4.3	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	0.20	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.34	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.32	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.41	ug/kg	
67-66-3	Chloroform	ND	5.0	0.48	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.62	ug/kg	
110-82-7	Cyclohexane	ND	5.0	0.38	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.5	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.17	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.28	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.19	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.17	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.32	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.22	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.0	0.61	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	0.32	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	0.42	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.27	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.15	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.33	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.15	ug/kg	
76-13-1	Freon 113	ND	5.0	0.71	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.14	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-4(0.0-0.6)
Lab Sample ID: JB7192-4
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/22/12
Date Received: 05/23/12
Percent Solids: 85.0

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.2	ug/kg	
108-87-2	Methylcyclohexane	ND	5.0	0.24	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	2.6	ug/kg	
75-09-2	Methylene chloride	ND	5.0	0.23	ug/kg	
100-42-5	Styrene	ND	5.0	0.18	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.18	ug/kg	
127-18-4	Tetrachloroethene	ND	5.0	0.19	ug/kg	
108-88-3	Toluene	ND	1.0	0.38	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.34	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.24	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.43	ug/kg	
79-01-6	Trichloroethene	ND	5.0	0.25	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.48	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	0.46	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
17060-07-0	1,2-Dichloroethane-D4	89%		70-122%
2037-26-5	Toluene-D8	106%		81-127%
460-00-4	4-Bromofluorobenzene	96%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-4(0.0-0.6)**Lab Sample ID:** JB7192-4**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/22/12**Date Received:** 05/23/12**Percent Solids:** 85.0

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	11100	60	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.4	2.4	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	3.1	2.4	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Barium	69.7	24	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.65	0.24	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.60	0.60	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	4180	600	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	16.4	1.2	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	6.5	6.0	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Copper	23.5	3.0	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Iron	19700	60	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Lead	20.8	2.4	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	4380	600	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	387	1.8	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	0.036	0.036	mg/kg	1	05/31/12	05/31/12	VK	SW846 7471B ¹ SW846 7471B ⁴
Nickel	14.6	4.8	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	1380	1200	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.4	2.4	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Silver	1.2	0.60	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1200	1200	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.2	1.2	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	27.6	6.0	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	60.5	2.4	mg/kg	1	05/25/12	06/03/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28694

(2) Instrument QC Batch: MA28711

(3) Prep QC Batch: MP64631

(4) Prep QC Batch: MP64711

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-4(1.5-2.0)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-5	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	83.1
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A183957.D	1	05/29/12	CL	05/23/12 15:00	n/a	VA6874
Run #2							

	Initial Weight
Run #1	6.3 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.6	6.3	ug/kg	
71-43-2	Benzene	ND	0.96	0.13	ug/kg	
75-27-4	Bromodichloromethane	ND	4.8	0.21	ug/kg	
75-25-2	Bromoform	ND	4.8	0.72	ug/kg	
74-83-9	Bromomethane	ND	4.8	0.38	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.6	4.1	ug/kg	
75-15-0	Carbon disulfide	ND	4.8	0.19	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.8	0.33	ug/kg	
108-90-7	Chlorobenzene	ND	4.8	0.31	ug/kg	
75-00-3	Chloroethane	ND	4.8	0.39	ug/kg	
67-66-3	Chloroform	ND	4.8	0.46	ug/kg	
74-87-3	Chloromethane	ND	4.8	0.60	ug/kg	
110-82-7	Cyclohexane	ND	4.8	0.36	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	9.6	1.4	ug/kg	
124-48-1	Dibromochloromethane	ND	4.8	0.16	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.96	0.23	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.26	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.18	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.16	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.8	0.31	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.8	0.21	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.96	0.17	ug/kg	
75-35-4	1,1-Dichloroethene	ND	4.8	0.59	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	4.8	0.31	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	4.8	0.40	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.8	0.25	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.8	0.15	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.8	0.32	ug/kg	
100-41-4	Ethylbenzene	ND	0.96	0.14	ug/kg	
76-13-1	Freon 113	ND	4.8	0.68	ug/kg	
591-78-6	2-Hexanone	ND	4.8	2.4	ug/kg	
98-82-8	Isopropylbenzene	ND	4.8	0.13	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-4(1.5-2.0)
Lab Sample ID: JB7192-5
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/22/12

Date Received: 05/23/12

Percent Solids: 83.1

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	4.8	2.1	ug/kg	
108-87-2	Methylcyclohexane	ND	4.8	0.23	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.96	0.17	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.8	2.5	ug/kg	
75-09-2	Methylene chloride	ND	4.8	0.22	ug/kg	
100-42-5	Styrene	ND	4.8	0.18	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.8	0.17	ug/kg	
127-18-4	Tetrachloroethene	ND	4.8	0.18	ug/kg	
108-88-3	Toluene	ND	0.96	0.36	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.33	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.8	0.23	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.8	0.41	ug/kg	
79-01-6	Trichloroethene	ND	4.8	0.24	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.8	0.46	ug/kg	
75-01-4	Vinyl chloride	ND	4.8	0.44	ug/kg	
1330-20-7	Xylene (total)	ND	0.96	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%
17060-07-0	1,2-Dichloroethane-D4	86%		70-122%
2037-26-5	Toluene-D8	106%		81-127%
460-00-4	4-Bromofluorobenzene	95%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-4(1.5-2.0)**Lab Sample ID:** JB7192-5**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/22/12**Date Received:** 05/23/12**Percent Solids:** 83.1**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	14300	61	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.4	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	4.1	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Barium	83.7	24	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.78	0.24	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.61	0.61	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	6250	610	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	23.1	1.2	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	7.8	6.1	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Copper	29.3	3.1	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Iron	22700	61	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Lead	36.4	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	5660	610	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	451	1.8	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	0.097	0.040	mg/kg	1	05/31/12	05/31/12	VK	SW846 7471B ¹ SW846 7471B ⁴
Nickel	19.2	4.9	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	1480	1200	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.4	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Silver	2.4	0.61	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1200	1200	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.2	1.2	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	33.1	6.1	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	82.1	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28694

(2) Instrument QC Batch: MA28711

(3) Prep QC Batch: MP64631

(4) Prep QC Batch: MP64711

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-5(0.0-0.6)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-6	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	79.7
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A183980.D	1	05/30/12	CL	05/23/12 15:00	n/a	VA6874
Run #2							

	Initial Weight
Run #1	6.0 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.9	ug/kg	
71-43-2	Benzene	ND	1.0	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.2	0.23	ug/kg	
75-25-2	Bromoform	ND	5.2	0.79	ug/kg	
74-83-9	Bromomethane	ND	5.2	0.41	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	4.5	ug/kg	
75-15-0	Carbon disulfide	ND	5.2	0.20	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.2	0.36	ug/kg	
108-90-7	Chlorobenzene	ND	5.2	0.34	ug/kg	
75-00-3	Chloroethane	ND	5.2	0.43	ug/kg	
67-66-3	Chloroform	ND	5.2	0.51	ug/kg	
74-87-3	Chloromethane	ND	5.2	0.65	ug/kg	
110-82-7	Cyclohexane	ND	5.2	0.40	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.6	ug/kg	
124-48-1	Dibromochloromethane	ND	5.2	0.18	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.25	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.2	0.29	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.2	0.20	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.2	0.18	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.2	0.34	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.2	0.23	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.19	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.2	0.64	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.2	0.34	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.2	0.44	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.2	0.28	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.2	0.35	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.15	ug/kg	
76-13-1	Freon 113	ND	5.2	0.75	ug/kg	
591-78-6	2-Hexanone	ND	5.2	2.6	ug/kg	
98-82-8	Isopropylbenzene	ND	5.2	0.14	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-5(0.0-0.6)
Lab Sample ID: JB7192-6
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/22/12
Date Received: 05/23/12
Percent Solids: 79.7

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.2	2.3	ug/kg	
108-87-2	Methylcyclohexane	ND	5.2	0.26	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.19	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	2.7	ug/kg	
75-09-2	Methylene chloride	ND	5.2	0.24	ug/kg	
100-42-5	Styrene	ND	5.2	0.19	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.2	0.19	ug/kg	
127-18-4	Tetrachloroethene	ND	5.2	0.20	ug/kg	
108-88-3	Toluene	ND	1.0	0.40	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	0.36	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.2	0.25	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.2	0.45	ug/kg	
79-01-6	Trichloroethene	ND	5.2	0.26	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.2	0.50	ug/kg	
75-01-4	Vinyl chloride	ND	5.2	0.48	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
17060-07-0	1,2-Dichloroethane-D4	88%		70-122%
2037-26-5	Toluene-D8	106%		81-127%
460-00-4	4-Bromofluorobenzene	97%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-5(0.0-0.6)**Lab Sample ID:** JB7192-6**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/22/12**Date Received:** 05/23/12**Percent Solids:** 79.7

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	6950	64	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.6	2.6	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	< 2.6	2.6	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Barium	57.4	26	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.50	0.26	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.64	0.64	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	10400	640	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	13.6	1.3	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	< 6.4	6.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Copper	20.7	3.2	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Iron	16900	64	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Lead	20.2	2.6	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	7950	640	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	498	1.9	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	< 0.037	0.037	mg/kg	1	05/31/12	05/31/12	VK	SW846 7471B ¹ SW846 7471B ⁴
Nickel	11.6	5.1	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1300	1300	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.6	2.6	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Silver	< 0.64	0.64	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1300	1300	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.3	1.3	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	23.9	6.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	41.5	2.6	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28694

(2) Instrument QC Batch: MA28711

(3) Prep QC Batch: MP64631

(4) Prep QC Batch: MP64711

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-5(1.5-2.0)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-7	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	84.6
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V126753.D	1	06/04/12	OTR	05/23/12 15:00	n/a	VV5480
Run #2							

Run #	Initial Weight
Run #1	6.3 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.4	1.6	ug/kg	
71-43-2	Benzene	ND	0.94	0.11	ug/kg	
75-27-4	Bromodichloromethane	ND	4.7	0.099	ug/kg	
75-25-2	Bromoform	ND	4.7	0.14	ug/kg	
74-83-9	Bromomethane	ND	4.7	0.26	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.4	2.2	ug/kg	
75-15-0	Carbon disulfide	ND	4.7	0.11	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.7	0.12	ug/kg	
108-90-7	Chlorobenzene	ND	4.7	0.10	ug/kg	
75-00-3	Chloroethane	ND	4.7	0.21	ug/kg	
67-66-3	Chloroform	ND	4.7	0.077	ug/kg	
74-87-3	Chloromethane	ND	4.7	0.17	ug/kg	
110-82-7	Cyclohexane	ND	4.7	0.12	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	9.4	0.83	ug/kg	
124-48-1	Dibromochloromethane	ND	4.7	0.15	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.94	0.12	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	4.7	0.18	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	4.7	0.18	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	4.7	0.17	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.7	0.21	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.7	0.13	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.94	0.13	ug/kg	
75-35-4	1,1-Dichloroethene	ND	4.7	0.24	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	4.7	0.17	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	4.7	0.22	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.7	0.14	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.7	0.13	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.7	0.15	ug/kg	
100-41-4	Ethylbenzene	ND	0.94	0.25	ug/kg	
76-13-1	Freon 113	ND	4.7	0.40	ug/kg	
591-78-6	2-Hexanone	ND	4.7	0.58	ug/kg	
98-82-8	Isopropylbenzene	ND	4.7	0.070	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-5(1.5-2.0)
Lab Sample ID: JB7192-7
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/22/12
Date Received: 05/23/12
Percent Solids: 84.6

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	4.7	2.4	ug/kg	
108-87-2	Methylcyclohexane	ND	4.7	0.16	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.94	0.22	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.7	0.70	ug/kg	
75-09-2	Methylene chloride	ND	4.7	1.2	ug/kg	
100-42-5	Styrene	ND	4.7	0.086	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.7	0.12	ug/kg	
127-18-4	Tetrachloroethene	ND	4.7	0.16	ug/kg	
108-88-3	Toluene	0.41	0.94	0.099	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.13	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.7	0.099	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.7	0.16	ug/kg	
79-01-6	Trichloroethene	ND	4.7	0.16	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.7	0.28	ug/kg	
75-01-4	Vinyl chloride	ND	4.7	0.14	ug/kg	
1330-20-7	Xylene (total)	0.26	0.94	0.13	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%
17060-07-0	1,2-Dichloroethane-D4	88%		70-122%
2037-26-5	Toluene-D8	108%		81-127%
460-00-4	4-Bromofluorobenzene	88%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-5(1.5-2.0)**Lab Sample ID:** JB7192-7**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/22/12**Date Received:** 05/23/12**Percent Solids:** 84.6**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	8710	61	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.4	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	2.6	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Barium	36.2	24	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.48	0.24	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.61	0.61	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	3110	610	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	17.1	1.2	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	< 6.1	6.1	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Copper	14.4	3.0	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Iron	16400	61	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Lead	15.7	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	2720	610	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	238	1.8	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	< 0.038	0.038	mg/kg	1	05/31/12	05/31/12	VK	SW846 7471B ¹ SW846 7471B ⁴
Nickel	12.5	4.8	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1200	1200	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.4	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Silver	< 0.61	0.61	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1200	1200	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.2	1.2	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	24.1	6.1	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	40.9	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28694

(2) Instrument QC Batch: MA28711

(3) Prep QC Batch: MP64631

(4) Prep QC Batch: MP64711

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	OU2-SB-6(0.0-0.6)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-8	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	83.3
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A183979.D	1	05/30/12	CL	05/23/12 15:00	n/a	VA6874
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.7	ug/kg	
71-43-2	Benzene	ND	1.0	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.1	0.23	ug/kg	
75-25-2	Bromoform	ND	5.1	0.77	ug/kg	
74-83-9	Bromomethane	ND	5.1	0.40	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	4.4	ug/kg	
75-15-0	Carbon disulfide	ND	5.1	0.20	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.1	0.35	ug/kg	
108-90-7	Chlorobenzene	ND	5.1	0.33	ug/kg	
75-00-3	Chloroethane	ND	5.1	0.42	ug/kg	
67-66-3	Chloroform	ND	5.1	0.49	ug/kg	
74-87-3	Chloromethane	ND	5.1	0.63	ug/kg	
110-82-7	Cyclohexane	ND	5.1	0.39	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.5	ug/kg	
124-48-1	Dibromochloromethane	ND	5.1	0.17	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.1	0.28	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.1	0.20	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.1	0.17	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.1	0.33	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.1	0.22	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.19	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.1	0.62	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.1	0.33	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.1	0.43	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.1	0.27	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.1	0.15	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.1	0.34	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.15	ug/kg	
76-13-1	Freon 113	ND	5.1	0.73	ug/kg	
591-78-6	2-Hexanone	ND	5.1	2.5	ug/kg	
98-82-8	Isopropylbenzene	ND	5.1	0.14	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-6(0.0-0.6)
Lab Sample ID: JB7192-8
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/22/12
Date Received: 05/23/12
Percent Solids: 83.3

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.1	2.3	ug/kg	
108-87-2	Methylcyclohexane	ND	5.1	0.25	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.1	2.7	ug/kg	
75-09-2	Methylene chloride	ND	5.1	0.23	ug/kg	
100-42-5	Styrene	ND	5.1	0.19	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.1	0.18	ug/kg	
127-18-4	Tetrachloroethene	ND	5.1	0.19	ug/kg	
108-88-3	Toluene	ND	1.0	0.38	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	0.35	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.1	0.25	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.1	0.44	ug/kg	
79-01-6	Trichloroethene	ND	5.1	0.25	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.1	0.49	ug/kg	
75-01-4	Vinyl chloride	ND	5.1	0.47	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
17060-07-0	1,2-Dichloroethane-D4	89%		70-122%
2037-26-5	Toluene-D8	107%		81-127%
460-00-4	4-Bromofluorobenzene	96%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

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 RL = Reporting Limit
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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	OU2-SB-6(0.0-0.6)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-8	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	83.3
Method:	SW846 8270D SW846 3550C		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2M44245.D	1	05/29/12	KH	05/24/12	OP57242	E2M1905
Run #2							

	Initial Weight	Final Volume
Run #1	35.9 g	1.0 ml
Run #2		

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	170	34	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	33	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	54	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	56	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	670	41	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	670	41	ug/kg	
95-48-7	2-Methylphenol	ND	67	38	ug/kg	
	3&4-Methylphenol	ND	67	42	ug/kg	
88-75-5	2-Nitrophenol	ND	170	35	ug/kg	
100-02-7	4-Nitrophenol	ND	330	57	ug/kg	
87-86-5	Pentachlorophenol	ND	330	57	ug/kg	
108-95-2	Phenol	ND	67	35	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	39	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	31	ug/kg	
83-32-9	Acenaphthene	ND	33	9.7	ug/kg	
208-96-8	Acenaphthylene	ND	33	11	ug/kg	
98-86-2	Acetophenone	ND	170	5.9	ug/kg	
120-12-7	Anthracene	21.0	33	12	ug/kg	J
1912-24-9	Atrazine	ND	170	6.6	ug/kg	
56-55-3	Benzo(a)anthracene	94.3	33	11	ug/kg	
50-32-8	Benzo(a)pyrene	95.2	33	10	ug/kg	
205-99-2	Benzo(b)fluoranthene	96.0	33	11	ug/kg	
191-24-2	Benzo(g,h,i)perylene	66.1	33	12	ug/kg	
207-08-9	Benzo(k)fluoranthene	73.4	33	13	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	67	12	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	67	19	ug/kg	
92-52-4	1,1'-Biphenyl	ND	67	3.9	ug/kg	
100-52-7	Benzaldehyde	ND	170	7.7	ug/kg	
91-58-7	2-Chloronaphthalene	ND	67	10	ug/kg	
106-47-8	4-Chloroaniline	ND	170	11	ug/kg	
86-74-8	Carbazole	ND	67	15	ug/kg	
105-60-2	Caprolactam	ND	67	11	ug/kg	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-6(0.0-0.6)

Lab Sample ID: JB7192-8

Matrix: SO - Soil

Method: SW846 8270D SW846 3550C

Project: Ramapo, NY

Date Sampled: 05/22/12

Date Received: 05/23/12

Percent Solids: 83.3

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	103	33	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	67	14	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	67	10	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	67	9.9	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	67	10	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	67	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	67	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	8.5	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	32.4	33	11	ug/kg	J
132-64-9	Dibenzofuran	ND	67	9.9	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	67	7.4	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	67	16	ug/kg	
84-66-2	Diethyl phthalate	ND	67	11	ug/kg	
131-11-3	Dimethyl phthalate	ND	67	12	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	67	30	ug/kg	
206-44-0	Fluoranthene	162	33	15	ug/kg	
86-73-7	Fluorene	ND	33	11	ug/kg	
118-74-1	Hexachlorobenzene	ND	67	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	33	9.3	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	34	ug/kg	
67-72-1	Hexachloroethane	ND	170	9.3	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	63.4	33	12	ug/kg	
78-59-1	Isophorone	ND	67	9.0	ug/kg	
91-57-6	2-Methylnaphthalene	ND	67	19	ug/kg	
88-74-4	2-Nitroaniline	ND	170	15	ug/kg	
99-09-2	3-Nitroaniline	ND	170	13	ug/kg	
100-01-6	4-Nitroaniline	ND	170	13	ug/kg	
91-20-3	Naphthalene	ND	33	9.1	ug/kg	
98-95-3	Nitrobenzene	ND	67	9.7	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	67	8.2	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	20	ug/kg	
85-01-8	Phenanthrene	67.2	33	15	ug/kg	
129-00-0	Pyrene	136	33	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%		21-116%
4165-62-2	Phenol-d5	40%		19-117%
118-79-6	2,4,6-Tribromophenol	58%		24-136%
4165-60-0	Nitrobenzene-d5	38%		21-122%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OU2-SB-6(0.0-0.6)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-8	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	83.3
Method:	SW846 8270D SW846 3550C		
Project:	Ramapo, NY		

ABN TCL List (CLP4.2 list)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	37%		30-117%
1718-51-0	Terphenyl-d14	63%		31-129%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	1.53	150	ug/kg	J
	system artifact/aldol-condensation	1.69	8700	ug/kg	J
57-10-3	n-Hexadecanoic acid	10.83	240	ug/kg	JN
57-11-4	Octadecanoic acid	11.95	150	ug/kg	JN
	alkane	13.96	170	ug/kg	J
	unknown	15.79	340	ug/kg	J
	Total TIC, Semi-Volatile		900	ug/kg	J

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Report of Analysis

Page 1 of 1

Client Sample ID:	OU2-SB-6(0.0-0.6)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-8	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	83.3
Method:	SW846 8081B SW846 3546		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G80034.D	1	05/31/12	DS	05/24/12	OP57258	G1G2669
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.80	0.40	ug/kg	
319-84-6	alpha-BHC	ND	0.80	0.60	ug/kg	
319-85-7	beta-BHC	ND	0.80	0.56	ug/kg	
319-86-8	delta-BHC	ND	0.80	0.46	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.80	0.36	ug/kg	
5103-71-9	alpha-Chlordane ^a	1.4	0.80	0.52	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.80	0.41	ug/kg	
60-57-1	Dieldrin	1.2	0.80	0.62	ug/kg	
72-54-8	4,4' -DDD	ND	0.80	0.41	ug/kg	
72-55-9	4,4' -DDE	ND	0.80	0.47	ug/kg	
50-29-3	4,4' -DDT ^b	0.97	0.80	0.58	ug/kg	
72-20-8	Endrin	ND	0.80	0.41	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.80	0.72	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.80	0.75	ug/kg	
959-98-8	Endosulfan-I	ND	0.80	0.38	ug/kg	
33213-65-9	Endosulfan-II	ND	0.80	0.52	ug/kg	
76-44-8	Heptachlor	ND	0.80	0.49	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.80	0.39	ug/kg	
72-43-5	Methoxychlor	ND	1.6	0.56	ug/kg	
53494-70-5	Endrin ketone	ND	0.80	0.52	ug/kg	
8001-35-2	Toxaphene	ND	20	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	67%		23-137%
877-09-8	Tetrachloro-m-xylene	61%		23-137%
2051-24-3	Decachlorobiphenyl	65%		22-160%
2051-24-3	Decachlorobiphenyl	67%		22-160%

(a) Reported from 2nd signal due to interference on 1st signal.

(b) More than 40 % RPD for detected concentrations between the two GC columns.

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	OU2-SB-6(0.0-0.6)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-8	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	83.3
Method:	SW846 8082A SW846 3546		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G67841.D	1	05/31/12	AZ	05/26/12	OP57298	G2G2381
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	10	ug/kg	
11104-28-2	Aroclor 1221	ND	38	23	ug/kg	
11141-16-5	Aroclor 1232	ND	38	19	ug/kg	
53469-21-9	Aroclor 1242	ND	38	12	ug/kg	
12672-29-6	Aroclor 1248	ND	38	12	ug/kg	
11097-69-1	Aroclor 1254	ND	38	18	ug/kg	
11096-82-5	Aroclor 1260	ND	38	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	117%		22-141%
877-09-8	Tetrachloro-m-xylene	110%		22-141%
2051-24-3	Decachlorobiphenyl	121%		18-163%
2051-24-3	Decachlorobiphenyl	110%		18-163%

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-6(0.0-0.6)**Lab Sample ID:** JB7192-8**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/22/12**Date Received:** 05/23/12**Percent Solids:** 83.3

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	11600	60	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.4	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	3.7	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Barium	64.7	24	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.68	0.24	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.60	0.60	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	3410	600	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	17.3	1.2	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	7.2	6.0	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Copper	23.9	3.0	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Iron	20500	60	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Lead	22.2	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	3820	600	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	410	1.8	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	0.053	0.039	mg/kg	1	05/31/12	05/31/12	VK	SW846 7471B ¹ SW846 7471B ⁴
Nickel	16.1	4.8	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	1220	1200	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.4	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Silver	1.2	0.60	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1200	1200	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.2	1.2	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	29.7	6.0	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	60.3	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28694

(2) Instrument QC Batch: MA28711

(3) Prep QC Batch: MP64631

(4) Prep QC Batch: MP64711

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-6(0.0-0.6)**Lab Sample ID:** JB7192-8**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/22/12**Date Received:** 05/23/12**Percent Solids:** 83.3**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.28	0.28	mg/kg	1	05/28/12 14:05	CW	SW846 9012 M/LACHAT
Solids, Percent	83.3		%	1	05/30/12	RO	SM18 2540G

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	OU2-SB-6(1.5-2.0)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-9	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	82.3
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A183965.D	1	05/29/12	CL	05/23/12 15:00	n/a	VA6874
Run #2							

	Initial Weight
Run #1	5.7 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	7.1	ug/kg	
71-43-2	Benzene	ND	1.1	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.3	0.24	ug/kg	
75-25-2	Bromoform	ND	5.3	0.80	ug/kg	
74-83-9	Bromomethane	ND	5.3	0.42	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	4.6	ug/kg	
75-15-0	Carbon disulfide	ND	5.3	0.21	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.3	0.37	ug/kg	
108-90-7	Chlorobenzene	ND	5.3	0.34	ug/kg	
75-00-3	Chloroethane	ND	5.3	0.43	ug/kg	
67-66-3	Chloroform	ND	5.3	0.51	ug/kg	
74-87-3	Chloromethane	ND	5.3	0.67	ug/kg	
110-82-7	Cyclohexane	ND	5.3	0.40	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	1.6	ug/kg	
124-48-1	Dibromochloromethane	ND	5.3	0.18	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.25	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.3	0.30	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.3	0.20	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.3	0.18	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.3	0.34	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.3	0.23	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.19	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.3	0.65	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.3	0.34	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.3	0.45	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.3	0.28	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.3	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.3	0.36	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.16	ug/kg	
76-13-1	Freon 113	ND	5.3	0.76	ug/kg	
591-78-6	2-Hexanone	ND	5.3	2.6	ug/kg	
98-82-8	Isopropylbenzene	ND	5.3	0.15	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-6(1.5-2.0)
Lab Sample ID: JB7192-9
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/22/12
Date Received: 05/23/12
Percent Solids: 82.3

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.3	2.4	ug/kg	
108-87-2	Methylcyclohexane	ND	5.3	0.26	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.19	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.3	2.8	ug/kg	
75-09-2	Methylene chloride	ND	5.3	0.25	ug/kg	
100-42-5	Styrene	ND	5.3	0.20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.3	0.19	ug/kg	
127-18-4	Tetrachloroethene	ND	5.3	0.20	ug/kg	
108-88-3	Toluene	ND	1.1	0.40	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	0.36	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.3	0.26	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.3	0.46	ug/kg	
79-01-6	Trichloroethene	ND	5.3	0.26	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.3	0.51	ug/kg	
75-01-4	Vinyl chloride	ND	5.3	0.49	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		70-130%
17060-07-0	1,2-Dichloroethane-D4	90%		70-122%
2037-26-5	Toluene-D8	105%		81-127%
460-00-4	4-Bromofluorobenzene	96%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	OU2-SB-6(1.5-2.0)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-9	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	82.3
Method:	SW846 8270D SW846 3550C		
Project:	Ramapo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2M44246.D	1	05/29/12	KH	05/24/12	OP57242	E2M1905
Run #2							

Run #	Initial Weight	Final Volume
Run #1	35.2 g	1.0 ml
Run #2		

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	170	35	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	35	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	56	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	58	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	690	42	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	690	42	ug/kg	
95-48-7	2-Methylphenol	ND	69	39	ug/kg	
	3&4-Methylphenol	ND	69	44	ug/kg	
88-75-5	2-Nitrophenol	ND	170	37	ug/kg	
100-02-7	4-Nitrophenol	ND	350	58	ug/kg	
87-86-5	Pentachlorophenol	ND	350	59	ug/kg	
108-95-2	Phenol	ND	69	36	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	40	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	32	ug/kg	
83-32-9	Acenaphthene	ND	35	10	ug/kg	
208-96-8	Acenaphthylene	13.8	35	11	ug/kg	J
98-86-2	Acetophenone	ND	170	6.1	ug/kg	
120-12-7	Anthracene	20.6	35	12	ug/kg	J
1912-24-9	Atrazine	ND	170	6.8	ug/kg	
56-55-3	Benzo(a)anthracene	82.0	35	11	ug/kg	
50-32-8	Benzo(a)pyrene	85.0	35	11	ug/kg	
205-99-2	Benzo(b)fluoranthene	86.3	35	12	ug/kg	
191-24-2	Benzo(g,h,i)perylene	67.1	35	13	ug/kg	
207-08-9	Benzo(k)fluoranthene	72.2	35	13	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	69	13	ug/kg	
85-68-7	Butyl benzyl phthalate	39.0	69	20	ug/kg	J
92-52-4	1,1'-Biphenyl	ND	69	4.0	ug/kg	
100-52-7	Benzaldehyde	ND	170	7.9	ug/kg	
91-58-7	2-Chloronaphthalene	ND	69	11	ug/kg	
106-47-8	4-Chloroaniline	ND	170	11	ug/kg	
86-74-8	Carbazole	ND	69	16	ug/kg	
105-60-2	Caprolactam	ND	69	11	ug/kg	

ND = Not detected MDL - Method Detection Limit

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-6(1.5-2.0)

Lab Sample ID: JB7192-9

Matrix: SO - Soil

Method: SW846 8270D SW846 3550C

Project: Ramapo, NY

Date Sampled: 05/22/12

Date Received: 05/23/12

Percent Solids: 82.3

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	111	35	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	69	14	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	69	10	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	69	10	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	69	10	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	69	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	69	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	8.8	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	30.9	35	12	ug/kg	J
132-64-9	Dibenzofuran	ND	69	10	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	69	7.7	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	69	17	ug/kg	
84-66-2	Diethyl phthalate	ND	69	12	ug/kg	
131-11-3	Dimethyl phthalate	ND	69	12	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	69	30	ug/kg	
206-44-0	Fluoranthene	263	35	15	ug/kg	
86-73-7	Fluorene	ND	35	11	ug/kg	
118-74-1	Hexachlorobenzene	ND	69	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	35	9.6	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	350	35	ug/kg	
67-72-1	Hexachloroethane	ND	170	9.6	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	60.3	35	12	ug/kg	
78-59-1	Isophorone	ND	69	9.3	ug/kg	
91-57-6	2-Methylnaphthalene	ND	69	19	ug/kg	
88-74-4	2-Nitroaniline	ND	170	15	ug/kg	
99-09-2	3-Nitroaniline	ND	170	14	ug/kg	
100-01-6	4-Nitroaniline	ND	170	13	ug/kg	
91-20-3	Naphthalene	ND	35	9.4	ug/kg	
98-95-3	Nitrobenzene	ND	69	10	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	69	8.4	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	21	ug/kg	
85-01-8	Phenanthrene	154	35	16	ug/kg	
129-00-0	Pyrene	189	35	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		21-116%
4165-62-2	Phenol-d5	44%		19-117%
118-79-6	2,4,6-Tribromophenol	65%		24-136%
4165-60-0	Nitrobenzene-d5	41%		21-122%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-6(1.5-2.0)**Lab Sample ID:** JB7192-9**Matrix:** SO - Soil**Method:** SW846 8270D SW846 3550C**Project:** Ramapo, NY**Date Sampled:** 05/22/12**Date Received:** 05/23/12**Percent Solids:** 82.3

ABN TCL List (CLP4.2 list)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	43%		30-117%
1718-51-0	Terphenyl-d14	66%		31-129%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	1.53	170	ug/kg	J
	system artifact/aldol-condensation	1.69	9800	ug/kg	J
	Benzeneethanol, -hydroxy-	6.92	190	ug/kg	J
57-10-3	n-Hexadecanoic acid	10.84	450	ug/kg	JN
57-11-4	Octadecanoic acid	11.96	290	ug/kg	JN
	unknown	13.96	320	ug/kg	J
	alkane	15.08	210	ug/kg	J
	unknown	15.79	290	ug/kg	J
	unknown	15.94	320	ug/kg	J
	unknown	15.99	170	ug/kg	J
	unknown	16.08	640	ug/kg	J
	unknown	16.23	150	ug/kg	J
	Total TIC, Semi-Volatile		3030	ug/kg	J

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	OU2-SB-6(1.5-2.0)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-9	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	82.3
Method:	SW846 8081B SW846 3546		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G80069.D	1	06/01/12	DS	05/24/12	OP57258	G1G2670
Run #2	1G80070.D	10	06/01/12	DS	05/24/12	OP57258	G1G2670

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2	15.3 g	10.0 ml

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.79	0.40	ug/kg	
319-84-6	alpha-BHC	ND	0.79	0.59	ug/kg	
319-85-7	beta-BHC	ND	0.79	0.56	ug/kg	
319-86-8	delta-BHC	ND	0.79	0.46	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.79	0.36	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.79	0.52	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.79	0.41	ug/kg	
60-57-1	Dieldrin	128 ^a	7.9	6.1	ug/kg	
72-54-8	4,4' -DDD	ND	0.79	0.41	ug/kg	
72-55-9	4,4' -DDE	160 ^a	7.9	4.7	ug/kg	
50-29-3	4,4' -DDT	ND	0.79	0.58	ug/kg	
72-20-8	Endrin	ND	0.79	0.41	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.79	0.72	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.79	0.75	ug/kg	
959-98-8	Endosulfan-I	ND	0.79	0.38	ug/kg	
33213-65-9	Endosulfan-II	ND	0.79	0.52	ug/kg	
76-44-8	Heptachlor	ND	0.79	0.49	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.79	0.39	ug/kg	
72-43-5	Methoxychlor	ND	1.6	0.56	ug/kg	
53494-70-5	Endrin ketone	ND	0.79	0.52	ug/kg	
8001-35-2	Toxaphene	ND	20	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	70%	82%	23-137%
877-09-8	Tetrachloro-m-xylene	75%	98%	23-137%
2051-24-3	Decachlorobiphenyl	62%	96%	22-160%
2051-24-3	Decachlorobiphenyl	74%	90%	22-160%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	OU2-SB-6(1.5-2.0)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-9	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	82.3
Method:	SW846 8082A SW846 3546		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G67842.D	1	05/31/12	AZ	05/26/12	OP57298	G2G2381
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	39	10	ug/kg	
11104-28-2	Aroclor 1221	ND	39	23	ug/kg	
11141-16-5	Aroclor 1232	ND	39	20	ug/kg	
53469-21-9	Aroclor 1242	ND	39	12	ug/kg	
12672-29-6	Aroclor 1248	ND	39	12	ug/kg	
11097-69-1	Aroclor 1254	ND	39	18	ug/kg	
11096-82-5	Aroclor 1260	ND	39	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	110%		22-141%
877-09-8	Tetrachloro-m-xylene	103%		22-141%
2051-24-3	Decachlorobiphenyl	111%		18-163%
2051-24-3	Decachlorobiphenyl	104%		18-163%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-6(1.5-2.0)

Lab Sample ID: JB7192-9

Matrix: SO - Soil

Project: Ramapo, NY

Date Sampled: 05/22/12

Date Received: 05/23/12

Percent Solids: 82.3

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	14100	63	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Antimony	< 2.5	2.5	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Arsenic	3.3	2.5	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Barium	87.5	25	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Beryllium	0.60	0.25	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Cadmium	< 0.63	0.63	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Calcium	3610	630	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Chromium	16.8	1.3	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Cobalt	< 6.3	6.3	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Copper	18.8	3.1	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Iron	18100	63	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Lead	44.8	2.5	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Magnesium	2780	630	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Manganese	204	1.9	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Mercury	0.063	0.040	mg/kg	1	05/31/12	05/31/12	VK	SW846 7471B ¹
Nickel	11.9	5.0	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Potassium	< 1300	1300	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Selenium	< 2.5	2.5	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Silver	0.65	0.63	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Sodium	< 1300	1300	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Thallium	< 1.3	1.3	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Vanadium	26.4	6.3	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Zinc	163	2.5	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²

(1) Instrument QC Batch: MA28694

(2) Instrument QC Batch: MA28711

(3) Prep QC Batch: MP64631

(4) Prep QC Batch: MP64711

RL = Reporting Limit

Report of Analysis

Client Sample ID:	OU2-SB-6(1.5-2.0)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-9	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	82.3
Project:	Ramapo, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.30	0.30	mg/kg	1	05/28/12 14:09	CW	SW846 9012 M/LACHAT
Solids, Percent	82.3		%	1	05/30/12	RO	SM18 2540G

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	OU2-SB-7(0.0-0.6)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-10	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	78.7
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	E191892.D	1	05/31/12	OTR	05/23/12 15:00	n/a	VE8438
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.4 g	5.0 ml	100 ul
Run #2			

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	720	120	ug/kg	
71-43-2	Benzene	ND	72	8.6	ug/kg	
75-27-4	Bromodichloromethane	ND	360	7.6	ug/kg	
75-25-2	Bromoform	ND	360	11	ug/kg	
74-83-9	Bromomethane	ND	360	20	ug/kg	
78-93-3	2-Butanone (MEK)	ND	720	170	ug/kg	
75-15-0	Carbon disulfide	ND	360	8.5	ug/kg	
56-23-5	Carbon tetrachloride	ND	360	9.6	ug/kg	
108-90-7	Chlorobenzene	ND	360	7.8	ug/kg	
75-00-3	Chloroethane	ND	360	16	ug/kg	
67-66-3	Chloroform	ND	360	6.0	ug/kg	
74-87-3	Chloromethane	ND	360	13	ug/kg	
110-82-7	Cyclohexane	ND	360	9.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	720	64	ug/kg	
124-48-1	Dibromochloromethane	ND	360	12	ug/kg	
106-93-4	1,2-Dibromoethane	ND	72	9.2	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	360	14	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	360	14	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	360	13	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	360	16	ug/kg	
75-34-3	1,1-Dichloroethane	ND	360	9.9	ug/kg	
107-06-2	1,2-Dichloroethane	ND	72	9.8	ug/kg	
75-35-4	1,1-Dichloroethene	ND	360	19	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	360	13	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	360	17	ug/kg	
78-87-5	1,2-Dichloropropane	ND	360	11	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	360	10	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	360	11	ug/kg	
100-41-4	Ethylbenzene	ND	72	19	ug/kg	
76-13-1	Freon 113	ND	360	31	ug/kg	
591-78-6	2-Hexanone	ND	360	45	ug/kg	
98-82-8	Isopropylbenzene	ND	360	5.4	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-7(0.0-0.6)
Lab Sample ID: JB7192-10
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/22/12
Date Received: 05/23/12
Percent Solids: 78.7

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	360	190	ug/kg	
108-87-2	Methylcyclohexane	ND	360	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	72	17	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	360	54	ug/kg	
75-09-2	Methylene chloride	ND	360	92	ug/kg	
100-42-5	Styrene	ND	360	6.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	360	9.6	ug/kg	
127-18-4	Tetrachloroethene	ND	360	12	ug/kg	
108-88-3	Toluene	ND	72	7.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	360	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	360	7.7	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	360	13	ug/kg	
79-01-6	Trichloroethene	ND	360	13	ug/kg	
75-69-4	Trichlorofluoromethane	ND	360	22	ug/kg	
75-01-4	Vinyl chloride	ND	360	10	ug/kg	
1330-20-7	Xylene (total)	ND	72	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-130%
17060-07-0	1,2-Dichloroethane-D4	94%		70-122%
2037-26-5	Toluene-D8	95%		81-127%
460-00-4	4-Bromofluorobenzene	93%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
471-84-1	.alpha.-Pinene	15.27	4400	ug/kg	J
	Bicyclo[2.2.1]heptane, 7,7-dimethyl-2-me	15.55	2000	ug/kg	JN
	unknown	15.84	1700	ug/kg	J
99-83-2	unknown	16.03	9200	ug/kg	J
	.alpha.-Phellandrene	16.28	680	ug/kg	JN
	unknown	16.35	5200	ug/kg	J
	Limonene	16.59	1800	ug/kg	J
	cycloalkane/alkene	17.34	840	ug/kg	J
	unknown	21.10	820	ug/kg	J
	unknown	21.20	520	ug/kg	J
	unknown	22.96	390	ug/kg	J
	Total TIC, Volatile		27550	ug/kg	J

(a) Dilution required due to matrix interference.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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3.10

3

Client Sample ID: OU2-SB-7(0.0-0.6)**Lab Sample ID:** JB7192-10**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/22/12**Date Received:** 05/23/12**Percent Solids:** 78.7**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	14000	64	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Antimony	< 2.6	2.6	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Arsenic	3.2	2.6	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Barium	43.8	26	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Beryllium	0.59	0.26	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Cadmium	< 0.64	0.64	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Calcium	2210	640	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Chromium	17.2	1.3	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Cobalt	< 6.4	6.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Copper	16.2	3.2	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Iron	17400	64	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Lead	11.8	2.6	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Magnesium	2690	640	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Manganese	197	1.9	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Mercury	< 0.041	0.041	mg/kg	1	05/31/12	05/31/12	VK	SW846 7471B ¹
Nickel	11.3	5.1	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Potassium	< 1300	1300	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Selenium	< 2.6	2.6	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Silver	< 0.64	0.64	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Sodium	< 1300	1300	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Thallium	< 1.3	1.3	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Vanadium	28.1	6.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Zinc	39.9	2.6	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²

(1) Instrument QC Batch: MA28694

(2) Instrument QC Batch: MA28711

(3) Prep QC Batch: MP64631

(4) Prep QC Batch: MP64711

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-7(1.5-2.0)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-11	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	86.8
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A183982.D	1	05/30/12	CL	05/23/12 15:00	n/a	VA6874
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.8	ug/kg	
71-43-2	Benzene	ND	1.0	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.1	0.23	ug/kg	
75-25-2	Bromoform	ND	5.1	0.78	ug/kg	
74-83-9	Bromomethane	ND	5.1	0.41	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	4.5	ug/kg	
75-15-0	Carbon disulfide	ND	5.1	0.20	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.1	0.36	ug/kg	
108-90-7	Chlorobenzene	ND	5.1	0.33	ug/kg	
75-00-3	Chloroethane	ND	5.1	0.42	ug/kg	
67-66-3	Chloroform	ND	5.1	0.50	ug/kg	
74-87-3	Chloromethane	ND	5.1	0.64	ug/kg	
110-82-7	Cyclohexane	ND	5.1	0.39	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.6	ug/kg	
124-48-1	Dibromochloromethane	ND	5.1	0.17	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.1	0.28	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.1	0.20	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.1	0.17	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.1	0.33	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.1	0.22	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.19	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.1	0.63	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.1	0.33	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.1	0.44	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.1	0.27	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.1	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.1	0.35	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.15	ug/kg	
76-13-1	Freon 113	ND	5.1	0.74	ug/kg	
591-78-6	2-Hexanone	ND	5.1	2.6	ug/kg	
98-82-8	Isopropylbenzene	ND	5.1	0.14	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-7(1.5-2.0)
Lab Sample ID: JB7192-11
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/22/12
Date Received: 05/23/12
Percent Solids: 86.8

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.1	2.3	ug/kg	
108-87-2	Methylcyclohexane	ND	5.1	0.25	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.1	2.7	ug/kg	
75-09-2	Methylene chloride	ND	5.1	0.24	ug/kg	
100-42-5	Styrene	ND	5.1	0.19	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.1	0.18	ug/kg	
127-18-4	Tetrachloroethene	ND	5.1	0.20	ug/kg	
108-88-3	Toluene	ND	1.0	0.39	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	0.35	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.1	0.25	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.1	0.45	ug/kg	
79-01-6	Trichloroethene	ND	5.1	0.25	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.1	0.50	ug/kg	
75-01-4	Vinyl chloride	ND	5.1	0.47	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		70-130%
17060-07-0	1,2-Dichloroethane-D4	90%		70-122%
2037-26-5	Toluene-D8	107%		81-127%
460-00-4	4-Bromofluorobenzene	97%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
471-84-1	Bicyclo[2.2.1]heptane, 7,7-dimethyl-2-me	15.31	11	ug/kg	JN
127-91-3	.beta. -Pinene	15.79	6.3	ug/kg	JN
13466-78-9	3-Carene	16.13	18	ug/kg	JN
	Total TIC, Volatile		35.3	ug/kg	J

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-7(1.5-2.0)

Lab Sample ID: JB7192-11

Matrix: SO - Soil

Project: Ramapo, NY

Date Sampled: 05/22/12

Date Received: 05/23/12

Percent Solids: 86.8

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	15000	59	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Antimony	< 2.4	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Arsenic	3.0	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Barium	44.3	24	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Beryllium	0.62	0.24	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Cadmium	< 0.59	0.59	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Calcium	1660	590	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Chromium	17.2	1.2	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Cobalt	< 5.9	5.9	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Copper	14.7	2.9	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Iron	18300	59	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Lead	11.1	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Magnesium	2800	590	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Manganese	186	1.8	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Mercury	0.038	0.038	mg/kg	1	05/31/12	05/31/12	VK	SW846 7471B ¹
Nickel	11.5	4.7	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Potassium	< 1200	1200	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Selenium	< 2.4	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Silver	< 0.59	0.59	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Sodium	< 1200	1200	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Thallium	< 1.2	1.2	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Vanadium	29.9	5.9	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²
Zinc	36.8	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ²

(1) Instrument QC Batch: MA28694

(2) Instrument QC Batch: MA28711

(3) Prep QC Batch: MP64631

(4) Prep QC Batch: MP64711

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-8(0.0-0.6)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-12	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	86.5
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A183958.D	1	05/29/12	CL	05/23/12 15:00	n/a	VA6874
Run #2							

	Initial Weight
Run #1	5.4 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	7.1	ug/kg	
71-43-2	Benzene	ND	1.1	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.4	0.24	ug/kg	
75-25-2	Bromoform	ND	5.4	0.81	ug/kg	
74-83-9	Bromomethane	ND	5.4	0.42	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	4.6	ug/kg	
75-15-0	Carbon disulfide	ND	5.4	0.21	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.4	0.37	ug/kg	
108-90-7	Chlorobenzene	ND	5.4	0.34	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.44	ug/kg	
67-66-3	Chloroform	ND	5.4	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.4	0.67	ug/kg	
110-82-7	Cyclohexane	ND	5.4	0.41	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	1.6	ug/kg	
124-48-1	Dibromochloromethane	ND	5.4	0.18	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.25	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.4	0.30	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.4	0.21	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.4	0.18	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.4	0.34	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.4	0.23	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.19	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.4	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.4	0.34	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.4	0.45	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.4	0.28	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.4	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.4	0.36	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.16	ug/kg	
76-13-1	Freon 113	ND	5.4	0.77	ug/kg	
591-78-6	2-Hexanone	ND	5.4	2.7	ug/kg	
98-82-8	Isopropylbenzene	ND	5.4	0.15	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-8(0.0-0.6)
Lab Sample ID: JB7192-12
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/22/12
Date Received: 05/23/12
Percent Solids: 86.5

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.4	2.4	ug/kg	
108-87-2	Methylcyclohexane	ND	5.4	0.26	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.19	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	2.8	ug/kg	
75-09-2	Methylene chloride	ND	5.4	0.25	ug/kg	
100-42-5	Styrene	ND	5.4	0.20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.4	0.19	ug/kg	
127-18-4	Tetrachloroethene	ND	5.4	0.20	ug/kg	
108-88-3	Toluene	ND	1.1	0.40	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	0.37	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.4	0.26	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.4	0.46	ug/kg	
79-01-6	Trichloroethene	ND	5.4	0.26	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.4	0.52	ug/kg	
75-01-4	Vinyl chloride	ND	5.4	0.49	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%
17060-07-0	1,2-Dichloroethane-D4	83%		70-122%
2037-26-5	Toluene-D8	105%		81-127%
460-00-4	4-Bromofluorobenzene	96%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-8(0.0-0.6)**Lab Sample ID:** JB7192-12**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/22/12**Date Received:** 05/23/12**Percent Solids:** 86.5

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	5190	60	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.4	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	< 2.4	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Barium	30.3	24	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.35	0.24	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.60	0.60	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	2000	600	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	11.3	1.2	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	< 6.0	6.0	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Copper	10.7	3.0	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Iron	12800	60	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Lead	12.0	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	2220	600	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	196	1.8	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	< 0.037	0.037	mg/kg	1	05/31/12	05/31/12	VK	SW846 7471B ¹ SW846 7471B ⁴
Nickel	8.4	4.8	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1200	1200	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.4	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Silver	< 0.60	0.60	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1200	1200	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.2	1.2	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	17.6	6.0	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	31.2	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28694

(2) Instrument QC Batch: MA28711

(3) Prep QC Batch: MP64631

(4) Prep QC Batch: MP64711

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	OU2-SB-8(1.5-2.0)	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-13	Date Received:	05/23/12
Matrix:	SO - Soil	Percent Solids:	83.0
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A183959.D	1	05/29/12	CL	05/23/12 15:00	n/a	VA6874
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	7.1	ug/kg	
71-43-2	Benzene	ND	1.1	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.4	0.24	ug/kg	
75-25-2	Bromoform	ND	5.4	0.81	ug/kg	
74-83-9	Bromomethane	ND	5.4	0.42	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	4.7	ug/kg	
75-15-0	Carbon disulfide	ND	5.4	0.21	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.4	0.37	ug/kg	
108-90-7	Chlorobenzene	ND	5.4	0.35	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.44	ug/kg	
67-66-3	Chloroform	ND	5.4	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.4	0.67	ug/kg	
110-82-7	Cyclohexane	ND	5.4	0.41	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	1.6	ug/kg	
124-48-1	Dibromochloromethane	ND	5.4	0.18	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.26	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.4	0.30	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.4	0.21	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.4	0.18	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.4	0.35	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.4	0.23	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.20	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.4	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.4	0.35	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.4	0.46	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.4	0.29	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.4	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.4	0.36	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.16	ug/kg	
76-13-1	Freon 113	ND	5.4	0.77	ug/kg	
591-78-6	2-Hexanone	ND	5.4	2.7	ug/kg	
98-82-8	Isopropylbenzene	ND	5.4	0.15	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-8(1.5-2.0)
Lab Sample ID: JB7192-13
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/22/12
Date Received: 05/23/12
Percent Solids: 83.0

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.4	2.4	ug/kg	
108-87-2	Methylcyclohexane	ND	5.4	0.26	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.19	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	2.8	ug/kg	
75-09-2	Methylene chloride	ND	5.4	0.25	ug/kg	
100-42-5	Styrene	ND	5.4	0.20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.4	0.19	ug/kg	
127-18-4	Tetrachloroethene	ND	5.4	0.21	ug/kg	
108-88-3	Toluene	ND	1.1	0.41	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	0.37	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.4	0.26	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.4	0.47	ug/kg	
79-01-6	Trichloroethene	ND	5.4	0.27	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.4	0.52	ug/kg	
75-01-4	Vinyl chloride	ND	5.4	0.50	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		70-130%
17060-07-0	1,2-Dichloroethane-D4	87%		70-122%
2037-26-5	Toluene-D8	107%		81-127%
460-00-4	4-Bromofluorobenzene	94%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-8(1.5-2.0)**Lab Sample ID:** JB7192-13**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/22/12**Date Received:** 05/23/12**Percent Solids:** 83.0**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	6150	60	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.4	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	< 2.4	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Barium	27.3	24	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.42	0.24	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.60	0.60	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	1840	600	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	12.3	1.2	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	< 6.0	6.0	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Copper	12.9	3.0	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Iron	14900	60	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Lead	17.3	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	2270	600	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	237	1.8	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	< 0.037	0.037	mg/kg	1	05/31/12	05/31/12	VK	SW846 7471B ¹ SW846 7471B ⁴
Nickel	9.1	4.8	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1200	1200	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.4	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Silver	< 0.60	0.60	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1200	1200	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.2	1.2	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	18.4	6.0	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	29.6	2.4	mg/kg	1	05/25/12	06/04/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28694

(2) Instrument QC Batch: MA28711

(3) Prep QC Batch: MP64631

(4) Prep QC Batch: MP64711

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	TB	Date Sampled:	05/22/12
Lab Sample ID:	JB7192-14	Date Received:	05/23/12
Matrix:	AQ - Trip Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E78510.D	1	05/26/12	MAH	n/a	n/a	V2E3523
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: TB	Date Sampled: 05/22/12
Lab Sample ID: JB7192-14	Date Received: 05/23/12
Matrix: AQ - Trip Blank Soil	Percent Solids: n/a
Method: SW846 8260B	
Project: Ramapo, NY	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		77-120%
17060-07-0	1,2-Dichloroethane-D4	105%		70-127%
2037-26-5	Toluene-D8	108%		79-120%
460-00-4	4-Bromofluorobenzene	103%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Client / Reporting Information			Project Information			Requested Analysis (see TEST CODE sheet)										Matrix Codes	
Company Name ARCADIS-US			Project Name: OU-2 Soil Sampling Work Plain Site 3-44-064			VOC + TAL Full FERTAL TOL/TAL										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	
Street Address 17-17 Route 208 North 2nd FL			Street FAIRLAWN N.J. 07410														
City FAIRLAWN N.J. State 07410 Zip RAWAPPO NY			Billing Information (if different from Report to)														
Project Contact JOE ROCKLIN Phone 201-797-7400 Fax 201-797-7400			CLAIM ADJUSTER CONTACT NAME:														
Sampler(s) Name(s) ARCEUS A. BARRIO			CHARTIS PRICING NEEDED: ☐														
Accutest Sample #	Field ID / Point of Collection	MECH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	H3PO4	DI Water	MEOH	ENCORE	LAB USE ONLY	
-1	FB 20120522		5/22/12	1410	AB	AQ	8	X			X					EX51, ME3	
-2	OU2-SB-2 (0.0-0.6)		5/22/12	1400	AB	SO	5				X					9078,	
-3	OU2-SB-2 (1.5-2.0)			1430	AB		5				X					1965,	
-4	OU2-SB-4 (0.0-0.6)			1100	AB		5				X					4964	
-5	OU2-SB-4 (1.5-2.0)			1130	AB		5				X					EX24, ME3	
-6	OU2-SB-5 (0.0-0.6)			1000	AB		5				X					AMEFAR,	
-7	OU2-SB-5 (1.5-2.0)			1030	AB		5				X					866	
-8	OU2-SB-6 (0.0-0.6)			1200	AB		6				X			X	X		
-9	OU2-SB-6 (1.5-2.0)			1230	AB		6				X			X	X		
-10	OU2-SB-7 (0.0-0.6)			1300	AB		5				X						
-11	OU2-SB-7 (1.5-2.0)			1330	AB		5				X						
-12	OU2-SB-8 (0.0-0.6)			1500	AB		5				X						
Turnaround Time (Business days)																	
☒ Std. 10 Business Days ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ other _____ Emergency & Rush T/A data available VIA Lablink			Approved By (Accutest PM): / Date: _____ _____ _____ _____ _____			☐ Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☐ FULLT1 (Level 3+4) ☐ NJ Reduced ☐ Commercial "C" Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data										Comments / Special Instructions Sample # 11 is OU2-SB7 (1.5-2.0) @ 1330 300mg 5/23/12	
Sample Custody must be documented below each time samples change possession, including courier delivery.																	
Relinquished by Sampler: <i>Joe Rocklin</i>		Date Time: 5/22/12 1700		Received By: <i>SP312</i>		Date Time: 5/23/12 1140		Received By: <i>M. Torres</i>									
Relinquished by Sampler: <i>Joe Rocklin</i>		Date Time: 5/22/12 1700		Received By: <i>SP312</i>		Date Time: 5/23/12 1140		Received By: <i>M. Torres</i>									
Relinquished by: <i>Joe Rocklin</i>		Date Time: 5/22/12 1700		Received By: <i>SP312</i>		Date Time: 5/23/12 1140		Received By: <i>M. Torres</i>									
Custody Seal # <i>ME</i>		☐ Intact		☐ Not intact		Preserved where applicable		On Ice		Cooler Temp. <i>20°C, 10°C</i>							

JB7192: Chain of Custody

Page 1 of 4

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)												Matrix Codes													
Company Name ARCADIS-US		Project Name: OU-2 Sub Sampling work plan 3-44-069														Matrix Codes													
Street Address 17-17 Route 208 North 2nd EL		Street 2nd EL														DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WIP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank													
City Freehold N.J. State N.J. Zip 07410		City Freehold N.J. State N.J. Zip 07410																											
Project Contact Joe Rocklin @ ARCADIS-US		CLAIM ADJUSTER CONTACT NAME:																											
Phone # 201-797-7400 Fax # 201-797-7400		CLAIMS NUMBER #																											
Sampler(s) Name(s) ANGELUS A. GARDINO Phone # 201-797-7400		CHARTIS PRICING NEEDED: ☐																											
Field ID / Point of Collection		MEOH/ID1 Vial #		Collection		Sampled by		Matrix		# of bottles		HCL		NH4OH		HNO3		H2SO4		H2O2		DI Water		MEOH		ENDORE		LAB USE ONLY	
13 OU2-SB-8(1.5-2.0)		5/22/12		1530		SO		5		5		X																	
14 TB								AQ		2		X																	
~~15 OU2-SB-3 (0-0.6)~~		~~5/21/12~~		~~1500~~		~~SO~~		~~1~~		~~1~~		<del></del>		<del></del>		<del></del>		<del></del>		<del></del>		<del></del>		<del></del>		<del></del>		<del></del>	
Turnaround Time (Business days)		Approved By (Accutest PM): / Date:		Data Deliverable Information												Comments / Special Instructions													
☒ Std. 10 Business Days ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ other				☐ Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☐ FULLT1 (Level 3+4) ☐ NJ Reduced ☐ Commercial "C" ☐ NYASP Category A ☐ NYASP Category B ☐ State Forms ☐ EDD Format ☐ Other												a Zeng 5/23/12 * ADDED													
Emergency & Rush T/A data available VIA Lablink				Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data																									
Relinquished by Sampler:		Date Time:		Received By:		Date Time:		Relinquished by:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:	
1 Joe Rocklin		5/22/12 1700		1 Joe Rocklin		5/23/12 1140		2 Joe Rocklin		5/23/12 1140		3 Joe Rocklin		5/23/12 1140		4 Joe Rocklin		5/23/12 1140		5 Joe Rocklin		5/23/12 1140		6 Joe Rocklin		5/23/12 1140		7 Joe Rocklin	
Relinquished by Sampler:		Date Time:		Received By:		Date Time:		Relinquished by:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:	
3 Joe Rocklin		5/22/12 1700		3 Joe Rocklin		5/23/12 1140		4 Joe Rocklin		5/23/12 1140		5 Joe Rocklin		5/23/12 1140		6 Joe Rocklin		5/23/12 1140		7 Joe Rocklin		5/23/12 1140		8 Joe Rocklin		5/23/12 1140		9 Joe Rocklin	
Relinquished by:		Date Time:		Received By:		Date Time:		Relinquished by:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:	
5 Joe Rocklin		5/22/12 1700		5 Joe Rocklin		5/23/12 1140		6 Joe Rocklin		5/23/12 1140		7 Joe Rocklin		5/23/12 1140		8 Joe Rocklin		5/23/12 1140		9 Joe Rocklin		5/23/12 1140		10 Joe Rocklin		5/23/12 1140		11 Joe Rocklin	
Custody Seal #		Intact		Not Intact		Preserved where applicable		On Ice		Cooler Temp.		20°C		1.0°C															

JB7192: Chain of Custody

Page 2 of 4

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB7192 Client: ARCADIS-NJ Project: OU2S
 Date / Time Received: 5/23/2012 1140 Delivery Method: Accutest Courier Airbill #'s: N/A

Cooler Temps (Initial/Adjusted): #1: (2/2); #2: (1/1); 0

Cooler Security

	Y	or	N		Y	or	N
1. Custody Seals Present:	☐		☒	3. COC Present:	☒		☐
2. Custody Seals Intact:	☒		☐	4. Smpl Dates/Time OK	☒		☐

Cooler Temperature

	Y	or	N
1. Temp criteria achieved:	☒		☐
2. Cooler temp verification:			
3. Cooler media:			
4. No, Coolers			

Quality Control Preservation

	Y	N	N/A
1. Trip Blank present / cooler:	☒	☐	☐
2. Trip Blank listed on COC:	☒	☐	☐
3. Samples preserved properly:	☒	☐	
4. VOCs headspace free:	☒	☐	☐

Sample Integrity - Documentation

	Y	or	N
1. Sample labels present on bottles:	☒		☐
2. Container labeling complete:	☒		☐
3. Sample container label / COC agree:	☒		☐

Sample Integrity - Condition

	Y	or	N
1. Sample recvd within HT:	☒		☐
2. All containers accounted for:	☒		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions

	Y	N	N/A
1. Analysis requested is clear:	☒	☐	
2. Bottles received for unspecified tests	☒	☐	
3. Sufficient volume recvd for analysis:	☒	☐	
4. Compositing instructions clear:	☐	☐	☒
5. Filtering instructions clear:	☐	☐	☒

Comments -15 ADDED TO COC - NEEDED? 60ml SOIL LABELED FOR METALS
 LABELED "OU2-SB3(0-0.6)" 5/21/12 1500

Accutest Job Number: JB7192

CSR: Michelle _____

Response Date: 5/23/2012 _____

Response: -15, this is extra volume that should be added to JB7078-3

Per Angelus Barrio

4.1
4



06/13/12

Technical Report for

Arcadis

Ramapo, NY

NJ000602.0002

Accutest Job Number: JB7363

Sampling Date: 05/23/12

Report to:

Arcadis Geraghty & Miller

Matt.Gress@arcadis-us.com

ATTN: Matt Gress

Total number of pages in report: **57**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Paul Ioannidis
Lab Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), PA, RI, SC, TN, VA, WV

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Test results relate only to samples analyzed.

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Sample Summary

Arcadis

Job No: JB7363

Ramapo, NY

Project No: NJ000602.0002

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JB7363-1	05/23/12	14:10 AAB	05/24/12	AQ	Field Blank Soil	FB20120523
JB7363-2	05/23/12	16:00 AAB	05/24/12	SO	Soil	OU2-SB-9(0.0-0.6)
JB7363-3	05/23/12	16:30 AAB	05/24/12	SO	Soil	OU2-SB-9(1.5-2.0)
JB7363-4	05/23/12	09:00 AAB	05/24/12	SO	Soil	OU2-SB-10(0.0-0.6)
JB7363-5	05/23/12	09:30 AAB	05/24/12	SO	Soil	OU2-SB-10(1.5-2.0)
JB7363-6	05/23/12	10:00 AAB	05/24/12	SO	Soil	OU2-SB-11(0.0-0.6)
JB7363-7	05/23/12	10:30 AAB	05/24/12	SO	Soil	OU2-SB-11(1.5-2.0)
JB7363-8	05/23/12	11:00 AAB	05/24/12	SO	Soil	OU2-SB-12(0.0-0.6)
JB7363-9	05/23/12	11:30 AAB	05/24/12	SO	Soil	OU2-SB-12(1.5-2.0)
JB7363-10	05/23/12	12:00 AAB	05/24/12	SO	Soil	OU2-SB-13(0.0-0.6)
JB7363-11	05/23/12	12:30 AAB	05/24/12	SO	Soil	OU2-SB-13(1.5-2.0)
JB7363-12	05/23/12	13:00 AAB	05/24/12	SO	Soil	OU2-SB-14(0.0-0.6)
JB7363-13	05/23/12	13:30 AAB	05/24/12	SO	Soil	OU2-SB-14(1.5-2.0)

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

Arcadis

Job No: JB7363

Ramapo, NY

Project No: NJ000602.0002

Sample Number	Collected		Time By	Received	Matrix		Client Sample ID
	Date				Code	Type	
JB7363-14	05/23/12	14:00	AAB	05/24/12	SO	Soil	OU2-SB-15(0.0-0.6)
JB7363-15	05/23/12	14:30	AAB	05/24/12	SO	Soil	OU2-SB-15(1.5-2.0)

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Arcadis

Job No JB7363

Site: Ramapo, NY

Report Date 6/5/2012 6:18:35 PM

On 05/24/2012, 14 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at Accutest Laboratories at a temperature of 3 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB7363 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ

Batch ID: V2C4389

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB7551-3MS, JB7551-5DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO

Batch ID: V3C3917

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB7363-3DUP, JB7363-4MS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Acetone are outside control limits. Outside control limits due to matrix interference.

Matrix: SO

Batch ID: V3C3918

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB7363-13MS, JB7363-14DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Metals By Method SW846 6010C

Matrix: AQ

Batch ID: MP64647

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7137-1MS, JB7137-1MSD, JB7137-1SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Selenium, Silver, Vanadium are outside control limits for sample MP64647-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix: SO

Batch ID: MP64646

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7363-4MS, JB7363-4MSD, JB7363-4SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Aluminum, Antimony, Iron are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike Duplicate Recovery(s) for Aluminum, Antimony, Iron are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike Recovery(s) for Manganese are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for MS/MSD for Manganese are outside control limits for sample MP64646-S2. High rpd due to possible sample nonhomogeneity.
- RPD(s) for Serial Dilution for Antimony, Beryllium, Cadmium, Sodium, Thallium are outside control limits for sample MP64646-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP64646-SD1 for Copper: Serial dilution indicates possible matrix interference.
- MP64646-SD1 for Potassium: Serial dilution indicates possible matrix interference.
- MP64646-SD1 for Magnesium: Serial dilution indicates possible matrix interference.
- MP64646-SD1 for Nickel: Serial dilution indicates possible matrix interference.
- MP64646-SD1 for Calcium: Serial dilution indicates possible matrix interference.
- MP64646-SD1 for Vanadium: Serial dilution indicates possible matrix interference.
- MP64646-SD1 for Barium: Serial dilution indicates possible matrix interference.
- MP64646-SD1 for Aluminum: Serial dilution indicates possible matrix interference.

Metals By Method SW846 7470A

Matrix: AQ

Batch ID: MP64764

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7540-2FMS, JB7540-2FMSD were used as the QC samples for metals.

Metals By Method SW846 7471B

Matrix: SO

Batch ID: MP64757

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7152-2MS, JB7152-2MSD were used as the QC samples for metals.

Matrix: SO

Batch ID: MP64758

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7163-1MS, JB7163-1MSD were used as the QC samples for metals.
- Matrix Spike Duplicate Recovery(s) for Mercury are outside control limits. Spike recovery indicates possible matrix interference.

Wet Chemistry By Method ASTM 4643-00

Matrix: SO

Batch ID: GN67164

- The data for ASTM 4643-00 meets quality control requirements.

Wet Chemistry By Method SM18 2540G

Matrix: SO

Batch ID: GN67093

- The data for SM18 2540G meets quality control requirements.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 2

Client Sample ID:	FB20120523	Date Sampled:	05/23/12
Lab Sample ID:	JB7363-1	Date Received:	05/24/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C96071.D	1	05/31/12	DR	n/a	n/a	V2C4389
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.21	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.26	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.21	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.35	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	0.54	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.20	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.27	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.11	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.19	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.19	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.48	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.23	ug/l	
76-13-1	Freon 113	ND	5.0	0.53	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.45	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	FB20120523	Date Sampled:	05/23/12
Lab Sample ID:	JB7363-1	Date Received:	05/24/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Ramapo, NY		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.2	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.26	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.16	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.70	ug/l	
100-42-5	Styrene	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.27	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		81-121%
17060-07-0	1,2-Dichloroethane-D4	111%		74-127%
2037-26-5	Toluene-D8	101%		80-122%
460-00-4	4-Bromofluorobenzene	98%		78-116%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: FB20120523

Lab Sample ID: JB7363-1

Matrix: AQ - Field Blank Soil

Project: Ramapo, NY

Date Sampled: 05/23/12

Date Received: 05/24/12

Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 200	200	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Antimony	< 6.0	6.0	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Arsenic	< 3.0	3.0	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Barium	< 200	200	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Beryllium	< 1.0	1.0	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Cadmium	< 3.0	3.0	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Calcium	< 5000	5000	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Chromium	< 10	10	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Cobalt	< 50	50	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Copper	< 10	10	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Iron	< 100	100	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Lead	< 3.0	3.0	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Magnesium	< 5000	5000	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Manganese	< 15	15	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Mercury	< 0.20	0.20	ug/l	1	06/04/12	06/04/12	JW	SW846 7470A ² SW846 7470A ⁵
Nickel	< 10	10	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Potassium	< 10000	10000	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Selenium	< 10	10	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Silver	< 10	10	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Sodium	< 10000	10000	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Thallium	< 2.0	2.0	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ³ SW846 3010A ⁴
Vanadium	< 50	50	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴
Zinc	< 20	20	ug/l	1	05/25/12	06/05/12	ND	SW846 6010C ¹ SW846 3010A ⁴

(1) Instrument QC Batch: MA28718

(2) Instrument QC Batch: MA28719

(3) Instrument QC Batch: MA28725

(4) Prep QC Batch: MP64647

(5) Prep QC Batch: MP64764

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-9(0.0-0.6)	Date Sampled:	05/23/12
Lab Sample ID:	JB7363-2	Date Received:	05/24/12
Matrix:	SO - Soil	Percent Solids:	78.0
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C88061.D	1	05/29/12	JTP	05/25/12 08:00	n/a	V3C3917
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	1.9	ug/kg	
71-43-2	Benzene	ND	1.1	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.7	0.12	ug/kg	
75-25-2	Bromoform	ND	5.7	0.17	ug/kg	
74-83-9	Bromomethane	ND	5.7	0.31	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.7	ug/kg	
75-15-0	Carbon disulfide	ND	5.7	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.7	0.15	ug/kg	
108-90-7	Chlorobenzene	ND	5.7	0.12	ug/kg	
75-00-3	Chloroethane	ND	5.7	0.26	ug/kg	
67-66-3	Chloroform	ND	5.7	0.095	ug/kg	
74-87-3	Chloromethane	ND	5.7	0.21	ug/kg	
110-82-7	Cyclohexane	ND	5.7	0.14	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.7	0.19	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.15	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.7	0.22	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.7	0.21	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.7	0.20	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.7	0.26	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.7	0.16	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.15	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.7	0.29	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.7	0.21	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.7	0.27	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.7	0.18	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.7	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.7	0.18	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.30	ug/kg	
76-13-1	Freon 113	ND	5.7	0.49	ug/kg	
591-78-6	2-Hexanone	ND	5.7	0.71	ug/kg	
98-82-8	Isopropylbenzene	ND	5.7	0.085	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-9(0.0-0.6)
Lab Sample ID: JB7363-2
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/23/12
Date Received: 05/24/12
Percent Solids: 78.0

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.7	3.0	ug/kg	
108-87-2	Methylcyclohexane	ND	5.7	0.19	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.27	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.7	0.86	ug/kg	
75-09-2	Methylene chloride	ND	5.7	1.5	ug/kg	
100-42-5	Styrene	ND	5.7	0.10	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.7	0.15	ug/kg	
127-18-4	Tetrachloroethene	ND	5.7	0.20	ug/kg	
108-88-3	Toluene	ND	1.1	0.12	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.7	0.16	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.7	0.12	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.7	0.20	ug/kg	
79-01-6	Trichloroethene	ND	5.7	0.20	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.7	0.34	ug/kg	
75-01-4	Vinyl chloride	ND	5.7	0.16	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%
17060-07-0	1,2-Dichloroethane-D4	100%		70-122%
2037-26-5	Toluene-D8	111%		81-127%
460-00-4	4-Bromofluorobenzene	107%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-9(0.0-0.6)**Lab Sample ID:** JB7363-2**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/23/12**Date Received:** 05/24/12**Percent Solids:** 78.0

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	6370	63	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Antimony	< 2.5	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Arsenic	3.3	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Barium	278	25	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Beryllium	0.41	0.25	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cadmium	2.7	0.63	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Calcium	3000	630	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Chromium	15.7	1.3	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cobalt	< 6.3	6.3	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Copper	28.8	3.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Iron	13900	63	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Lead	140	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Magnesium	2680	630	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Manganese	348	1.9	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Mercury	< 0.041	0.041	mg/kg	1	06/04/12	06/04/12	DP	SW846 7471B ¹
Nickel	12.6	5.0	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Potassium	< 1300	1300	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Selenium	< 2.5	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Silver	1.0	0.63	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Sodium	< 1300	1300	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Thallium	< 1.3	1.3	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Vanadium	18.0	6.3	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Zinc	273	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²

(1) Instrument QC Batch: MA28713

(2) Instrument QC Batch: MA28716

(3) Prep QC Batch: MP64646

(4) Prep QC Batch: MP64757

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-9(1.5-2.0)	Date Sampled:	05/23/12
Lab Sample ID:	JB7363-3	Date Received:	05/24/12
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C88062.D	1	05/29/12	JTP	05/25/12 08:00	n/a	V3C3917
Run #2							

	Initial Weight
Run #1	6.4 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.6	1.6	ug/kg	
71-43-2	Benzene	ND	0.96	0.11	ug/kg	
75-27-4	Bromodichloromethane	ND	4.8	0.10	ug/kg	
75-25-2	Bromoform	ND	4.8	0.14	ug/kg	
74-83-9	Bromomethane	ND	4.8	0.26	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.6	2.3	ug/kg	
75-15-0	Carbon disulfide	ND	4.8	0.11	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.8	0.13	ug/kg	
108-90-7	Chlorobenzene	ND	4.8	0.10	ug/kg	
75-00-3	Chloroethane	ND	4.8	0.22	ug/kg	
67-66-3	Chloroform	ND	4.8	0.079	ug/kg	
74-87-3	Chloromethane	ND	4.8	0.18	ug/kg	
110-82-7	Cyclohexane	ND	4.8	0.12	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	9.6	0.85	ug/kg	
124-48-1	Dibromochloromethane	ND	4.8	0.16	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.96	0.12	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.18	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.18	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.17	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.8	0.22	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.8	0.13	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.96	0.13	ug/kg	
75-35-4	1,1-Dichloroethene	ND	4.8	0.25	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	4.8	0.17	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	4.8	0.23	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.8	0.15	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.8	0.13	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.8	0.15	ug/kg	
100-41-4	Ethylbenzene	ND	0.96	0.25	ug/kg	
76-13-1	Freon 113	ND	4.8	0.41	ug/kg	
591-78-6	2-Hexanone	ND	4.8	0.59	ug/kg	
98-82-8	Isopropylbenzene	ND	4.8	0.071	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-9(1.5-2.0)
Lab Sample ID: JB7363-3
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/23/12

Date Received: 05/24/12

Percent Solids: 81.7

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	4.8	2.5	ug/kg	
108-87-2	Methylcyclohexane	ND	4.8	0.16	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.96	0.22	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.8	0.72	ug/kg	
75-09-2	Methylene chloride	ND	4.8	1.2	ug/kg	
100-42-5	Styrene	ND	4.8	0.088	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.8	0.13	ug/kg	
127-18-4	Tetrachloroethene	ND	4.8	0.16	ug/kg	
108-88-3	Toluene	ND	0.96	0.10	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.13	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.8	0.10	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.8	0.17	ug/kg	
79-01-6	Trichloroethene	ND	4.8	0.17	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.8	0.28	ug/kg	
75-01-4	Vinyl chloride	ND	4.8	0.14	ug/kg	
1330-20-7	Xylene (total)	ND	0.96	0.13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%
17060-07-0	1,2-Dichloroethane-D4	100%		70-122%
2037-26-5	Toluene-D8	111%		81-127%
460-00-4	4-Bromofluorobenzene	106%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-9(1.5-2.0)**Lab Sample ID:** JB7363-3**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/23/12**Date Received:** 05/24/12**Percent Solids:** 81.7

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	7530	62	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Antimony	< 2.5	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Arsenic	3.4	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Barium	256	25	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Beryllium	0.51	0.25	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cadmium	1.3	0.62	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Calcium	2920	620	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Chromium	19.4	1.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cobalt	6.5	6.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Copper	29.5	3.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Iron	16900	62	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Lead	117	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Magnesium	2720	620	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Manganese	444	1.9	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Mercury	< 0.039	0.039	mg/kg	1	06/04/12	06/04/12	DP	SW846 7471B ¹
Nickel	13.9	4.9	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Potassium	< 1200	1200	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Selenium	< 2.5	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Silver	0.95	0.62	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Sodium	< 1200	1200	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Thallium	< 1.2	1.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Vanadium	23.4	6.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Zinc	212	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²

(1) Instrument QC Batch: MA28713

(2) Instrument QC Batch: MA28716

(3) Prep QC Batch: MP64646

(4) Prep QC Batch: MP64757

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-10(0.0-0.6)	Date Sampled:	05/23/12
Lab Sample ID:	JB7363-4	Date Received:	05/24/12
Matrix:	SO - Soil	Percent Solids:	72.4
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C88063.D	1	05/29/12	JTP	05/25/12 08:00	n/a	V3C3917
Run #2							

	Initial Weight
Run #1	4.8 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	109	14	2.4	ug/kg	
71-43-2	Benzene	ND	1.4	0.17	ug/kg	
75-27-4	Bromodichloromethane	ND	7.2	0.15	ug/kg	
75-25-2	Bromoform	ND	7.2	0.22	ug/kg	
74-83-9	Bromomethane	ND	7.2	0.39	ug/kg	
78-93-3	2-Butanone (MEK)	ND	14	3.4	ug/kg	
75-15-0	Carbon disulfide	ND	7.2	0.17	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.2	0.19	ug/kg	
108-90-7	Chlorobenzene	ND	7.2	0.16	ug/kg	
75-00-3	Chloroethane	ND	7.2	0.33	ug/kg	
67-66-3	Chloroform	ND	7.2	0.12	ug/kg	
74-87-3	Chloromethane	ND	7.2	0.27	ug/kg	
110-82-7	Cyclohexane	ND	7.2	0.18	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	14	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	7.2	0.24	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.4	0.18	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	7.2	0.27	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	7.2	0.27	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	7.2	0.25	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	7.2	0.33	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.2	0.20	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.4	0.19	ug/kg	
75-35-4	1,1-Dichloroethene	ND	7.2	0.37	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	7.2	0.26	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	7.2	0.34	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.2	0.22	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.2	0.20	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.2	0.22	ug/kg	
100-41-4	Ethylbenzene	ND	1.4	0.38	ug/kg	
76-13-1	Freon 113	ND	7.2	0.62	ug/kg	
591-78-6	2-Hexanone	ND	7.2	0.89	ug/kg	
98-82-8	Isopropylbenzene	ND	7.2	0.11	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-10(0.0-0.6)
Lab Sample ID: JB7363-4
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/23/12
Date Received: 05/24/12
Percent Solids: 72.4

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	7.2	3.7	ug/kg	
108-87-2	Methylcyclohexane	ND	7.2	0.24	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.4	0.34	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	7.2	1.1	ug/kg	
75-09-2	Methylene chloride	ND	7.2	1.8	ug/kg	
100-42-5	Styrene	ND	7.2	0.13	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.2	0.19	ug/kg	
127-18-4	Tetrachloroethene	ND	7.2	0.25	ug/kg	
108-88-3	Toluene	ND	1.4	0.15	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	7.2	0.20	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.2	0.15	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.2	0.25	ug/kg	
79-01-6	Trichloroethene	ND	7.2	0.25	ug/kg	
75-69-4	Trichlorofluoromethane	ND	7.2	0.43	ug/kg	
75-01-4	Vinyl chloride	ND	7.2	0.21	ug/kg	
1330-20-7	Xylene (total)	ND	1.4	0.20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%
17060-07-0	1,2-Dichloroethane-D4	102%		70-122%
2037-26-5	Toluene-D8	111%		81-127%
460-00-4	4-Bromofluorobenzene	110%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-10(0.0-0.6)**Lab Sample ID:** JB7363-4**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/23/12**Date Received:** 05/24/12**Percent Solids:** 72.4**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	23700	70	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Antimony	< 2.8	2.8	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Arsenic	5.7	2.8	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Barium	58.9	28	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Beryllium	1.1	0.28	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Cadmium	< 0.70	0.70	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Calcium	823	700	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Chromium	23.3	1.4	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Cobalt	8.4	7.0	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Copper	11.6	3.5	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Iron	25500	70	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Lead	16.8	2.8	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Magnesium	1990	700	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Manganese	1180	2.1	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Mercury	0.092	0.044	mg/kg	1	06/04/12	06/04/12	DP	SW846 7471B ²
Nickel	12.4	5.6	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Potassium	< 1400	1400	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Selenium	< 2.8	2.8	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Silver	< 0.70	0.70	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Sodium	< 1400	1400	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Thallium	< 1.4	1.4	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Vanadium	46.1	7.0	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹
Zinc	49.6	2.8	mg/kg	1	05/28/12	05/30/12	GT	SW846 6010C ¹

(1) Instrument QC Batch: MA28690

(2) Instrument QC Batch: MA28713

(3) Prep QC Batch: MP64646

(4) Prep QC Batch: MP64757

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-10(1.5-2.0)	Date Sampled:	05/23/12
Lab Sample ID:	JB7363-5	Date Received:	05/24/12
Matrix:	SO - Soil	Percent Solids:	73.3
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C88064.D	1	05/29/12	JTP	05/25/12 08:00	n/a	V3C3917
Run #2							

	Initial Weight
Run #1	5.1 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	2.3	ug/kg	
71-43-2	Benzene	ND	1.3	0.16	ug/kg	
75-27-4	Bromodichloromethane	ND	6.7	0.14	ug/kg	
75-25-2	Bromoform	ND	6.7	0.20	ug/kg	
74-83-9	Bromomethane	ND	6.7	0.37	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.2	ug/kg	
75-15-0	Carbon disulfide	ND	6.7	0.16	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.7	0.18	ug/kg	
108-90-7	Chlorobenzene	ND	6.7	0.14	ug/kg	
75-00-3	Chloroethane	ND	6.7	0.30	ug/kg	
67-66-3	Chloroform	ND	6.7	0.11	ug/kg	
74-87-3	Chloromethane	ND	6.7	0.25	ug/kg	
110-82-7	Cyclohexane	ND	6.7	0.17	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	13	1.2	ug/kg	
124-48-1	Dibromochloromethane	ND	6.7	0.22	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.3	0.17	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.7	0.25	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.7	0.25	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.7	0.24	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.7	0.30	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.7	0.18	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.7	0.34	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.7	0.24	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.7	0.32	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.7	0.21	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.7	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.7	0.21	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.35	ug/kg	
76-13-1	Freon 113	ND	6.7	0.58	ug/kg	
591-78-6	2-Hexanone	ND	6.7	0.83	ug/kg	
98-82-8	Isopropylbenzene	ND	6.7	0.099	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-10(1.5-2.0)
Lab Sample ID: JB7363-5
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/23/12
Date Received: 05/24/12
Percent Solids: 73.3

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	6.7	3.5	ug/kg	
108-87-2	Methylcyclohexane	ND	6.7	0.23	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.31	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.7	1.0	ug/kg	
75-09-2	Methylene chloride	ND	6.7	1.7	ug/kg	
100-42-5	Styrene	ND	6.7	0.12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.7	0.18	ug/kg	
127-18-4	Tetrachloroethene	ND	6.7	0.23	ug/kg	
108-88-3	Toluene	ND	1.3	0.14	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.7	0.19	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.7	0.14	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.7	0.23	ug/kg	
79-01-6	Trichloroethene	ND	6.7	0.23	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.7	0.40	ug/kg	
75-01-4	Vinyl chloride	ND	6.7	0.19	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%
17060-07-0	1,2-Dichloroethane-D4	102%		70-122%
2037-26-5	Toluene-D8	111%		81-127%
460-00-4	4-Bromofluorobenzene	111%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-10(1.5-2.0)**Lab Sample ID:** JB7363-5**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/23/12**Date Received:** 05/24/12**Percent Solids:** 73.3

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	19000	69	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Antimony	< 2.8	2.8	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Arsenic	4.7	2.8	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Barium	51.5	28	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Beryllium	0.70	0.28	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cadmium	< 0.69	0.69	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Calcium	857	690	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Chromium	20.0	1.4	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cobalt	< 6.9	6.9	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Copper	11.2	3.4	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Iron	18200	69	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Lead	25.4	2.8	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Magnesium	1980	690	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Manganese	185	2.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Mercury	0.073	0.042	mg/kg	1	06/04/12	06/04/12	DP	SW846 7471B ¹
Nickel	11.7	5.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Potassium	< 1400	1400	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Selenium	< 2.8	2.8	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Silver	0.83	0.69	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Sodium	< 1400	1400	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Thallium	< 1.4	1.4	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Vanadium	32.9	6.9	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Zinc	42.8	2.8	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²

(1) Instrument QC Batch: MA28713

(2) Instrument QC Batch: MA28716

(3) Prep QC Batch: MP64646

(4) Prep QC Batch: MP64757

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-11(0.0-0.6)	Date Sampled:	05/23/12
Lab Sample ID:	JB7363-6	Date Received:	05/24/12
Matrix:	SO - Soil	Percent Solids:	80.3
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C88082.D	1	05/29/12	JTP	05/25/12 08:00	n/a	V3C3917
Run #2							

	Initial Weight
Run #1	5.2 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	2.0	ug/kg	
71-43-2	Benzene	ND	1.2	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	6.0	0.13	ug/kg	
75-25-2	Bromoform	ND	6.0	0.18	ug/kg	
74-83-9	Bromomethane	ND	6.0	0.33	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	2.9	ug/kg	
75-15-0	Carbon disulfide	ND	6.0	0.14	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.0	0.16	ug/kg	
108-90-7	Chlorobenzene	ND	6.0	0.13	ug/kg	
75-00-3	Chloroethane	ND	6.0	0.27	ug/kg	
67-66-3	Chloroform	ND	6.0	0.099	ug/kg	
74-87-3	Chloromethane	ND	6.0	0.22	ug/kg	
110-82-7	Cyclohexane	ND	6.0	0.15	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.1	ug/kg	
124-48-1	Dibromochloromethane	ND	6.0	0.20	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.15	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.0	0.23	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.0	0.22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.0	0.21	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.0	0.27	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.0	0.16	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.16	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.0	0.31	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.0	0.22	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.0	0.28	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.0	0.18	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	0.19	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.31	ug/kg	
76-13-1	Freon 113	ND	6.0	0.51	ug/kg	
591-78-6	2-Hexanone	ND	6.0	0.74	ug/kg	
98-82-8	Isopropylbenzene	ND	6.0	0.089	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-11(0.0-0.6)
Lab Sample ID: JB7363-6
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/23/12
Date Received: 05/24/12
Percent Solids: 80.3

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	6.0	3.1	ug/kg	
108-87-2	Methylcyclohexane	ND	6.0	0.20	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.28	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.0	0.90	ug/kg	
75-09-2	Methylene chloride	ND	6.0	1.5	ug/kg	
100-42-5	Styrene	ND	6.0	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	0.16	ug/kg	
127-18-4	Tetrachloroethene	ND	6.0	0.21	ug/kg	
108-88-3	Toluene	ND	1.2	0.13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.0	0.17	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.0	0.13	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.0	0.21	ug/kg	
79-01-6	Trichloroethene	ND	6.0	0.21	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.0	0.36	ug/kg	
75-01-4	Vinyl chloride	ND	6.0	0.17	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%
17060-07-0	1,2-Dichloroethane-D4	102%		70-122%
2037-26-5	Toluene-D8	112%		81-127%
460-00-4	4-Bromofluorobenzene	110%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-11(0.0-0.6)**Lab Sample ID:** JB7363-6**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/23/12**Date Received:** 05/24/12**Percent Solids:** 80.3

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	13800	61	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Antimony	< 2.4	2.4	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Arsenic	3.9	2.4	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Barium	62.0	24	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Beryllium	0.66	0.24	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cadmium	< 0.61	0.61	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Calcium	2410	610	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Chromium	17.5	1.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cobalt	6.4	6.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Copper	16.0	3.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Iron	19500	61	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Lead	52.0	2.4	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Magnesium	2520	610	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Manganese	340	1.8	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Mercury	0.058	0.040	mg/kg	1	06/04/12	06/04/12	DP	SW846 7471B ¹
Nickel	12.1	4.9	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Potassium	< 1200	1200	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Selenium	< 2.4	2.4	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Silver	0.83	0.61	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Sodium	< 1200	1200	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Thallium	< 1.2	1.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Vanadium	29.7	6.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Zinc	79.1	2.4	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²

(1) Instrument QC Batch: MA28713

(2) Instrument QC Batch: MA28716

(3) Prep QC Batch: MP64646

(4) Prep QC Batch: MP64757

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-11(1.5-2.0)	Date Sampled:	05/23/12
Lab Sample ID:	JB7363-7	Date Received:	05/24/12
Matrix:	SO - Soil	Percent Solids:	77.9
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C88083.D	1	05/29/12	JTP	05/25/12 08:00	n/a	V3C3917
Run #2							

	Initial Weight
Run #1	6.1 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	1.8	ug/kg	
71-43-2	Benzene	ND	1.1	0.13	ug/kg	
75-27-4	Bromodichloromethane	ND	5.3	0.11	ug/kg	
75-25-2	Bromoform	ND	5.3	0.16	ug/kg	
74-83-9	Bromomethane	ND	5.3	0.29	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.5	ug/kg	
75-15-0	Carbon disulfide	ND	5.3	0.12	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.3	0.14	ug/kg	
108-90-7	Chlorobenzene	ND	5.3	0.11	ug/kg	
75-00-3	Chloroethane	ND	5.3	0.24	ug/kg	
67-66-3	Chloroform	ND	5.3	0.087	ug/kg	
74-87-3	Chloromethane	ND	5.3	0.20	ug/kg	
110-82-7	Cyclohexane	ND	5.3	0.13	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	0.94	ug/kg	
124-48-1	Dibromochloromethane	ND	5.3	0.17	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.13	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.3	0.20	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.3	0.20	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.3	0.19	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.3	0.24	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.3	0.14	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.14	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.3	0.27	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.3	0.19	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.3	0.25	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.3	0.16	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.3	0.15	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.3	0.16	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.28	ug/kg	
76-13-1	Freon 113	ND	5.3	0.45	ug/kg	
591-78-6	2-Hexanone	ND	5.3	0.65	ug/kg	
98-82-8	Isopropylbenzene	ND	5.3	0.078	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-11(1.5-2.0)
Lab Sample ID: JB7363-7
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/23/12**Date Received:** 05/24/12**Percent Solids:** 77.9

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.3	2.7	ug/kg	
108-87-2	Methylcyclohexane	ND	5.3	0.18	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.25	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.3	0.79	ug/kg	
75-09-2	Methylene chloride	ND	5.3	1.3	ug/kg	
100-42-5	Styrene	ND	5.3	0.096	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.3	0.14	ug/kg	
127-18-4	Tetrachloroethene	ND	5.3	0.18	ug/kg	
108-88-3	Toluene	ND	1.1	0.11	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	0.15	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.3	0.11	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.3	0.18	ug/kg	
79-01-6	Trichloroethene	ND	5.3	0.18	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.3	0.31	ug/kg	
75-01-4	Vinyl chloride	ND	5.3	0.15	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%
17060-07-0	1,2-Dichloroethane-D4	100%		70-122%
2037-26-5	Toluene-D8	112%		81-127%
460-00-4	4-Bromofluorobenzene	110%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-11(1.5-2.0)

Lab Sample ID: JB7363-7

Matrix: SO - Soil

Project: Ramapo, NY

Date Sampled: 05/23/12

Date Received: 05/24/12

Percent Solids: 77.9

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Aluminum	13800	64	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Antimony	< 2.5	2.5	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Arsenic	< 2.5	2.5	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Barium	58.1	25	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Beryllium	0.66	0.25	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Cadmium	< 0.64	0.64	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Calcium	1770	640	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Chromium	17.8	1.3	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Cobalt	< 6.4	6.4	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Copper	6.4	3.2	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Iron	16500	64	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Lead	7.7	2.5	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Magnesium	2800	640	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Manganese	169	1.9	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Mercury	< 0.042	0.042	mg/kg	1	06/04/12	06/04/12 DP	SW846 7471B ¹	SW846 7471B ⁴
Nickel	10.4	5.1	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Potassium	< 1300	1300	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Selenium	< 2.5	2.5	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Silver	0.97	0.64	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Sodium	< 1300	1300	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Thallium	< 1.3	1.3	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Vanadium	26.4	6.4	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Zinc	39.3	2.5	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³

(1) Instrument QC Batch: MA28713

(2) Instrument QC Batch: MA28716

(3) Prep QC Batch: MP64646

(4) Prep QC Batch: MP64757

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-12(0.0-0.6)	Date Sampled:	05/23/12
Lab Sample ID:	JB7363-8	Date Received:	05/24/12
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C88084.D	1	05/30/12	JTP	05/25/12 08:00	n/a	V3C3917
Run #2							

	Initial Weight
Run #1	6.0 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.3	1.6	ug/kg	
71-43-2	Benzene	ND	0.93	0.11	ug/kg	
75-27-4	Bromodichloromethane	ND	4.6	0.098	ug/kg	
75-25-2	Bromoform	ND	4.6	0.14	ug/kg	
74-83-9	Bromomethane	ND	4.6	0.25	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.3	2.2	ug/kg	
75-15-0	Carbon disulfide	ND	4.6	0.11	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.6	0.12	ug/kg	
108-90-7	Chlorobenzene	ND	4.6	0.10	ug/kg	
75-00-3	Chloroethane	ND	4.6	0.21	ug/kg	
67-66-3	Chloroform	ND	4.6	0.077	ug/kg	
74-87-3	Chloromethane	ND	4.6	0.17	ug/kg	
110-82-7	Cyclohexane	ND	4.6	0.12	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	9.3	0.83	ug/kg	
124-48-1	Dibromochloromethane	ND	4.6	0.15	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.93	0.12	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	4.6	0.18	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	4.6	0.17	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	4.6	0.16	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.6	0.21	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.6	0.13	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.93	0.13	ug/kg	
75-35-4	1,1-Dichloroethene	ND	4.6	0.24	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	4.6	0.17	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	4.6	0.22	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.6	0.14	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.6	0.13	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.6	0.14	ug/kg	
100-41-4	Ethylbenzene	ND	0.93	0.24	ug/kg	
76-13-1	Freon 113	ND	4.6	0.40	ug/kg	
591-78-6	2-Hexanone	ND	4.6	0.58	ug/kg	
98-82-8	Isopropylbenzene	ND	4.6	0.069	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-12(0.0-0.6)
Lab Sample ID: JB7363-8
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/23/12

Date Received: 05/24/12

Percent Solids: 89.7

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	4.6	2.4	ug/kg	
108-87-2	Methylcyclohexane	ND	4.6	0.16	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.93	0.22	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.6	0.70	ug/kg	
75-09-2	Methylene chloride	ND	4.6	1.2	ug/kg	
100-42-5	Styrene	ND	4.6	0.085	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.6	0.12	ug/kg	
127-18-4	Tetrachloroethene	ND	4.6	0.16	ug/kg	
108-88-3	Toluene	ND	0.93	0.098	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.6	0.13	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.6	0.098	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.6	0.16	ug/kg	
79-01-6	Trichloroethene	ND	4.6	0.16	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.6	0.28	ug/kg	
75-01-4	Vinyl chloride	ND	4.6	0.13	ug/kg	
1330-20-7	Xylene (total)	ND	0.93	0.13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%
17060-07-0	1,2-Dichloroethane-D4	101%		70-122%
2037-26-5	Toluene-D8	113%		81-127%
460-00-4	4-Bromofluorobenzene	109%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-12(0.0-0.6)

Lab Sample ID: JB7363-8

Matrix: SO - Soil

Project: Ramapo, NY

Date Sampled: 05/23/12

Date Received: 05/24/12

Percent Solids: 89.7

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	6170	55	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Antimony	< 2.2	2.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Arsenic	2.3	2.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Barium	50.3	22	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Beryllium	0.40	0.22	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cadmium	< 0.55	0.55	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Calcium	3040	550	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Chromium	11.1	1.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cobalt	< 5.5	5.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Copper	12.7	2.7	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Iron	14000	55	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Lead	4.4	2.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Magnesium	2640	550	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Manganese	806	1.6	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Mercury	< 0.035	0.035	mg/kg	1	06/04/12	06/04/12	DP	SW846 7471B ¹
Nickel	9.2	4.4	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Potassium	< 1100	1100	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Selenium	< 2.2	2.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Silver	1.1	0.55	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Sodium	< 1100	1100	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Thallium	< 1.1	1.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Vanadium	17.7	5.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Zinc	24.2	2.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²

(1) Instrument QC Batch: MA28713

(2) Instrument QC Batch: MA28716

(3) Prep QC Batch: MP64646

(4) Prep QC Batch: MP64757

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	OU2-SB-12(1.5-2.0)	Date Sampled:	05/23/12
Lab Sample ID:	JB7363-9	Date Received:	05/24/12
Matrix:	SO - Soil	Percent Solids:	79.4
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C88085.D	1	05/30/12	JTP	05/25/12 08:00	n/a	V3C3917
Run #2							

	Initial Weight
Run #1	5.3 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	2.0	ug/kg	
71-43-2	Benzene	ND	1.2	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.9	0.12	ug/kg	
75-25-2	Bromoform	ND	5.9	0.18	ug/kg	
74-83-9	Bromomethane	ND	5.9	0.32	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	2.8	ug/kg	
75-15-0	Carbon disulfide	ND	5.9	0.14	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.9	0.16	ug/kg	
108-90-7	Chlorobenzene	ND	5.9	0.13	ug/kg	
75-00-3	Chloroethane	ND	5.9	0.27	ug/kg	
67-66-3	Chloroform	ND	5.9	0.098	ug/kg	
74-87-3	Chloromethane	ND	5.9	0.22	ug/kg	
110-82-7	Cyclohexane	ND	5.9	0.15	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.1	ug/kg	
124-48-1	Dibromochloromethane	ND	5.9	0.19	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.15	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.9	0.22	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.9	0.22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.9	0.21	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.9	0.27	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.9	0.16	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.16	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.9	0.31	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.9	0.22	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.9	0.28	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.9	0.18	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.9	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.9	0.18	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.31	ug/kg	
76-13-1	Freon 113	ND	5.9	0.51	ug/kg	
591-78-6	2-Hexanone	ND	5.9	0.74	ug/kg	
98-82-8	Isopropylbenzene	ND	5.9	0.088	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-12(1.5-2.0)
Lab Sample ID: JB7363-9
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/23/12**Date Received:** 05/24/12**Percent Solids:** 79.4

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.9	3.1	ug/kg	
108-87-2	Methylcyclohexane	ND	5.9	0.20	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.28	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.9	0.89	ug/kg	
75-09-2	Methylene chloride	ND	5.9	1.5	ug/kg	
100-42-5	Styrene	ND	5.9	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.9	0.16	ug/kg	
127-18-4	Tetrachloroethene	ND	5.9	0.20	ug/kg	
108-88-3	Toluene	ND	1.2	0.12	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.9	0.17	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.9	0.13	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.9	0.21	ug/kg	
79-01-6	Trichloroethene	ND	5.9	0.21	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.9	0.35	ug/kg	
75-01-4	Vinyl chloride	ND	5.9	0.17	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		70-130%
17060-07-0	1,2-Dichloroethane-D4	102%		70-122%
2037-26-5	Toluene-D8	111%		81-127%
460-00-4	4-Bromofluorobenzene	111%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-12(1.5-2.0)

Lab Sample ID: JB7363-9

Matrix: SO - Soil

Project: Ramapo, NY

Date Sampled: 05/23/12

Date Received: 05/24/12

Percent Solids: 79.4

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	7010	62	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Antimony	< 2.5	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Arsenic	2.5	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Barium	45.6	25	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Beryllium	0.50	0.25	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cadmium	< 0.62	0.62	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Calcium	4290	620	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Chromium	14.3	1.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cobalt	6.3	6.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Copper	13.3	3.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Iron	16300	62	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Lead	5.4	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Magnesium	3380	620	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Manganese	409	1.9	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Mercury	< 0.041	0.041	mg/kg	1	06/04/12	06/04/12	DP	SW846 7471B ¹
Nickel	10.6	5.0	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Potassium	< 1200	1200	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Selenium	< 2.5	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Silver	0.96	0.62	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Sodium	< 1200	1200	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Thallium	< 1.2	1.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Vanadium	21.6	6.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Zinc	31.7	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²

(1) Instrument QC Batch: MA28713

(2) Instrument QC Batch: MA28716

(3) Prep QC Batch: MP64646

(4) Prep QC Batch: MP64757

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-13(0.0-0.6)	Date Sampled:	05/23/12
Lab Sample ID:	JB7363-10	Date Received:	05/24/12
Matrix:	SO - Soil	Percent Solids:	81.6
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C88086.D	1	05/30/12	JTP	05/25/12 09:00	n/a	V3C3917
Run #2							

	Initial Weight
Run #1	5.1 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	2.0	ug/kg	
71-43-2	Benzene	ND	1.2	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	6.0	0.13	ug/kg	
75-25-2	Bromoform	ND	6.0	0.18	ug/kg	
74-83-9	Bromomethane	ND	6.0	0.33	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	2.9	ug/kg	
75-15-0	Carbon disulfide	ND	6.0	0.14	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.0	0.16	ug/kg	
108-90-7	Chlorobenzene	ND	6.0	0.13	ug/kg	
75-00-3	Chloroethane	ND	6.0	0.27	ug/kg	
67-66-3	Chloroform	ND	6.0	0.099	ug/kg	
74-87-3	Chloromethane	ND	6.0	0.22	ug/kg	
110-82-7	Cyclohexane	ND	6.0	0.15	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.1	ug/kg	
124-48-1	Dibromochloromethane	ND	6.0	0.20	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.15	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.0	0.23	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.0	0.22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.0	0.21	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.0	0.27	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.0	0.16	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.16	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.0	0.31	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.0	0.22	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.0	0.29	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.0	0.19	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	0.19	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.32	ug/kg	
76-13-1	Freon 113	ND	6.0	0.52	ug/kg	
591-78-6	2-Hexanone	ND	6.0	0.75	ug/kg	
98-82-8	Isopropylbenzene	ND	6.0	0.089	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-13(0.0-0.6)
Lab Sample ID: JB7363-10
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/23/12
Date Received: 05/24/12
Percent Solids: 81.6

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	6.0	3.1	ug/kg	
108-87-2	Methylcyclohexane	ND	6.0	0.20	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.28	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.0	0.90	ug/kg	
75-09-2	Methylene chloride	ND	6.0	1.5	ug/kg	
100-42-5	Styrene	ND	6.0	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	0.16	ug/kg	
127-18-4	Tetrachloroethene	ND	6.0	0.21	ug/kg	
108-88-3	Toluene	ND	1.2	0.13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.0	0.17	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.0	0.13	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.0	0.21	ug/kg	
79-01-6	Trichloroethene	ND	6.0	0.21	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.0	0.36	ug/kg	
75-01-4	Vinyl chloride	ND	6.0	0.17	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		70-130%
17060-07-0	1,2-Dichloroethane-D4	101%		70-122%
2037-26-5	Toluene-D8	113%		81-127%
460-00-4	4-Bromofluorobenzene	110%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-13(0.0-0.6)**Lab Sample ID:** JB7363-10**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/23/12**Date Received:** 05/24/12**Percent Solids:** 81.6

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	8600	61	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Antimony	< 2.5	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Arsenic	4.4	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Barium	53.1	25	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Beryllium	0.49	0.25	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cadmium	< 0.61	0.61	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Calcium	2130	610	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Chromium	15.4	1.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cobalt	< 6.1	6.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Copper	15.8	3.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Iron	19300	61	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Lead	43.5	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Magnesium	2270	610	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Manganese	460	1.8	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Mercury	0.066	0.040	mg/kg	1	06/04/12	06/04/12	DP	SW846 7471B ¹
Nickel	10.8	4.9	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Potassium	< 1200	1200	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Selenium	< 2.5	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Silver	1.1	0.61	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Sodium	< 1200	1200	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Thallium	< 1.2	1.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Vanadium	23.8	6.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Zinc	66.5	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²

(1) Instrument QC Batch: MA28713

(2) Instrument QC Batch: MA28716

(3) Prep QC Batch: MP64646

(4) Prep QC Batch: MP64757

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-13(1.5-2.0)	Date Sampled:	05/23/12
Lab Sample ID:	JB7363-11	Date Received:	05/24/12
Matrix:	SO - Soil	Percent Solids:	71.5
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C88087.D	1	05/30/12	JTP	05/25/12 09:00	n/a	V3C3917
Run #2							

	Initial Weight
Run #1	5.7 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	2.1	ug/kg	
71-43-2	Benzene	ND	1.2	0.15	ug/kg	
75-27-4	Bromodichloromethane	ND	6.1	0.13	ug/kg	
75-25-2	Bromoform	ND	6.1	0.19	ug/kg	
74-83-9	Bromomethane	ND	6.1	0.33	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	2.9	ug/kg	
75-15-0	Carbon disulfide	ND	6.1	0.14	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.1	0.16	ug/kg	
108-90-7	Chlorobenzene	ND	6.1	0.13	ug/kg	
75-00-3	Chloroethane	ND	6.1	0.28	ug/kg	
67-66-3	Chloroform	ND	6.1	0.10	ug/kg	
74-87-3	Chloromethane	ND	6.1	0.23	ug/kg	
110-82-7	Cyclohexane	ND	6.1	0.15	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.1	ug/kg	
124-48-1	Dibromochloromethane	ND	6.1	0.20	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.16	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.1	0.23	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.1	0.23	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.1	0.22	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.1	0.28	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.1	0.17	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.17	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.1	0.32	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.1	0.22	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.1	0.29	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.1	0.19	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.1	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.1	0.19	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.32	ug/kg	
76-13-1	Freon 113	ND	6.1	0.53	ug/kg	
591-78-6	2-Hexanone	ND	6.1	0.76	ug/kg	
98-82-8	Isopropylbenzene	ND	6.1	0.091	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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3

Client Sample ID: OU2-SB-13(1.5-2.0)
Lab Sample ID: JB7363-11
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/23/12
Date Received: 05/24/12
Percent Solids: 71.5

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	6.1	3.2	ug/kg	
108-87-2	Methylcyclohexane	ND	6.1	0.21	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.29	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.1	0.92	ug/kg	
75-09-2	Methylene chloride	ND	6.1	1.6	ug/kg	
100-42-5	Styrene	ND	6.1	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.1	0.16	ug/kg	
127-18-4	Tetrachloroethene	ND	6.1	0.21	ug/kg	
108-88-3	Toluene	ND	1.2	0.13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.1	0.17	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.1	0.13	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.1	0.21	ug/kg	
79-01-6	Trichloroethene	ND	6.1	0.21	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.1	0.37	ug/kg	
75-01-4	Vinyl chloride	ND	6.1	0.18	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%
17060-07-0	1,2-Dichloroethane-D4	104%		70-122%
2037-26-5	Toluene-D8	112%		81-127%
460-00-4	4-Bromofluorobenzene	111%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-13(1.5-2.0)**Lab Sample ID:** JB7363-11**Matrix:** SO - Soil**Date Sampled:** 05/23/12**Date Received:** 05/24/12**Percent Solids:** 71.5**Project:** Ramapo, NY

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	18200	69	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Antimony	< 2.7	2.7	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Arsenic	5.9	2.7	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Barium	80.1	27	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Beryllium	0.90	0.27	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cadmium	< 0.69	0.69	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Calcium	1290	690	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Chromium	24.2	1.4	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cobalt	17.2	6.9	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Copper	12.4	3.4	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Iron	27200	69	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Lead	15.1	2.7	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Magnesium	2460	690	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Manganese	1530	6.2	mg/kg	3	05/28/12	06/05/12	ND	SW846 6010C ³
Mercury	< 0.047	0.047	mg/kg	1	06/04/12	06/04/12	DP	SW846 7471B ¹
Nickel	12.3	5.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Potassium	< 1400	1400	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Selenium	< 2.7	2.7	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Silver	1.5	0.69	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Sodium	< 1400	1400	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Thallium	< 1.4	1.4	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Vanadium	40.9	6.9	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Zinc	49.3	2.7	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²

(1) Instrument QC Batch: MA28713

(2) Instrument QC Batch: MA28716

(3) Instrument QC Batch: MA28725

(4) Prep QC Batch: MP64646

(5) Prep QC Batch: MP64757

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-14(0.0-0.6)	Date Sampled:	05/23/12
Lab Sample ID:	JB7363-12	Date Received:	05/24/12
Matrix:	SO - Soil	Percent Solids:	65.4
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C88088.D	1	05/30/12	JTP	05/25/12 09:00	n/a	V3C3917
Run #2							

	Initial Weight
Run #1	4.6 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	17	2.8	ug/kg	
71-43-2	Benzene	ND	1.7	0.20	ug/kg	
75-27-4	Bromodichloromethane	ND	8.3	0.17	ug/kg	
75-25-2	Bromoform	ND	8.3	0.25	ug/kg	
74-83-9	Bromomethane	ND	8.3	0.45	ug/kg	
78-93-3	2-Butanone (MEK)	ND	17	4.0	ug/kg	
75-15-0	Carbon disulfide	ND	8.3	0.19	ug/kg	
56-23-5	Carbon tetrachloride	ND	8.3	0.22	ug/kg	
108-90-7	Chlorobenzene	ND	8.3	0.18	ug/kg	
75-00-3	Chloroethane	ND	8.3	0.38	ug/kg	
67-66-3	Chloroform	ND	8.3	0.14	ug/kg	
74-87-3	Chloromethane	ND	8.3	0.31	ug/kg	
110-82-7	Cyclohexane	ND	8.3	0.21	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	17	1.5	ug/kg	
124-48-1	Dibromochloromethane	ND	8.3	0.27	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.7	0.21	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	8.3	0.31	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	8.3	0.31	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	8.3	0.29	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	8.3	0.38	ug/kg	
75-34-3	1,1-Dichloroethane	ND	8.3	0.23	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.7	0.22	ug/kg	
75-35-4	1,1-Dichloroethene	ND	8.3	0.43	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	8.3	0.30	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	8.3	0.40	ug/kg	
78-87-5	1,2-Dichloropropane	ND	8.3	0.26	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	8.3	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	8.3	0.26	ug/kg	
100-41-4	Ethylbenzene	ND	1.7	0.44	ug/kg	
76-13-1	Freon 113	ND	8.3	0.71	ug/kg	
591-78-6	2-Hexanone	ND	8.3	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	8.3	0.12	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-14(0.0-0.6)
Lab Sample ID: JB7363-12
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/23/12
Date Received: 05/24/12
Percent Solids: 65.4

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	8.3	4.3	ug/kg	
108-87-2	Methylcyclohexane	ND	8.3	0.28	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.7	0.39	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	8.3	1.2	ug/kg	
75-09-2	Methylene chloride	ND	8.3	2.1	ug/kg	
100-42-5	Styrene	ND	8.3	0.15	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	8.3	0.22	ug/kg	
127-18-4	Tetrachloroethene	ND	8.3	0.29	ug/kg	
108-88-3	Toluene	ND	1.7	0.17	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	8.3	0.23	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	8.3	0.18	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	8.3	0.29	ug/kg	
79-01-6	Trichloroethene	ND	8.3	0.29	ug/kg	
75-69-4	Trichlorofluoromethane	ND	8.3	0.50	ug/kg	
75-01-4	Vinyl chloride	ND	8.3	0.24	ug/kg	
1330-20-7	Xylene (total)	ND	1.7	0.23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%
17060-07-0	1,2-Dichloroethane-D4	104%		70-122%
2037-26-5	Toluene-D8	111%		81-127%
460-00-4	4-Bromofluorobenzene	112%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-14(0.0-0.6)**Lab Sample ID:** JB7363-12**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/23/12**Date Received:** 05/24/12**Percent Solids:** 65.4

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	9300	77	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Antimony	< 3.1	3.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Arsenic	< 3.1	3.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Barium	57.7	31	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Beryllium	0.59	0.31	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cadmium	< 0.77	0.77	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Calcium	< 770	770	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Chromium	13.1	1.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cobalt	< 7.7	7.7	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Copper	< 3.9	3.9	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Iron	13100	77	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Lead	3.2	3.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Magnesium	1070	770	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Manganese	54.7	2.3	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Mercury	< 0.048	0.048	mg/kg	1	06/04/12	06/04/12	DP	SW846 7471B ¹
Nickel	< 6.2	6.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Potassium	< 1500	1500	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Selenium	< 3.1	3.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Silver	0.86	0.77	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Sodium	< 1500	1500	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Thallium	< 1.5	1.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Vanadium	16.6	7.7	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Zinc	23.0	3.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²

(1) Instrument QC Batch: MA28713

(2) Instrument QC Batch: MA28716

(3) Prep QC Batch: MP64646

(4) Prep QC Batch: MP64757

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	OU2-SB-14(1.5-2.0)	Date Sampled:	05/23/12
Lab Sample ID:	JB7363-13	Date Received:	05/24/12
Matrix:	SO - Soil	Percent Solids:	74.3
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C88097.D	1	05/30/12	JTP	05/25/12 09:00	n/a	V3C3918
Run #2							

	Initial Weight
Run #1	5.8 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	2.0	ug/kg	
71-43-2	Benzene	ND	1.2	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.8	0.12	ug/kg	
75-25-2	Bromoform	ND	5.8	0.18	ug/kg	
74-83-9	Bromomethane	ND	5.8	0.32	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	2.8	ug/kg	
75-15-0	Carbon disulfide	ND	5.8	0.14	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.8	0.15	ug/kg	
108-90-7	Chlorobenzene	ND	5.8	0.13	ug/kg	
75-00-3	Chloroethane	ND	5.8	0.26	ug/kg	
67-66-3	Chloroform	ND	5.8	0.096	ug/kg	
74-87-3	Chloromethane	ND	5.8	0.22	ug/kg	
110-82-7	Cyclohexane	ND	5.8	0.14	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.8	0.19	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.15	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.8	0.22	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.8	0.22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.8	0.20	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.8	0.26	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.8	0.16	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.16	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.8	0.30	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.8	0.21	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.8	0.28	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.8	0.18	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	0.18	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.31	ug/kg	
76-13-1	Freon 113	ND	5.8	0.50	ug/kg	
591-78-6	2-Hexanone	ND	5.8	0.72	ug/kg	
98-82-8	Isopropylbenzene	ND	5.8	0.086	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-14(1.5-2.0)
Lab Sample ID: JB7363-13
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/23/12
Date Received: 05/24/12
Percent Solids: 74.3

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.8	3.0	ug/kg	
108-87-2	Methylcyclohexane	ND	5.8	0.20	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.27	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.8	0.87	ug/kg	
75-09-2	Methylene chloride	ND	5.8	1.5	ug/kg	
100-42-5	Styrene	ND	5.8	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	0.15	ug/kg	
127-18-4	Tetrachloroethene	ND	5.8	0.20	ug/kg	
108-88-3	Toluene	ND	1.2	0.12	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.8	0.16	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.8	0.12	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.8	0.20	ug/kg	
79-01-6	Trichloroethene	ND	5.8	0.20	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.8	0.35	ug/kg	
75-01-4	Vinyl chloride	ND	5.8	0.17	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%
17060-07-0	1,2-Dichloroethane-D4	101%		70-122%
2037-26-5	Toluene-D8	112%		81-127%
460-00-4	4-Bromofluorobenzene	112%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-14(1.5-2.0)**Lab Sample ID:** JB7363-13**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/23/12**Date Received:** 05/24/12**Percent Solids:** 74.3

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	7580	69	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Antimony	< 2.8	2.8	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Arsenic	3.4	2.8	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Barium	< 28	28	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Beryllium	0.37	0.28	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.69	0.69	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Calcium	1020	690	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Chromium	11.4	1.4	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Cobalt	< 6.9	6.9	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Copper	8.6	3.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Iron	12500	69	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Lead	43.2	2.8	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Magnesium	1100	690	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Manganese	79.0	2.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Mercury	0.081	0.044	mg/kg	1	06/04/12	06/04/12	DP	SW846 7471B ¹ SW846 7471B ⁴
Nickel	< 5.6	5.6	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Potassium	< 1400	1400	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Selenium	< 2.8	2.8	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Silver	0.94	0.69	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Sodium	< 1400	1400	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Thallium	< 1.4	1.4	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Vanadium	19.6	6.9	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³
Zinc	22.2	2.8	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28713

(2) Instrument QC Batch: MA28716

(3) Prep QC Batch: MP64646

(4) Prep QC Batch: MP64758

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-15(0.0-0.6)	Date Sampled:	05/23/12
Lab Sample ID:	JB7363-14	Date Received:	05/24/12
Matrix:	SO - Soil	Percent Solids:	83.1
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C88098.D	1	05/30/12	JTP	05/25/12 09:00	n/a	V3C3918
Run #2							

	Initial Weight
Run #1	5.7 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	1.8	ug/kg	
71-43-2	Benzene	ND	1.1	0.13	ug/kg	
75-27-4	Bromodichloromethane	ND	5.3	0.11	ug/kg	
75-25-2	Bromoform	ND	5.3	0.16	ug/kg	
74-83-9	Bromomethane	ND	5.3	0.29	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.5	ug/kg	
75-15-0	Carbon disulfide	ND	5.3	0.12	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.3	0.14	ug/kg	
108-90-7	Chlorobenzene	ND	5.3	0.11	ug/kg	
75-00-3	Chloroethane	ND	5.3	0.24	ug/kg	
67-66-3	Chloroform	ND	5.3	0.087	ug/kg	
74-87-3	Chloromethane	ND	5.3	0.20	ug/kg	
110-82-7	Cyclohexane	ND	5.3	0.13	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	0.94	ug/kg	
124-48-1	Dibromochloromethane	ND	5.3	0.17	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.13	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.3	0.20	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.3	0.20	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.3	0.19	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.3	0.24	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.3	0.14	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.14	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.3	0.27	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.3	0.19	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.3	0.25	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.3	0.16	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.3	0.15	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.3	0.16	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.28	ug/kg	
76-13-1	Freon 113	ND	5.3	0.45	ug/kg	
591-78-6	2-Hexanone	ND	5.3	0.66	ug/kg	
98-82-8	Isopropylbenzene	ND	5.3	0.078	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

3.14

3

Client Sample ID: OU2-SB-15(0.0-0.6)
Lab Sample ID: JB7363-14
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/23/12
Date Received: 05/24/12
Percent Solids: 83.1

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.3	2.7	ug/kg	
108-87-2	Methylcyclohexane	ND	5.3	0.18	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.25	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.3	0.79	ug/kg	
75-09-2	Methylene chloride	ND	5.3	1.3	ug/kg	
100-42-5	Styrene	ND	5.3	0.097	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.3	0.14	ug/kg	
127-18-4	Tetrachloroethene	ND	5.3	0.18	ug/kg	
108-88-3	Toluene	ND	1.1	0.11	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	0.15	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.3	0.11	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.3	0.18	ug/kg	
79-01-6	Trichloroethene	ND	5.3	0.18	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.3	0.31	ug/kg	
75-01-4	Vinyl chloride	ND	5.3	0.15	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%
17060-07-0	1,2-Dichloroethane-D4	102%		70-122%
2037-26-5	Toluene-D8	111%		81-127%
460-00-4	4-Bromofluorobenzene	109%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

3.14

3

Client Sample ID: OU2-SB-15(0.0-0.6)**Lab Sample ID:** JB7363-14**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/23/12**Date Received:** 05/24/12**Percent Solids:** 83.1

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	12400	62	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Antimony	< 2.5	2.5	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Arsenic	< 2.5	2.5	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Barium	51.3	25	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Beryllium	0.57	0.25	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Cadmium	< 0.62	0.62	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Calcium	947	620	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Chromium	16.1	1.2	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Cobalt	< 6.2	6.2	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Copper	6.6	3.1	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Iron	15300	62	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Lead	10.5	2.5	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Magnesium	1960	620	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Manganese	147	1.9	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Mercury	< 0.039	0.039	mg/kg	1	06/04/12	06/04/12 DP	SW846 7471B ¹	SW846 7471B ⁴
Nickel	9.0	5.0	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Potassium	< 1200	1200	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Selenium	< 2.5	2.5	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Silver	1.0	0.62	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Sodium	< 1200	1200	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Thallium	< 1.2	1.2	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Vanadium	21.3	6.2	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³
Zinc	36.7	2.5	mg/kg	1	05/28/12	06/05/12 BL	SW846 6010C ²	SW846 3050B ³

(1) Instrument QC Batch: MA28713

(2) Instrument QC Batch: MA28716

(3) Prep QC Batch: MP64646

(4) Prep QC Batch: MP64758

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	OU2-SB-15(1.5-2.0)	Date Sampled:	05/23/12
Lab Sample ID:	JB7363-15	Date Received:	05/24/12
Matrix:	SO - Soil	Percent Solids:	78.9
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C88099.D	1	05/30/12	JTP	05/25/12 09:00	n/a	V3C3918
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	1.9	ug/kg	
71-43-2	Benzene	ND	1.1	0.13	ug/kg	
75-27-4	Bromodichloromethane	ND	5.7	0.12	ug/kg	
75-25-2	Bromoform	ND	5.7	0.17	ug/kg	
74-83-9	Bromomethane	ND	5.7	0.31	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.7	ug/kg	
75-15-0	Carbon disulfide	ND	5.7	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.7	0.15	ug/kg	
108-90-7	Chlorobenzene	ND	5.7	0.12	ug/kg	
75-00-3	Chloroethane	ND	5.7	0.26	ug/kg	
67-66-3	Chloroform	ND	5.7	0.093	ug/kg	
74-87-3	Chloromethane	ND	5.7	0.21	ug/kg	
110-82-7	Cyclohexane	ND	5.7	0.14	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.7	0.19	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.14	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.7	0.21	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.7	0.21	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.7	0.20	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.7	0.26	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.7	0.16	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.15	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.7	0.29	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.7	0.21	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.7	0.27	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.7	0.17	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.7	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.7	0.18	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.30	ug/kg	
76-13-1	Freon 113	ND	5.7	0.49	ug/kg	
591-78-6	2-Hexanone	ND	5.7	0.70	ug/kg	
98-82-8	Isopropylbenzene	ND	5.7	0.084	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

3.15

3

Client Sample ID: OU2-SB-15(1.5-2.0)
Lab Sample ID: JB7363-15
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/23/12**Date Received:** 05/24/12**Percent Solids:** 78.9

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.7	2.9	ug/kg	
108-87-2	Methylcyclohexane	ND	5.7	0.19	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.27	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.7	0.85	ug/kg	
75-09-2	Methylene chloride	ND	5.7	1.4	ug/kg	
100-42-5	Styrene	ND	5.7	0.10	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.7	0.15	ug/kg	
127-18-4	Tetrachloroethene	ND	5.7	0.19	ug/kg	
108-88-3	Toluene	ND	1.1	0.12	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.7	0.16	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.7	0.12	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.7	0.20	ug/kg	
79-01-6	Trichloroethene	ND	5.7	0.20	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.7	0.34	ug/kg	
75-01-4	Vinyl chloride	ND	5.7	0.16	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%
17060-07-0	1,2-Dichloroethane-D4	101%		70-122%
2037-26-5	Toluene-D8	111%		81-127%
460-00-4	4-Bromofluorobenzene	110%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-15(1.5-2.0)**Lab Sample ID:** JB7363-15**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/23/12**Date Received:** 05/24/12**Percent Solids:** 78.9

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	13300	63	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Antimony	< 2.5	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Arsenic	3.0	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Barium	59.0	25	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Beryllium	0.67	0.25	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cadmium	< 0.63	0.63	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Calcium	1340	630	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Chromium	17.3	1.3	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Cobalt	< 6.3	6.3	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Copper	9.2	3.2	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Iron	17000	63	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Lead	23.3	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Magnesium	2130	630	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Manganese	201	1.9	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Mercury	0.050	0.040	mg/kg	1	06/04/12	06/04/12	DP	SW846 7471B ¹
Nickel	10.1	5.1	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Potassium	< 1300	1300	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Selenium	< 2.5	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Silver	0.82	0.63	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Sodium	< 1300	1300	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Thallium	< 1.3	1.3	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Vanadium	23.3	6.3	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²
Zinc	45.2	2.5	mg/kg	1	05/28/12	06/05/12	BL	SW846 6010C ²

(1) Instrument QC Batch: MA28713

(2) Instrument QC Batch: MA28716

(3) Prep QC Batch: MP64646

(4) Prep QC Batch: MP64758

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



ACCUTEST
LABORATORIES

CHAIN OF CUSTODY

Accutest New Jersey
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 2

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)												Matrix Codes													
Company Name ARCADIS-US		Project Name: OU-2 Soil Sampling work PLAN site																											
Street Address 17-17 Route 208 N 2nd FL		Street																											
City Fair Lawn NJ State NJ Zip 07410		City Ramapo NJ State NJ																											
Project Contact Jon Rocklin E-mail Jon.Rocklin@ARCADIS-US		CLAIM ADJUSTER CONTACT NAME:																											
Phone # 201-797-7400 Fax #		CLAIMS NUMBER #																											
Sampler(s) Name(s) ANGELUS A. BARRIO Phone # 201-961-3142		CHARTIS PRICING NEEDED: ☐																											
Field ID / Point of Collection		MEQ/HDl Vial #		Date		Time		Sampled by		Matrix		# of bottles		HCl		NH ₄ OH		H ₂ SO ₄		NONE		DI Water		MEQH		ENCORE		LAB USE ONLY	
1 FB20 120523				5/23/12		1410		AAB		AQ		3		X		X													
2 SOU2-SB-9(0.0-0.6)				1600		AAB		SO		S								X											
3 OU2-SB-9(1.5-2.0)				1630		AAB		SO		S								X											
4 OU2-SB-10(0.0-0.6)				0900		AAB		SO		S								X											
5 OU2-SB-10(1.5-2.0)				0930		AAB		SO		S								X											
6 OU2-SB-11(0.0-0.6)				1000		AAB		SO		S								X											
7 OU2-SB-11(1.5-2.0)				1030		AAB		SO		S								X											
8 OU2-SB-12(0.0-0.6)				1100		AAB		SO		S								X											
9 OU2-SB-12(1.5-2.0)				1130		AAB		SO		S								X											
10 OU2-SB-13(0.0-0.6)				1200		AAB		SO		S								X											
11 OU2-SB-13(1.5-2.0)				1230		AAB		SO		S								X											
12 OU2-SB-14(0.0-0.6)				1300		AAB		SO		S								X											
Turnaround Time (Business days)		Approved By (Accutest PM): I Date:		Data Deliverable Information																				Comments / Special Instructions					
☒ Std. 10 Business Days ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ other				☐ Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☐ FULLT1 (Level 3+4) ☐ NJ Reduced ☐ Commercial "C" ☐ NYASP Category A ☐ NYASP Category B ☐ State Forms ☐ EDD Format ☐ Other																				3 ENCLAVES REC'D 5/24/12					
Emergency & Rush T/A data available VIA Lablink				Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data																									
Relinquished by Sampler:		Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:	
1		5/23/12		Chris Law		5/24/12		Chris Law		5/24/12		Chris Law		5/24/12		Chris Law		5/24/12		Chris Law		5/24/12		Chris Law		5/24/12		Chris Law	
3				3				4				4				5				5				5				5	
5				5				5				5				5				5				5				5	
Custody Seal #																													
Intact																													
Not Intact																													
Preserved when applicable																													
On Ice																													
Cooler Temp.																													

JB7363: Chain of Custody

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Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB7363 Client: _____ Project: _____
 Date / Time Received: 5/24/2012 Delivery Method: _____ Airbill #'s: _____
 Cooler Temps (Initial/Adjusted): #1: (3/3); 0

Cooler Security

<table border="0"> <tr> <th style="text-align: left;">Y or N</th> <th style="text-align: left;">Y or N</th> </tr> <tr> <td>1. Custody Seals Present: ☒ ☐</td> <td>3. COC Present: ☒ ☐</td> </tr> <tr> <td>2. Custody Seals Intact: ☒ ☐</td> <td>4. Smpl Dates/Time OK: ☒ ☐</td> </tr> </table>	Y or N	Y or N	1. Custody Seals Present: ☒ ☐	3. COC Present: ☒ ☐	2. Custody Seals Intact: ☒ ☐	4. Smpl Dates/Time OK: ☒ ☐	
Y or N	Y or N						
1. Custody Seals Present: ☒ ☐	3. COC Present: ☒ ☐						
2. Custody Seals Intact: ☒ ☐	4. Smpl Dates/Time OK: ☒ ☐						

Cooler Temperature

Y or N
1. Temp criteria achieved: ☒ ☐
2. Cooler temp verification: <u>Bar Therm</u>
3. Cooler media: <u>Ice (Bag)</u>
4. No. Coolers: <u>1</u>

Quality Control Preservation

Y	or	N	N/A
1. Trip Blank present / cooler:	☐	☒	☐
2. Trip Blank listed on COC:	☐	☒	☐
3. Samples preserved properly:	☒	☐	
4. VOCs headspace free:	☐	☐	☒

Sample Integrity - Documentation

Y	or	N
1. Sample labels present on bottles:	☒	☐
2. Container labeling complete:	☒	☐
3. Sample container label / COC agree:	☒	☐

Sample Integrity - Condition

Y	or	N
1. Sample recvd within HT:	☒	☐
2. All containers accounted for:	☒	☐
3. Condition of sample:	<u>Intact</u>	

Sample Integrity - Instructions

Y	or	N	N/A
1. Analysis requested is clear:	☒	☐	
2. Bottles received for unspecified tests	☐	☒	
3. Sufficient volume recvd for analysis:	☒	☐	
4. Compositing instructions clear:	☐	☐	☒
5. Filtering instructions clear:	☐	☐	☒

Comments



06/13/12

Technical Report for

Arcadis

Ramapo, NY

Soil Sampling NJ000602.0002

Accutest Job Number: JB7410

Sampling Date: 05/24/12

Report to:

Arcadis Geraghty & Miller

Matt.Gress@arcadis-us.com

ATTN: Matt Gress

Total number of pages in report: **53**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Paul Ioannidis
Lab Director

Client Service contact: Marie Meidhof 732-329-0200

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Test results relate only to samples analyzed.

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Sample Summary

Arcadis

Job No: JB7410

Ramapo, NY

Project No: Soil Sampling NJ000602.0002

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JB7410-1	05/24/12	09:00 AAB	05/25/12	SO	Soil	OU2-SB-16(0.0-1.6)
JB7410-2	05/24/12	09:30 AAB	05/25/12	SO	Soil	OU2-SB-16(1.5-2.0)
JB7410-3	05/24/12	10:00 AAB	05/25/12	SO	Soil	OU2-SB-17(0.0-0.6)
JB7410-4	05/24/12	10:30 AAB	05/25/12	SO	Soil	OU2-SB-17(1.5-2.0)
JB7410-5	05/24/12	00:01 AAB	05/25/12	SO	Soil	OU2-DUP20120524(0.0-0.6)
JB7410-6	05/24/12	00:02 AAB	05/25/12	SO	Soil	OU2-DUP20120524(1.5-2.0)
JB7410-7	05/24/12	11:00 AAB	05/25/12	SO	Soil	OU2-SB-18(0.0-0.6)
JB7410-8	05/24/12	11:30 AAB	05/25/12	SO	Soil	OU2-SB-18(1.5-2.0)
JB7410-9	05/24/12	12:00 AAB	05/25/12	SO	Soil	OU2-SB-19(0.0-0.6)
JB7410-10	05/24/12	12:30 AAB	05/25/12	SO	Soil	OU2-SB-19(1.5-2.0)
JB7410-11	05/24/12	13:00 AAB	05/25/12	SO	Soil	OU2-SB-20(0.0-0.6)
JB7410-12	05/24/12	13:30 AAB	05/25/12	SO	Soil	OU2-SB-20(1.5-2.0)
JB7410-13	05/24/12	14:10 AAB	05/25/12	AQ	Field Blank Soil	FB20120524

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

Arcadis

Job No: JB7410

Ramapo, NY

Project No: Soil Sampling NJ000602.0002

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
JB7410-14	05/24/12	14:10 AAB	05/25/12	AQ	Trip Blank Soil	TRIP BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Arcadis**Job No** JB7410**Site:** Ramapo, NY**Report Date** 6/8/2012 10:55:40 AM

On 05/25/2012, 12 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at Accutest Laboratories at a temperature of 1 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB7410 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ**Batch ID:** V4B821

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7252-20MS, JB7252-20MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Bromomethane are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Bromomethane are outside control limits. Outside control limits due to matrix interference.

Matrix: SO**Batch ID:** VY5284

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB7410-2MS, JB7410-3DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Acetone, Methyl Acetate are outside control limits. Outside control limits due to matrix interference.

Matrix: SO**Batch ID:** VY5286

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7506-1MS, JB7506-3DUP were used as the QC samples indicated.
- RPD(s) for Duplicate for Ethylbenzene, Isopropylbenzene, Toluene, Xylene (total) are outside control limits. High RPD due to possible sample analyzed from different vials.

Matrix: SO**Batch ID:** VY5288

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB7472-3MS, JB7472-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Acetone, Methyl Acetate are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Methyl Acetate are outside control limits. Outside control limits due to matrix interference.

Metals By Method SW846 6010C

Matrix: AQ

Batch ID: MP64654

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7247-17MS, JB7247-17MSD, JB7247-17SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference.
- Matrix Spike Duplicate Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference.
- Matrix Spike Recovery(s) for Aluminum, Iron are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Beryllium, Cadmium, Zinc are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix: SO

Batch ID: MP64692

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7410-1MS, JB7410-1MSD, JB7410-1SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Antimony, Calcium, Iron, Magnesium are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike Duplicate Recovery(s) for Antimony, Calcium, Magnesium are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Cadmium, Silver, Thallium are outside . Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Metals By Method SW846 7470A

Matrix: AQ

Batch ID: MP64764

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7540-2FMS, JB7540-2FMSD were used as the QC samples for metals.

Metals By Method SW846 7471B

Matrix: SO

Batch ID: MP64785

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7263-2MS, JB7263-2MSD were used as the QC samples for metals.

Matrix: SO

Batch ID: MP64786

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7205-1AMS, JB7205-1AMSD were used as the QC samples for metals.

Wet Chemistry By Method SM18 2540G

Matrix: SO

Batch ID: GN67127

- The data for SM18 2540G meets quality control requirements.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Sample Results

Report of Analysis

Report of Analysis

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Client Sample ID:	OU2-SB-16(0.0-1.6)	Date Sampled:	05/24/12
Lab Sample ID:	JB7410-1	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	81.2
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y123167.D	1	05/29/12	RS	05/25/12 12:00	n/a	VY5284
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	8.2	ug/kg	
71-43-2	Benzene	ND	1.2	0.16	ug/kg	
75-27-4	Bromodichloromethane	ND	6.2	0.28	ug/kg	
75-25-2	Bromoform	ND	6.2	0.93	ug/kg	
74-83-9	Bromomethane	ND	6.2	0.49	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	5.3	ug/kg	
75-15-0	Carbon disulfide	ND	6.2	0.24	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.2	0.43	ug/kg	
108-90-7	Chlorobenzene	ND	6.2	0.40	ug/kg	
75-00-3	Chloroethane	ND	6.2	0.50	ug/kg	
67-66-3	Chloroform	ND	6.2	0.59	ug/kg	
74-87-3	Chloromethane	ND	6.2	0.77	ug/kg	
110-82-7	Cyclohexane	ND	6.2	0.47	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.9	ug/kg	
124-48-1	Dibromochloromethane	ND	6.2	0.21	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.29	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.2	0.34	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.2	0.24	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.2	0.21	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.2	0.40	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.2	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.22	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.2	0.75	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.2	0.40	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.2	0.52	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.2	0.33	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.2	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.2	0.41	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.18	ug/kg	
76-13-1	Freon 113	ND	6.2	0.88	ug/kg	
591-78-6	2-Hexanone	ND	6.2	3.1	ug/kg	
98-82-8	Isopropylbenzene	ND	6.2	0.17	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-16(0.0-1.6)
Lab Sample ID: JB7410-1
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/24/12
Date Received: 05/25/12
Percent Solids: 81.2

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	6.2	2.7	ug/kg	
108-87-2	Methylcyclohexane	ND	6.2	0.30	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.22	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.2	3.2	ug/kg	
75-09-2	Methylene chloride	ND	6.2	0.28	ug/kg	
100-42-5	Styrene	ND	6.2	0.23	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.2	0.22	ug/kg	
127-18-4	Tetrachloroethene	ND	6.2	0.24	ug/kg	
108-88-3	Toluene	ND	1.2	0.47	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.2	0.42	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.2	0.30	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.2	0.53	ug/kg	
79-01-6	Trichloroethene	ND	6.2	0.30	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.2	0.59	ug/kg	
75-01-4	Vinyl chloride	ND	6.2	0.57	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
17060-07-0	1,2-Dichloroethane-D4	89%		70-122%
2037-26-5	Toluene-D8	104%		81-127%
460-00-4	4-Bromofluorobenzene	90%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-16(0.0-1.6)**Lab Sample ID:** JB7410-1**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/24/12**Date Received:** 05/25/12**Percent Solids:** 81.2

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	5230	61	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Antimony	< 2.4	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Arsenic	< 2.4	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Barium	< 24	24	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Beryllium	0.38	0.24	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Cadmium	< 0.61	0.61	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Calcium	4840	610	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Chromium	18.1	1.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Cobalt	< 6.1	6.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Copper	11.1	3.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Iron	16200	61	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Lead	7.5	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Magnesium	3480	610	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Manganese	186	1.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Mercury	0.052	0.036	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹
Nickel	8.5	4.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Potassium	< 1200	1200	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Selenium	< 2.4	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Silver	< 0.61	0.61	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Sodium	< 1200	1200	mg/kg	1	05/30/12	06/08/12	ND	SW846 6010C ³
Thallium	< 1.2	1.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Vanadium	31.9	6.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Zinc	25.1	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28736

(3) Instrument QC Batch: MA28750

(4) Prep QC Batch: MP64692

(5) Prep QC Batch: MP64785

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-16(1.5-2.0)	Date Sampled:	05/24/12
Lab Sample ID:	JB7410-2	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	79.3
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y123164.D	1	05/29/12	RS	05/25/12 12:00	n/a	VY5284
Run #2							

	Initial Weight
Run #1	6.2 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.7	ug/kg	
71-43-2	Benzene	ND	1.0	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.1	0.23	ug/kg	
75-25-2	Bromoform	ND	5.1	0.77	ug/kg	
74-83-9	Bromomethane	ND	5.1	0.40	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	4.4	ug/kg	
75-15-0	Carbon disulfide	ND	5.1	0.20	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.1	0.35	ug/kg	
108-90-7	Chlorobenzene	ND	5.1	0.33	ug/kg	
75-00-3	Chloroethane	ND	5.1	0.41	ug/kg	
67-66-3	Chloroform	ND	5.1	0.49	ug/kg	
74-87-3	Chloromethane	ND	5.1	0.63	ug/kg	
110-82-7	Cyclohexane	ND	5.1	0.39	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.5	ug/kg	
124-48-1	Dibromochloromethane	ND	5.1	0.17	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.1	0.28	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.1	0.20	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.1	0.17	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.1	0.33	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.1	0.22	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.19	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.1	0.62	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.1	0.33	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.1	0.43	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.1	0.27	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.1	0.15	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.1	0.34	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.15	ug/kg	
76-13-1	Freon 113	ND	5.1	0.73	ug/kg	
591-78-6	2-Hexanone	ND	5.1	2.5	ug/kg	
98-82-8	Isopropylbenzene	ND	5.1	0.14	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-16(1.5-2.0)
Lab Sample ID: JB7410-2
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/24/12
Date Received: 05/25/12
Percent Solids: 79.3

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.1	2.3	ug/kg	
108-87-2	Methylcyclohexane	ND	5.1	0.25	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.1	2.7	ug/kg	
75-09-2	Methylene chloride	ND	5.1	0.23	ug/kg	
100-42-5	Styrene	ND	5.1	0.19	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.1	0.18	ug/kg	
127-18-4	Tetrachloroethene	ND	5.1	0.19	ug/kg	
108-88-3	Toluene	ND	1.0	0.38	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	0.35	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.1	0.25	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.1	0.44	ug/kg	
79-01-6	Trichloroethene	ND	5.1	0.25	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.1	0.49	ug/kg	
75-01-4	Vinyl chloride	ND	5.1	0.47	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
17060-07-0	1,2-Dichloroethane-D4	90%		70-122%
2037-26-5	Toluene-D8	104%		81-127%
460-00-4	4-Bromofluorobenzene	90%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-16(1.5-2.0)

Lab Sample ID: JB7410-2

Matrix: SO - Soil

Project: Ramapo, NY

Date Sampled: 05/24/12

Date Received: 05/25/12

Percent Solids: 79.3

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	7590	64	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Antimony	< 2.5	2.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Arsenic	3.6	2.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Barium	37.3	25	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Beryllium	0.66	0.25	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Cadmium	< 0.64	0.64	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Calcium	3290	640	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Chromium	18.0	1.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Cobalt	< 6.4	6.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Copper	14.6	3.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Iron	13600	64	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Lead	87.7	2.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Magnesium	2540	640	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Manganese	279	1.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Mercury	0.089	0.040	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹
Nickel	11.0	5.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Potassium	< 1300	1300	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Selenium	< 2.5	2.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Silver	< 0.64	0.64	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Sodium	< 1300	1300	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Thallium	< 1.3	1.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Vanadium	22.5	6.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Zinc	47.7	2.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28736

(3) Prep QC Batch: MP64692

(4) Prep QC Batch: MP64785

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-17(0.0-0.6)	Date Sampled:	05/24/12
Lab Sample ID:	JB7410-3	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	77.3
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y123165.D	1	05/29/12	RS	05/25/12 12:00	n/a	VY5284
Run #2							

	Initial Weight
Run #1	5.3 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	8.1	ug/kg	
71-43-2	Benzene	ND	1.2	0.16	ug/kg	
75-27-4	Bromodichloromethane	ND	6.1	0.27	ug/kg	
75-25-2	Bromoform	ND	6.1	0.92	ug/kg	
74-83-9	Bromomethane	ND	6.1	0.48	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	5.3	ug/kg	
75-15-0	Carbon disulfide	ND	6.1	0.24	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.1	0.42	ug/kg	
108-90-7	Chlorobenzene	ND	6.1	0.39	ug/kg	
75-00-3	Chloroethane	ND	6.1	0.50	ug/kg	
67-66-3	Chloroform	ND	6.1	0.59	ug/kg	
74-87-3	Chloromethane	ND	6.1	0.76	ug/kg	
110-82-7	Cyclohexane	ND	6.1	0.46	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.8	ug/kg	
124-48-1	Dibromochloromethane	ND	6.1	0.21	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.29	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.1	0.34	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.1	0.23	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.1	0.21	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.1	0.39	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.1	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.22	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.1	0.75	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.1	0.39	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.1	0.52	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.1	0.32	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.1	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.1	0.41	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.18	ug/kg	
76-13-1	Freon 113	ND	6.1	0.88	ug/kg	
591-78-6	2-Hexanone	ND	6.1	3.0	ug/kg	
98-82-8	Isopropylbenzene	ND	6.1	0.17	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-17(0.0-0.6)
Lab Sample ID: JB7410-3
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/24/12

Date Received: 05/25/12

Percent Solids: 77.3

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	6.1	2.7	ug/kg	
108-87-2	Methylcyclohexane	ND	6.1	0.30	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.22	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.1	3.2	ug/kg	
75-09-2	Methylene chloride	ND	6.1	0.28	ug/kg	
100-42-5	Styrene	ND	6.1	0.23	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.1	0.22	ug/kg	
127-18-4	Tetrachloroethene	ND	6.1	0.23	ug/kg	
108-88-3	Toluene	ND	1.2	0.46	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.1	0.42	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.1	0.29	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.1	0.53	ug/kg	
79-01-6	Trichloroethene	ND	6.1	0.30	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.1	0.59	ug/kg	
75-01-4	Vinyl chloride	ND	6.1	0.56	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
17060-07-0	1,2-Dichloroethane-D4	90%		70-122%
2037-26-5	Toluene-D8	104%		81-127%
460-00-4	4-Bromofluorobenzene	90%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-17(0.0-0.6)

Lab Sample ID: JB7410-3

Matrix: SO - Soil

Date Sampled: 05/24/12

Date Received: 05/25/12

Percent Solids: 77.3

Project: Ramapo, NY

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	22300	66	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Antimony	< 2.6	2.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Arsenic	4.4	2.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Barium	53.1	26	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Beryllium	0.83	0.26	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Cadmium	< 0.66	0.66	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Calcium	< 660	660	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Chromium	21.8	1.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Cobalt	< 6.6	6.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Copper	9.5	3.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Iron	21700	66	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Lead	16.3	2.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Magnesium	2320	660	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Manganese	176	2.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Mercury	0.065	0.039	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹
Nickel	11.3	5.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Potassium	< 1300	1300	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Selenium	< 2.6	2.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Silver	0.67	0.66	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Sodium	< 1300	1300	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Thallium	< 1.3	1.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Vanadium	37.6	6.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Zinc	56.1	2.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28736

(3) Prep QC Batch: MP64692

(4) Prep QC Batch: MP64785

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-17(1.5-2.0)	Date Sampled:	05/24/12
Lab Sample ID:	JB7410-4	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	82.1
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y123168.D	1	05/29/12	RS	05/25/12 12:00	n/a	VY5284
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	7.2	ug/kg	
71-43-2	Benzene	ND	1.1	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.4	0.24	ug/kg	
75-25-2	Bromoform	ND	5.4	0.82	ug/kg	
74-83-9	Bromomethane	ND	5.4	0.43	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	4.7	ug/kg	
75-15-0	Carbon disulfide	ND	5.4	0.21	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.4	0.38	ug/kg	
108-90-7	Chlorobenzene	ND	5.4	0.35	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.44	ug/kg	
67-66-3	Chloroform	ND	5.4	0.53	ug/kg	
74-87-3	Chloromethane	ND	5.4	0.68	ug/kg	
110-82-7	Cyclohexane	ND	5.4	0.41	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	1.6	ug/kg	
124-48-1	Dibromochloromethane	ND	5.4	0.18	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.26	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.4	0.30	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.4	0.21	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.4	0.18	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.4	0.35	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.4	0.24	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.20	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.4	0.67	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.4	0.35	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.4	0.46	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.4	0.29	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.4	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.4	0.37	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.16	ug/kg	
76-13-1	Freon 113	ND	5.4	0.78	ug/kg	
591-78-6	2-Hexanone	ND	5.4	2.7	ug/kg	
98-82-8	Isopropylbenzene	ND	5.4	0.15	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-17(1.5-2.0)
Lab Sample ID: JB7410-4
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/24/12
Date Received: 05/25/12
Percent Solids: 82.1

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.4	2.4	ug/kg	
108-87-2	Methylcyclohexane	ND	5.4	0.27	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.19	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	2.9	ug/kg	
75-09-2	Methylene chloride	ND	5.4	0.25	ug/kg	
100-42-5	Styrene	ND	5.4	0.20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.4	0.19	ug/kg	
127-18-4	Tetrachloroethene	ND	5.4	0.21	ug/kg	
108-88-3	Toluene	ND	1.1	0.41	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	0.37	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.4	0.26	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.4	0.47	ug/kg	
79-01-6	Trichloroethene	ND	5.4	0.27	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.4	0.52	ug/kg	
75-01-4	Vinyl chloride	ND	5.4	0.50	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		70-130%
17060-07-0	1,2-Dichloroethane-D4	90%		70-122%
2037-26-5	Toluene-D8	104%		81-127%
460-00-4	4-Bromofluorobenzene	90%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-17(1.5-2.0)**Lab Sample ID:** JB7410-4**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/24/12**Date Received:** 05/25/12**Percent Solids:** 82.1**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	22600	60	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.4	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	4.5	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Barium	61.7	24	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.75	0.24	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.60	0.60	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	< 600	600	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	23.8	1.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	< 6.0	6.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Copper	11.9	3.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Iron	25300	60	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Lead	8.7	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	3000	600	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	158	1.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	< 0.037	0.037	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	12.8	4.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1200	1200	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.4	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Silver	0.68	0.60	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1200	1200	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.2	1.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	39.9	6.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	53.1	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28736

(3) Prep QC Batch: MP64692

(4) Prep QC Batch: MP64785

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-DUP20120524(0.0-0.6)	Date Sampled:	05/24/12
Lab Sample ID:	JB7410-5	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	79.3
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y123169.D	1	05/29/12	RS	05/25/12 12:00	n/a	VY5284
Run #2							

	Initial Weight
Run #1	4.9 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	8.5	ug/kg	
71-43-2	Benzene	ND	1.3	0.17	ug/kg	
75-27-4	Bromodichloromethane	ND	6.4	0.29	ug/kg	
75-25-2	Bromoform	ND	6.4	0.97	ug/kg	
74-83-9	Bromomethane	ND	6.4	0.51	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	5.6	ug/kg	
75-15-0	Carbon disulfide	ND	6.4	0.25	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.4	0.45	ug/kg	
108-90-7	Chlorobenzene	ND	6.4	0.41	ug/kg	
75-00-3	Chloroethane	ND	6.4	0.53	ug/kg	
67-66-3	Chloroform	ND	6.4	0.62	ug/kg	
74-87-3	Chloromethane	ND	6.4	0.80	ug/kg	
110-82-7	Cyclohexane	ND	6.4	0.49	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	13	1.9	ug/kg	
124-48-1	Dibromochloromethane	ND	6.4	0.22	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.3	0.31	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.4	0.36	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.4	0.25	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.4	0.22	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.4	0.41	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.4	0.28	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.23	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.4	0.79	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.4	0.41	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.4	0.55	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.4	0.34	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.4	0.20	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.4	0.43	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.19	ug/kg	
76-13-1	Freon 113	ND	6.4	0.92	ug/kg	
591-78-6	2-Hexanone	ND	6.4	3.2	ug/kg	
98-82-8	Isopropylbenzene	ND	6.4	0.18	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-DUP20120524(0.0-0.6)
Lab Sample ID: JB7410-5
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/24/12
Date Received: 05/25/12
Percent Solids: 79.3

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	6.4	2.9	ug/kg	
108-87-2	Methylcyclohexane	ND	6.4	0.32	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.23	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.4	3.4	ug/kg	
75-09-2	Methylene chloride	ND	6.4	0.30	ug/kg	
100-42-5	Styrene	ND	6.4	0.24	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.4	0.23	ug/kg	
127-18-4	Tetrachloroethene	ND	6.4	0.25	ug/kg	
108-88-3	Toluene	ND	1.3	0.49	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.4	0.44	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.4	0.31	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.4	0.56	ug/kg	
79-01-6	Trichloroethene	ND	6.4	0.32	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.4	0.62	ug/kg	
75-01-4	Vinyl chloride	ND	6.4	0.59	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		70-130%
17060-07-0	1,2-Dichloroethane-D4	92%		70-122%
2037-26-5	Toluene-D8	104%		81-127%
460-00-4	4-Bromofluorobenzene	89%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-DUP20120524(0.0-0.6)**Lab Sample ID:** JB7410-5**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/24/12**Date Received:** 05/25/12**Percent Solids:** 79.3

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	21900	64	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.5	2.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	4.4	2.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Barium	53.1	25	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.83	0.25	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.64	0.64	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	< 640	640	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	21.4	1.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	< 6.4	6.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Copper	9.2	3.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Iron	21200	64	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Lead	20.2	2.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	2240	640	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	180	1.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	0.047	0.038	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	11.1	5.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1300	1300	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.5	2.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Silver	0.70	0.64	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1300	1300	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.3	1.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	37.4	6.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	55.1	2.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28736

(3) Prep QC Batch: MP64692

(4) Prep QC Batch: MP64785

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-DUP20120524(1.5-2.0)	Date Sampled:	05/24/12
Lab Sample ID:	JB7410-6	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	81.1
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y123170.D	1	05/29/12	RS	05/25/12 12:00	n/a	VY5284
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.9	ug/kg	
71-43-2	Benzene	ND	1.0	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.2	0.23	ug/kg	
75-25-2	Bromoform	ND	5.2	0.79	ug/kg	
74-83-9	Bromomethane	ND	5.2	0.41	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	4.5	ug/kg	
75-15-0	Carbon disulfide	ND	5.2	0.20	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.2	0.36	ug/kg	
108-90-7	Chlorobenzene	ND	5.2	0.34	ug/kg	
75-00-3	Chloroethane	ND	5.2	0.43	ug/kg	
67-66-3	Chloroform	ND	5.2	0.50	ug/kg	
74-87-3	Chloromethane	ND	5.2	0.65	ug/kg	
110-82-7	Cyclohexane	ND	5.2	0.40	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.6	ug/kg	
124-48-1	Dibromochloromethane	ND	5.2	0.18	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.25	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.2	0.29	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.2	0.20	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.2	0.18	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.2	0.34	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.2	0.23	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.19	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.2	0.64	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.2	0.34	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.2	0.44	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.2	0.28	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.2	0.35	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.15	ug/kg	
76-13-1	Freon 113	ND	5.2	0.75	ug/kg	
591-78-6	2-Hexanone	ND	5.2	2.6	ug/kg	
98-82-8	Isopropylbenzene	ND	5.2	0.14	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-DUP20120524(1.5-2.0)
Lab Sample ID: JB7410-6
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/24/12**Date Received:** 05/25/12**Percent Solids:** 81.1

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.2	2.3	ug/kg	
108-87-2	Methylcyclohexane	ND	5.2	0.26	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.19	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	2.7	ug/kg	
75-09-2	Methylene chloride	ND	5.2	0.24	ug/kg	
100-42-5	Styrene	ND	5.2	0.19	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.2	0.19	ug/kg	
127-18-4	Tetrachloroethene	ND	5.2	0.20	ug/kg	
108-88-3	Toluene	ND	1.0	0.39	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	0.36	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.2	0.25	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.2	0.45	ug/kg	
79-01-6	Trichloroethene	ND	5.2	0.26	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.2	0.50	ug/kg	
75-01-4	Vinyl chloride	ND	5.2	0.48	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%
17060-07-0	1,2-Dichloroethane-D4	91%		70-122%
2037-26-5	Toluene-D8	105%		81-127%
460-00-4	4-Bromofluorobenzene	89%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-DUP20120524(1.5-2.0)**Lab Sample ID:** JB7410-6**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/24/12**Date Received:** 05/25/12**Percent Solids:** 81.1

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	20700	61	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.4	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	3.8	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Barium	63.6	24	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.65	0.24	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.61	0.61	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	< 610	610	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	21.3	1.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	< 6.1	6.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Copper	9.3	3.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Iron	22600	61	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Lead	7.7	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	2480	610	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	125	1.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	< 0.037	0.037	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	10.8	4.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1200	1200	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.4	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Silver	0.63	0.61	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1200	1200	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.2	1.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	36.6	6.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	50.3	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28736

(3) Prep QC Batch: MP64692

(4) Prep QC Batch: MP64785

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-18(0.0-0.6)	Date Sampled:	05/24/12
Lab Sample ID:	JB7410-7	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	83.6
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y123171.D	1	05/29/12	RS	05/25/12 12:00	n/a	VY5284
Run #2							

	Initial Weight
Run #1	4.8 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	119	12	8.2	ug/kg	
71-43-2	Benzene	ND	1.2	0.17	ug/kg	
75-27-4	Bromodichloromethane	ND	6.2	0.28	ug/kg	
75-25-2	Bromoform	ND	6.2	0.94	ug/kg	
74-83-9	Bromomethane	ND	6.2	0.49	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	5.4	ug/kg	
75-15-0	Carbon disulfide	ND	6.2	0.24	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.2	0.43	ug/kg	
108-90-7	Chlorobenzene	ND	6.2	0.40	ug/kg	
75-00-3	Chloroethane	ND	6.2	0.51	ug/kg	
67-66-3	Chloroform	ND	6.2	0.60	ug/kg	
74-87-3	Chloromethane	ND	6.2	0.78	ug/kg	
110-82-7	Cyclohexane	ND	6.2	0.47	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.9	ug/kg	
124-48-1	Dibromochloromethane	ND	6.2	0.21	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.30	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.2	0.35	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.2	0.24	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.2	0.21	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.2	0.40	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.2	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.23	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.2	0.76	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.2	0.40	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.2	0.53	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.2	0.33	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.2	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.2	0.42	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.18	ug/kg	
76-13-1	Freon 113	ND	6.2	0.89	ug/kg	
591-78-6	2-Hexanone	ND	6.2	3.1	ug/kg	
98-82-8	Isopropylbenzene	ND	6.2	0.17	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-18(0.0-0.6)
Lab Sample ID: JB7410-7
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/24/12

Date Received: 05/25/12

Percent Solids: 83.6

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	6.2	2.8	ug/kg	
108-87-2	Methylcyclohexane	ND	6.2	0.31	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.22	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.2	3.3	ug/kg	
75-09-2	Methylene chloride	ND	6.2	0.29	ug/kg	
100-42-5	Styrene	ND	6.2	0.23	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.2	0.22	ug/kg	
127-18-4	Tetrachloroethene	ND	6.2	0.24	ug/kg	
108-88-3	Toluene	ND	1.2	0.47	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.2	0.42	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.2	0.30	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.2	0.54	ug/kg	
79-01-6	Trichloroethene	ND	6.2	0.31	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.2	0.60	ug/kg	
75-01-4	Vinyl chloride	ND	6.2	0.57	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
17060-07-0	1,2-Dichloroethane-D4	90%		70-122%
2037-26-5	Toluene-D8	104%		81-127%
460-00-4	4-Bromofluorobenzene	90%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-18(0.0-0.6)**Lab Sample ID:** JB7410-7**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/24/12**Date Received:** 05/25/12**Percent Solids:** 83.6**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	14000	60	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.4	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	3.3	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Barium	36.8	24	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.73	0.24	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.60	0.60	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	1120	600	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	19.7	1.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	< 6.0	6.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Copper	12.1	3.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Iron	19200	60	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Lead	15.5	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	2530	600	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	195	1.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	0.047	0.035	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	12.5	4.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1200	1200	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.4	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Silver	0.68	0.60	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1200	1200	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.2	1.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	30.5	6.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	43.1	2.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28736

(3) Prep QC Batch: MP64692

(4) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-18(1.5-2.0)	Date Sampled:	05/24/12
Lab Sample ID:	JB7410-8	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	83.7
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y123172.D	1	05/29/12	RS	05/25/12 12:00	n/a	VY5284
Run #2							

	Initial Weight
Run #1	5.1 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	138	12	7.8	ug/kg	
71-43-2	Benzene	ND	1.2	0.16	ug/kg	
75-27-4	Bromodichloromethane	ND	5.9	0.26	ug/kg	
75-25-2	Bromoform	ND	5.9	0.88	ug/kg	
74-83-9	Bromomethane	ND	5.9	0.46	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	5.1	ug/kg	
75-15-0	Carbon disulfide	ND	5.9	0.23	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.9	0.41	ug/kg	
108-90-7	Chlorobenzene	ND	5.9	0.38	ug/kg	
75-00-3	Chloroethane	ND	5.9	0.48	ug/kg	
67-66-3	Chloroform	ND	5.9	0.57	ug/kg	
74-87-3	Chloromethane	ND	5.9	0.73	ug/kg	
110-82-7	Cyclohexane	ND	5.9	0.44	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.8	ug/kg	
124-48-1	Dibromochloromethane	ND	5.9	0.20	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.28	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.9	0.32	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.9	0.22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.9	0.20	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.9	0.38	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.9	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.21	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.9	0.72	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.9	0.38	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.9	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.9	0.31	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.9	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.9	0.39	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.17	ug/kg	
76-13-1	Freon 113	ND	5.9	0.84	ug/kg	
591-78-6	2-Hexanone	ND	5.9	2.9	ug/kg	
98-82-8	Isopropylbenzene	ND	5.9	0.16	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-18(1.5-2.0)
Lab Sample ID: JB7410-8
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/24/12
Date Received: 05/25/12
Percent Solids: 83.7

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.9	2.6	ug/kg	
108-87-2	Methylcyclohexane	ND	5.9	0.29	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.21	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.9	3.1	ug/kg	
75-09-2	Methylene chloride	ND	5.9	0.27	ug/kg	
100-42-5	Styrene	ND	5.9	0.22	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.9	0.21	ug/kg	
127-18-4	Tetrachloroethene	ND	5.9	0.22	ug/kg	
108-88-3	Toluene	ND	1.2	0.44	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.9	0.40	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.9	0.28	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.9	0.51	ug/kg	
79-01-6	Trichloroethene	ND	5.9	0.29	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.9	0.56	ug/kg	
75-01-4	Vinyl chloride	ND	5.9	0.54	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
17060-07-0	1,2-Dichloroethane-D4	88%		70-122%
2037-26-5	Toluene-D8	104%		81-127%
460-00-4	4-Bromofluorobenzene	90%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-18(1.5-2.0)**Lab Sample ID:** JB7410-8**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/24/12**Date Received:** 05/25/12**Percent Solids:** 83.7

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	12400	58	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.3	2.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	3.2	2.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Barium	35.4	23	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.70	0.23	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.58	0.58	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	1370	580	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	17.0	1.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	< 5.8	5.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Copper	12.2	2.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Iron	17600	58	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Lead	20.7	2.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	2370	580	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	242	1.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	0.051	0.037	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	10.9	4.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1200	1200	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.3	2.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Silver	< 0.58	0.58	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1200	1200	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.2	1.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	28.8	5.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	41.0	2.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28736

(3) Prep QC Batch: MP64692

(4) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-19(0.0-0.6)	Date Sampled:	05/24/12
Lab Sample ID:	JB7410-9	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	88.2
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y123257.D	1	05/31/12	RS	05/25/12 12:00	n/a	VY5288
Run #2							

	Initial Weight
Run #1	6.0 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.4	1.6	ug/kg	
71-43-2	Benzene	ND	0.94	0.11	ug/kg	
75-27-4	Bromodichloromethane	ND	4.7	0.099	ug/kg	
75-25-2	Bromoform	ND	4.7	0.14	ug/kg	
74-83-9	Bromomethane	ND	4.7	0.26	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.4	2.3	ug/kg	
75-15-0	Carbon disulfide	ND	4.7	0.11	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.7	0.13	ug/kg	
108-90-7	Chlorobenzene	ND	4.7	0.10	ug/kg	
75-00-3	Chloroethane	ND	4.7	0.21	ug/kg	
67-66-3	Chloroform	ND	4.7	0.078	ug/kg	
74-87-3	Chloromethane	ND	4.7	0.18	ug/kg	
110-82-7	Cyclohexane	ND	4.7	0.12	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	9.4	0.84	ug/kg	
124-48-1	Dibromochloromethane	ND	4.7	0.15	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.94	0.12	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	4.7	0.18	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	4.7	0.18	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	4.7	0.17	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.7	0.22	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.7	0.13	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.94	0.13	ug/kg	
75-35-4	1,1-Dichloroethene	ND	4.7	0.24	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	4.7	0.17	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	4.7	0.22	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.7	0.15	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.7	0.13	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.7	0.15	ug/kg	
100-41-4	Ethylbenzene	ND	0.94	0.25	ug/kg	
76-13-1	Freon 113	ND	4.7	0.41	ug/kg	
591-78-6	2-Hexanone	ND	4.7	0.59	ug/kg	
98-82-8	Isopropylbenzene	ND	4.7	0.070	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-19(0.0-0.6)
Lab Sample ID: JB7410-9
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/24/12
Date Received: 05/25/12
Percent Solids: 88.2

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	4.7	2.5	ug/kg	
108-87-2	Methylcyclohexane	ND	4.7	0.16	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.94	0.22	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.7	0.71	ug/kg	
75-09-2	Methylene chloride	ND	4.7	1.2	ug/kg	
100-42-5	Styrene	ND	4.7	0.087	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.7	0.12	ug/kg	
127-18-4	Tetrachloroethene	ND	4.7	0.16	ug/kg	
108-88-3	Toluene	ND	0.94	0.099	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.13	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.7	0.10	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.7	0.16	ug/kg	
79-01-6	Trichloroethene	ND	4.7	0.16	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.7	0.28	ug/kg	
75-01-4	Vinyl chloride	ND	4.7	0.14	ug/kg	
1330-20-7	Xylene (total)	ND	0.94	0.13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		70-130%
17060-07-0	1,2-Dichloroethane-D4	95%		70-122%
2037-26-5	Toluene-D8	112%		81-127%
460-00-4	4-Bromofluorobenzene	102%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-19(0.0-0.6)**Lab Sample ID:** JB7410-9**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/24/12**Date Received:** 05/25/12**Percent Solids:** 88.2

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	9170	56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.2	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	2.6	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Barium	34.4	22	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.54	0.22	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.56	0.56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	2050	560	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	17.2	1.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	< 5.6	5.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Copper	14.7	2.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Iron	17800	56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Lead	10.1	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	2700	560	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	319	1.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	< 0.033	0.033	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	11.5	4.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1100	1100	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.2	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Silver	0.57	0.56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1100	1100	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.1	1.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	28.6	5.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	35.6	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28736

(3) Prep QC Batch: MP64692

(4) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	OU2-SB-19(1.5-2.0)	Date Sampled:	05/24/12
Lab Sample ID:	JB7410-10	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	86.2
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y123212.D	1	05/30/12	RS	05/25/12 12:00	n/a	VY5286
Run #2							

	Initial Weight
Run #1	6.2 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.4	1.6	ug/kg	
71-43-2	Benzene	ND	0.94	0.11	ug/kg	
75-27-4	Bromodichloromethane	ND	4.7	0.098	ug/kg	
75-25-2	Bromoform	ND	4.7	0.14	ug/kg	
74-83-9	Bromomethane	ND	4.7	0.26	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.4	2.2	ug/kg	
75-15-0	Carbon disulfide	ND	4.7	0.11	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.7	0.12	ug/kg	
108-90-7	Chlorobenzene	ND	4.7	0.10	ug/kg	
75-00-3	Chloroethane	ND	4.7	0.21	ug/kg	
67-66-3	Chloroform	ND	4.7	0.077	ug/kg	
74-87-3	Chloromethane	ND	4.7	0.17	ug/kg	
110-82-7	Cyclohexane	ND	4.7	0.12	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	9.4	0.83	ug/kg	
124-48-1	Dibromochloromethane	ND	4.7	0.15	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.94	0.12	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	4.7	0.18	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	4.7	0.17	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	4.7	0.16	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.7	0.21	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.7	0.13	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.94	0.13	ug/kg	
75-35-4	1,1-Dichloroethene	ND	4.7	0.24	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	4.7	0.17	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	4.7	0.22	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.7	0.14	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.7	0.13	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.7	0.15	ug/kg	
100-41-4	Ethylbenzene	ND	0.94	0.25	ug/kg	
76-13-1	Freon 113	ND	4.7	0.40	ug/kg	
591-78-6	2-Hexanone	ND	4.7	0.58	ug/kg	
98-82-8	Isopropylbenzene	ND	4.7	0.070	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-19(1.5-2.0)
Lab Sample ID: JB7410-10
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/24/12
Date Received: 05/25/12
Percent Solids: 86.2

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	4.7	2.4	ug/kg	
108-87-2	Methylcyclohexane	ND	4.7	0.16	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.94	0.22	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.7	0.70	ug/kg	
75-09-2	Methylene chloride	ND	4.7	1.2	ug/kg	
100-42-5	Styrene	ND	4.7	0.086	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.7	0.12	ug/kg	
127-18-4	Tetrachloroethene	ND	4.7	0.16	ug/kg	
108-88-3	Toluene	1.3	0.94	0.098	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.13	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.7	0.099	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.7	0.16	ug/kg	
79-01-6	Trichloroethene	ND	4.7	0.16	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.7	0.28	ug/kg	
75-01-4	Vinyl chloride	ND	4.7	0.13	ug/kg	
1330-20-7	Xylene (total)	ND	0.94	0.13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
17060-07-0	1,2-Dichloroethane-D4	87%		70-122%
2037-26-5	Toluene-D8	102%		81-127%
460-00-4	4-Bromofluorobenzene	93%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-19(1.5-2.0)**Lab Sample ID:** JB7410-10**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/24/12**Date Received:** 05/25/12**Percent Solids:** 86.2**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	9270	56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.3	2.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	2.7	2.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Barium	36.1	23	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.59	0.23	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.56	0.56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	2370	560	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	17.1	1.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	5.9	5.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Copper	15.6	2.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Iron	19300	56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Lead	6.2	2.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	3190	560	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	365	1.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	< 0.037	0.037	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	11.9	4.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1100	1100	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.3	2.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Silver	< 0.56	0.56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1100	1100	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.1	1.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	28.1	5.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	34.2	2.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28736

(3) Prep QC Batch: MP64692

(4) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-20(0.0-0.6)	Date Sampled:	05/24/12
Lab Sample ID:	JB7410-11	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	83.1
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y123213.D	1	05/30/12	RS	05/25/12 12:00	n/a	VY5286
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	1.8	ug/kg	
71-43-2	Benzene	ND	1.1	0.13	ug/kg	
75-27-4	Bromodichloromethane	ND	5.4	0.11	ug/kg	
75-25-2	Bromoform	ND	5.4	0.16	ug/kg	
74-83-9	Bromomethane	ND	5.4	0.29	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.6	ug/kg	
75-15-0	Carbon disulfide	ND	5.4	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.4	0.14	ug/kg	
108-90-7	Chlorobenzene	ND	5.4	0.12	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.24	ug/kg	
67-66-3	Chloroform	ND	5.4	0.089	ug/kg	
74-87-3	Chloromethane	ND	5.4	0.20	ug/kg	
110-82-7	Cyclohexane	ND	5.4	0.13	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	0.96	ug/kg	
124-48-1	Dibromochloromethane	ND	5.4	0.18	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.14	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.4	0.20	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.4	0.20	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.4	0.19	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.4	0.24	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.4	0.15	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.15	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.4	0.28	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.4	0.20	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.4	0.26	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.4	0.17	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.4	0.15	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.4	0.17	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.28	ug/kg	
76-13-1	Freon 113	ND	5.4	0.46	ug/kg	
591-78-6	2-Hexanone	ND	5.4	0.67	ug/kg	
98-82-8	Isopropylbenzene	ND	5.4	0.080	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-20(0.0-0.6)
Lab Sample ID: JB7410-11
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/24/12
Date Received: 05/25/12
Percent Solids: 83.1

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.4	2.8	ug/kg	
108-87-2	Methylcyclohexane	ND	5.4	0.18	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	0.30	1.1	0.25	ug/kg	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	0.81	ug/kg	
75-09-2	Methylene chloride	ND	5.4	1.4	ug/kg	
100-42-5	Styrene	ND	5.4	0.099	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.4	0.14	ug/kg	
127-18-4	Tetrachloroethene	ND	5.4	0.18	ug/kg	
108-88-3	Toluene	1.3	1.1	0.11	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	0.15	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.4	0.11	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.4	0.19	ug/kg	
79-01-6	Trichloroethene	ND	5.4	0.19	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.4	0.32	ug/kg	
75-01-4	Vinyl chloride	ND	5.4	0.15	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
17060-07-0	1,2-Dichloroethane-D4	89%		70-122%
2037-26-5	Toluene-D8	103%		81-127%
460-00-4	4-Bromofluorobenzene	93%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-20(0.0-0.6)**Lab Sample ID:** JB7410-11**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/24/12**Date Received:** 05/25/12**Percent Solids:** 83.1**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	7220	63	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.5	2.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	< 2.5	2.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Barium	45.0	25	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.48	0.25	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.63	0.63	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	2440	630	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	18.2	1.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	< 6.3	6.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Copper	16.9	3.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Iron	17900	63	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Lead	12.3	2.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	3030	630	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	288	1.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	< 0.038	0.038	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	11.9	5.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	1560	1300	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.5	2.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Silver	< 0.63	0.63	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1300	1300	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.3	1.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	33.7	6.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	35.9	2.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28736

(3) Prep QC Batch: MP64692

(4) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-20(1.5-2.0)	Date Sampled:	05/24/12
Lab Sample ID:	JB7410-12	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	91.3
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y123214.D	1	05/30/12	RS	05/25/12 12:00	n/a	VY5286
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.8	1.7	ug/kg	
71-43-2	Benzene	ND	0.98	0.12	ug/kg	
75-27-4	Bromodichloromethane	ND	4.9	0.10	ug/kg	
75-25-2	Bromoform	ND	4.9	0.15	ug/kg	
74-83-9	Bromomethane	ND	4.9	0.27	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.8	2.3	ug/kg	
75-15-0	Carbon disulfide	ND	4.9	0.11	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.9	0.13	ug/kg	
108-90-7	Chlorobenzene	ND	4.9	0.11	ug/kg	
75-00-3	Chloroethane	ND	4.9	0.22	ug/kg	
67-66-3	Chloroform	ND	4.9	0.081	ug/kg	
74-87-3	Chloromethane	ND	4.9	0.18	ug/kg	
110-82-7	Cyclohexane	ND	4.9	0.12	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	9.8	0.87	ug/kg	
124-48-1	Dibromochloromethane	ND	4.9	0.16	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.98	0.12	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	4.9	0.18	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	4.9	0.18	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	4.9	0.17	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.22	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.9	0.13	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.98	0.13	ug/kg	
75-35-4	1,1-Dichloroethene	ND	4.9	0.25	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	4.9	0.18	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	4.9	0.23	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.9	0.15	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.9	0.14	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.9	0.15	ug/kg	
100-41-4	Ethylbenzene	ND	0.98	0.26	ug/kg	
76-13-1	Freon 113	ND	4.9	0.42	ug/kg	
591-78-6	2-Hexanone	ND	4.9	0.61	ug/kg	
98-82-8	Isopropylbenzene	ND	4.9	0.073	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-20(1.5-2.0)
Lab Sample ID: JB7410-12
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/24/12
Date Received: 05/25/12
Percent Solids: 91.3

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	4.9	2.5	ug/kg	
108-87-2	Methylcyclohexane	ND	4.9	0.17	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.98	0.23	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.9	0.73	ug/kg	
75-09-2	Methylene chloride	ND	4.9	1.2	ug/kg	
100-42-5	Styrene	ND	4.9	0.090	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.9	0.13	ug/kg	
127-18-4	Tetrachloroethene	ND	4.9	0.17	ug/kg	
108-88-3	Toluene	ND	0.98	0.10	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.14	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.9	0.10	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.9	0.17	ug/kg	
79-01-6	Trichloroethene	ND	4.9	0.17	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.29	ug/kg	
75-01-4	Vinyl chloride	ND	4.9	0.14	ug/kg	
1330-20-7	Xylene (total)	ND	0.98	0.14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
17060-07-0	1,2-Dichloroethane-D4	87%		70-122%
2037-26-5	Toluene-D8	103%		81-127%
460-00-4	4-Bromofluorobenzene	92%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-20(1.5-2.0)**Lab Sample ID:** JB7410-12**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/24/12**Date Received:** 05/25/12**Percent Solids:** 91.3

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	5790	54	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.2	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	< 2.2	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Barium	29.7	22	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.39	0.22	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.54	0.54	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	2320	540	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	18.3	1.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	< 5.4	5.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Copper	15.4	2.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Iron	14800	54	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Lead	10.5	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	2590	540	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	237	1.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	< 0.035	0.035	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	11.3	4.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1100	1100	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.2	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Silver	< 0.54	0.54	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1100	1100	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.1	1.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	29.5	5.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	29.9	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28736

(3) Prep QC Batch: MP64692

(4) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	FB20120524	Date Sampled:	05/24/12
Lab Sample ID:	JB7410-13	Date Received:	05/25/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B18703.D	1	05/30/12	TYG	n/a	n/a	V4B821
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.21	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.26	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.21	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.35	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	0.54	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.20	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.27	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.11	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.19	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.19	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.48	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.23	ug/l	
76-13-1	Freon 113	ND	5.0	0.53	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.45	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	FB20120524	Date Sampled:	05/24/12
Lab Sample ID:	JB7410-13	Date Received:	05/25/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Ramapo, NY		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.2	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.26	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.16	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.70	ug/l	
100-42-5	Styrene	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.27	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		81-121%
17060-07-0	1,2-Dichloroethane-D4	99%		74-127%
2037-26-5	Toluene-D8	105%		80-122%
460-00-4	4-Bromofluorobenzene	98%		78-116%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: FB20120524

Lab Sample ID: JB7410-13

Matrix: AQ - Field Blank Soil

Project: Ramapo, NY

Date Sampled: 05/24/12

Date Received: 05/25/12

Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 200	200	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Antimony	< 6.0	6.0	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Arsenic	< 3.0	3.0	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Beryllium	< 1.0	1.0	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Cadmium	< 3.0	3.0	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Calcium	< 5000	5000	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Cobalt	< 50	50	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Copper	< 10	10	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Iron	< 100	100	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Lead	< 3.0	3.0	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Magnesium	< 5000	5000	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Manganese	< 15	15	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	06/04/12	06/04/12 JW	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 10	10	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Potassium	< 10000	10000	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Silver	< 10	10	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Sodium	< 10000	10000	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Thallium	< 2.0	2.0	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Vanadium	< 50	50	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	05/26/12	06/06/12 BL	SW846 6010C ²	SW846 3010A ³

(1) Instrument QC Batch: MA28719

(2) Instrument QC Batch: MA28737

(3) Prep QC Batch: MP64654

(4) Prep QC Batch: MP64764

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	TRIP BLANK	Date Sampled:	05/24/12
Lab Sample ID:	JB7410-14	Date Received:	05/25/12
Matrix:	AQ - Trip Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B18704.D	1	05/30/12	TYG	n/a	n/a	V4B821
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.21	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.26	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.21	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.35	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	0.54	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.20	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.27	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.11	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.19	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.19	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.48	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.23	ug/l	
76-13-1	Freon 113	ND	5.0	0.53	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.45	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	TRIP BLANK	Date Sampled:	05/24/12
Lab Sample ID:	JB7410-14	Date Received:	05/25/12
Matrix:	AQ - Trip Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Ramapo, NY		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.2	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.26	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.16	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.70	ug/l	
100-42-5	Styrene	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.27	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		81-121%
17060-07-0	1,2-Dichloroethane-D4	100%		74-127%
2037-26-5	Toluene-D8	105%		80-122%
460-00-4	4-Bromofluorobenzene	98%		78-116%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest New Jersey
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)		Matrix Codes	
Company Name: ARCADIS-US		Project Name: 002 Soil Sampling work plan site					
Street Address: 17-17 Route 208N 2nd FL		Street: RAVAPPO NY					
City: FAIR HAVEN NJ 07410		City: RAVAPPO NY					
Project Contact: JOHN ROCKWELL (C. RECORDS-US)		CLAIM ADJUSTER CONTACT NAME:					
Phone #: 201-797-7400		CLAIMS NUMBER #					
Fax #: 201-797-7400		City: State: Zip:					
Sampler(s) Name(s): ANGELUS A. BARRIO		CHARTIS PRICING NEEDED: ☐					
Phone #: 201-797-3142		Attention:					
Field ID / Point of Collection		MEDH/ID Vial #		Collection		Number of preserved Bottles	
				Date Time		Sampled by Matrix # of bottles	
						HCl NO3- HNO3 H2SO4 H2O2 DI Water MEQHT ENCORE	
-1 002-SB-16(0.0-1.6)		5/24/12		0900		AB 50 4	
-2 002-SB-16(1.5-2.0)				0930		AB	
-3 002-SB-17(0.0-0.6)				1000		AB	
-4 002-SB-17(1.5-2.0)				1030		AB	
-5 002-DUP20120524(0.0-0.6)				0001		AB	
-6 002-DUP20120524(1.5-2.0)				0002		AB	
-7 002-DUP SB-18(0.0-0.6)				1100		AB	
-8 002-SB-18(1.5-2.0)				1130		AB	
-9 002-SB-19(0.0-0.6)				1200		AB	
-10 002-SB-20(1.5-2.0)				1230		AB	
-11 002-SB-20(0.0-0.6)				1300		AB	
-12 002-SB-20(1.5-2.0)				1330		AB	
Turnaround Time (Business days)		Approved By (Accutest PM) / Date:		Data Deliverable Information		Comments / Special Instructions	
☐ Std. 10 Business Days ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ other		☐ Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☐ FULLT1 (Level 3+4) ☐ NJ Reduced ☐ Commercial "C"		☐ NYASP Category A ☐ NYASP Category B ☐ State Forms ☐ EDD Format ☐ Other		D3 Encus DPJ/15/12	
Emergency & Rush T/A data available VIA Lablink		Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data					
Relinquished by Sampler:		Date Time:		Relinquished By:		Date Time:	
1 [Signature]		5/24/12		1 [Signature]		5/25/12 1105	
Relinquished by Sampler:		Date Time:		Relinquished By:		Date Time:	
3 [Signature]				4 [Signature]			
Relinquished by:		Date Time:		Relinquished By:		Date Time:	
5 [Signature]				5 [Signature]			
Custody Seal #		Intact		Preserved where applicable		On Ice	
10		1000000000		Ma		100	

JB7410: Chain of Custody

Page 1 of 3



PAGE 2 OF 2

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # JB7410

[illegible]

4.1

JB7410: Chain of Custody

Page 2 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB7410 Client: _____ Project: _____
 Date / Time Received: 5/25/2012 Delivery Method: _____ Airbill #'s: _____
 Cooler Temps (Initial/Adjusted): #1: (1/1); 0

Cooler Security

	Y	or	N		Y	or	N
1. Custody Seals Present:	☒		☐	3. COC Present:	☒		☐
2. Custody Seals Intact:	☒		☐	4. Smpl Dates/Time OK	☒		☐

Cooler Temperature

	Y	or	N
1. Temp criteria achieved:	☒		☐
2. Cooler temp verification:			
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation

	Y	or	N	N/A
1. Trip Blank present / cooler:	☒		☐	☐
2. Trip Blank listed on COC:	☒		☐	☐
3. Samples preserved properly:	☒		☐	
4. VOCs headspace free:	☒		☐	☐

Sample Integrity - Documentation

	Y	or	N
1. Sample labels present on bottles:	☒		☐
2. Container labeling complete:	☒		☐
3. Sample container label / COC agree:	☒		☐

Sample Integrity - Condition

	Y	or	N
1. Sample recvd within HT:	☒		☐
2. All containers accounted for:	☒		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions

	Y	or	N	N/A
1. Analysis requested is clear:	☒		☐	
2. Bottles received for unspecified tests	☐		☒	
3. Sufficient volume recvd for analysis:	☒		☐	
4. Compositing instructions clear:	☐		☐	☒
5. Filtering instructions clear:	☐		☐	☒

Comments



06/13/12

Technical Report for

Arcadis

Ramapo, NY

NJ000602.0002

Accutest Job Number: JB7500

Sampling Date: 05/25/12

Report to:

Arcadis Geraghty & Miller

Matt.Gress@arcadis-us.com

ATTN: Matt Gress

Total number of pages in report: **76**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Paul Ioannidis
Lab Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), PA, RI, SC, TN, VA, WV

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Test results relate only to samples analyzed.

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Sample Summary

Arcadis

Job No: JB7500

Ramapo, NY

Project No: NJ000602.0002

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB7500-1	05/25/12	09:00	AAB	05/25/12	SO	Soil	OU2-SB-21 (0.0-0.6)
JB7500-2	05/25/12	09:30	AAB	05/25/12	SO	Soil	OU2-SB-21 (1.5-2.0)
JB7500-3	05/25/12	10:00	AAB	05/25/12	SO	Soil	OU2-SB-22 (0.0-0.6)
JB7500-4	05/25/12	10:30	AAB	05/25/12	SO	Soil	OU2-SB-22 (1.5-2.0)
JB7500-5	05/25/12	11:00	AAB	05/25/12	SO	Soil	OU2-SB-23 (0.0-0.6)
JB7500-6	05/25/12	11:30	AAB	05/25/12	SO	Soil	OU2-SB-23 (1.5-2.0)
JB7500-7	05/25/12	12:00	AAB	05/25/12	SO	Soil	OU2-SB-24 (0.0-0.6)
JB7500-8	05/25/12	12:30	AAB	05/25/12	SO	Soil	OU2-SB-24 (1.5-2.0)
JB7500-9	05/25/12	13:00	AAB	05/25/12	SO	Soil	OU2-SB-25 (0.0-0.6)
JB7500-10	05/25/12	13:30	AAB	05/25/12	SO	Soil	OU2-SB-25 (1.5-2.0)
JB7500-11	05/25/12	14:00	AAB	05/25/12	SO	Soil	OU2-SB-26 (0.0-0.6)
JB7500-12	05/25/12	14:30	AAB	05/25/12	SO	Soil	OU2-SB-26 (1.5-2.0)
JB7500-13	05/25/12	15:00	AAB	05/25/12	SO	Soil	OU2-SB-27 (0.0-0.6)

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

Arcadis

Job No: JB7500

Ramapo, NY

Project No: NJ000602.0002

Sample Number	Collected		Matrix Code	Type	Client Sample ID	
	Date	Time By			Received	
JB7500-14	05/25/12	15:30 AAB	05/25/12	SO	Soil	OU2-SB-27 (1.5-2.0)
JB7500-15	05/25/12	14:10 AAB	05/25/12	AQ	Field Blank Soil	FB20120525

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Arcadis**Job No** JB7500**Site:** Ramapo, NY**Report Date** 6/12/2012 12:20:57 P

On 05/25/2012, 14 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at Accutest Laboratories at a temperature of 2 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB7500 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ**Batch ID:** V1A5011

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB7631-3MS, JB7631-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Tetrachloroethene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix: SO**Batch ID:** VA6875

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7500-1MS, JB7500-7DUP were used as the QC samples indicated.
- RPD(s) for Duplicate for Toluene are outside control limits High RPD due to low concentration of hit

Matrix: SO**Batch ID:** VA6876

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB7627-1MS, JB7627-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO**Batch ID:** VG6894

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7767-1MS, JB7767-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Methyl Acetate are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Methyl Acetate are outside control limits. Outside control limits due to matrix interference.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ

Batch ID: OP57339

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7453-1MS, JB7453-1MSD were used as the QC samples indicated.

Matrix: SO

Batch ID: OP57334

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7549-1MS, JB7549-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Hexachloroethane are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for MS/MSD for Hexachlorobutadiene, Hexachloroethane are outside of in house control limits.

Extractables by GC By Method SW846 8081B

Matrix: AQ

Batch ID: OP57321

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7368-15MS, JB7368-15MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 4,4'-DDT, beta-BHC, delta-BHC, Methoxychlor are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for beta-BHC are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for MS/MSD for 4,4'-DDT, Aldrin, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor epoxide, Methoxychlor are outside control limits. Outside control limits due to matrix interference.
- Sample(s) OP57321-MS, OP57321-MSD have surrogates outside control limits.
- OP57321-MSD for Tetrachloro-m-xylene: Outside control limits due to matrix interference.
- OP57321-MS for Tetrachloro-m-xylene: Outside control limits due to matrix interference.

Matrix: SO

Batch ID: OP57573

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7549-1MS, JB7549-1MSD were used as the QC samples indicated.
- Sample(s) OP57573-MS have surrogates outside control limits.
- JB7500-4 for Decachlorobiphenyl: Surrogate double spiked; The recovery re-calculated based on the spike amount.
- JB7500-3 for Tetrachloro-m-xylene: Surrogate double spiked; The recovery re-calculated based on the spike amount.
- JB7500-3 for Decachlorobiphenyl: Surrogate double spiked; The recovery re-calculated based on the spike amount.
- OP57573-MSD for Tetrachloro-m-xylene: Surrogate double spiked; The recovery re-calculated based on the spike amount.
- OP57573-MSD for Decachlorobiphenyl: Surrogate double spiked; The recovery re-calculated based on the spike amount.
- OP57573-MS for Tetrachloro-m-xylene: Outside of in house control limits.
- JB7500-4 for Tetrachloro-m-xylene: Surrogate double spiked; The recovery re-calculated based on the spike amount.

Extractables by GC By Method SW846 8082A

Matrix: AQ

Batch ID: OP57320

- All samples were extracted within the recommended method holding time.
- Sample(s) JB7114-2MS, JB7114-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO

Batch ID: OP57337

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7585-1MS, JB7585-1MSD were used as the QC samples indicated.

Metals By Method SW846 6010C

Matrix: AQ

Batch ID: MP64684

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7356-1MS, JB7356-1MSD, JB7356-1SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Sodium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Cadmium, Chromium, Copper, Lead, Nickel, Zinc are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix: SO

Batch ID: MP64693

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7205-1AMS, JB7205-1AMSD, JB7205-1ASDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Aluminum, Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike Duplicate Recovery(s) for Aluminum, Antimony, Potassium are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- RPD(s) for Serial Dilution for Cadmium, Thallium, Antimony, Selenium, Silver are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP64693-SD1 for Zinc: Serial dilution indicates possible matrix interference.

Metals By Method SW846 7470A

Matrix: AQ

Batch ID: MP64764

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7540-2FMS, JB7540-2FMSD were used as the QC samples for metals.

Metals By Method SW846 7471B

Matrix: SO

Batch ID: MP64734

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7073-1MS, JB7073-1MSD were used as the QC samples for metals.

Matrix: SO

Batch ID: MP64786

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7205-1AMS, JB7205-1AMSD were used as the QC samples for metals.

Wet Chemistry By Method EPA 335.4/LACHAT

Matrix: AQ

Batch ID: GP65186

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7211-2DUP, JB7211-2MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

Wet Chemistry By Method SM18 2540G

Matrix: SO

Batch ID: GN67127

- The data for SM18 2540G meets quality control requirements.

Matrix: SO

Batch ID: GN67129

- The data for SM18 2540G meets quality control requirements.

Wet Chemistry By Method SW846 9012 M/LACHAT

Matrix: SO

Batch ID: GP65151

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB7500-3DUP, JB7500-3MS, JB7500-4MS were used as the QC samples for Cyanide.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 2

Client Sample ID:	OU2-SB-21 (0.0-0.6)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-1	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	80.8
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A183998.D	1	05/30/12	CL	05/26/12 12:00	n/a	VA6875
Run #2							

	Initial Weight
Run #1	6.9 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	7.1	9.0	1.5	ug/kg	J
71-43-2	Benzene	ND	0.90	0.11	ug/kg	
75-27-4	Bromodichloromethane	ND	4.5	0.094	ug/kg	
75-25-2	Bromoform	ND	4.5	0.14	ug/kg	
74-83-9	Bromomethane	ND	4.5	0.24	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.0	2.1	ug/kg	
75-15-0	Carbon disulfide	ND	4.5	0.10	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.5	0.12	ug/kg	
108-90-7	Chlorobenzene	ND	4.5	0.097	ug/kg	
75-00-3	Chloroethane	ND	4.5	0.20	ug/kg	
67-66-3	Chloroform	ND	4.5	0.074	ug/kg	
74-87-3	Chloromethane	ND	4.5	0.17	ug/kg	
110-82-7	Cyclohexane	ND	4.5	0.11	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	9.0	0.80	ug/kg	
124-48-1	Dibromochloromethane	ND	4.5	0.15	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.90	0.11	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	4.5	0.17	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	4.5	0.17	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	4.5	0.16	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.5	0.20	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.5	0.12	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.90	0.12	ug/kg	
75-35-4	1,1-Dichloroethene	ND	4.5	0.23	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	4.5	0.16	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	4.5	0.21	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.5	0.14	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.5	0.12	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.5	0.14	ug/kg	
100-41-4	Ethylbenzene	ND	0.90	0.24	ug/kg	
76-13-1	Freon 113	ND	4.5	0.39	ug/kg	
591-78-6	2-Hexanone	ND	4.5	0.56	ug/kg	
98-82-8	Isopropylbenzene	ND	4.5	0.067	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-21 (0.0-0.6)
Lab Sample ID: JB7500-1
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/25/12
Date Received: 05/25/12
Percent Solids: 80.8

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	4.5	2.3	ug/kg	
108-87-2	Methylcyclohexane	ND	4.5	0.15	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.90	0.21	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.5	0.67	ug/kg	
75-09-2	Methylene chloride	ND	4.5	1.1	ug/kg	
100-42-5	Styrene	ND	4.5	0.082	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.5	0.12	ug/kg	
127-18-4	Tetrachloroethene	ND	4.5	0.15	ug/kg	
108-88-3	Toluene	0.56	0.90	0.094	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	4.5	0.12	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.5	0.095	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.5	0.16	ug/kg	
79-01-6	Trichloroethene	ND	4.5	0.16	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.5	0.27	ug/kg	
75-01-4	Vinyl chloride	ND	4.5	0.13	ug/kg	
1330-20-7	Xylene (total)	ND	0.90	0.12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		70-130%
17060-07-0	1,2-Dichloroethane-D4	90%		70-122%
2037-26-5	Toluene-D8	107%		81-127%
460-00-4	4-Bromofluorobenzene	96%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-21 (0.0-0.6)**Lab Sample ID:** JB7500-1**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/25/12**Date Received:** 05/25/12**Percent Solids:** 80.8

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	13700	63	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Antimony	< 2.5	2.5	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Arsenic	3.8	2.5	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Barium	49.7	25	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Beryllium	0.76	0.25	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ³
Cadmium	< 0.63	0.63	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ³
Calcium	1870	630	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Chromium	23.5	1.3	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Cobalt	7.8	6.3	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Copper	25.3	3.1	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Iron	24100	63	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Lead	21.8	2.5	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Magnesium	4000	630	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Manganese	363	1.9	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Mercury	0.059	0.039	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹
Nickel	17.3	5.0	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Potassium	< 1300	1300	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Selenium	< 2.5	2.5	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Silver	< 0.63	0.63	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Sodium	< 1300	1300	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Thallium	< 1.3	1.3	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Vanadium	38.3	6.3	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Zinc	54.0	2.5	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28726

(3) Instrument QC Batch: MA28742

(4) Prep QC Batch: MP64693

(5) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-21 (1.5-2.0)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-2	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G148621.D	1	06/01/12	SJM	05/26/12 12:00	n/a	VG6894
Run #2							

	Initial Weight
Run #1	6.1 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.6	1.6	ug/kg	
71-43-2	Benzene	ND	0.96	0.11	ug/kg	
75-27-4	Bromodichloromethane	ND	4.8	0.10	ug/kg	
75-25-2	Bromoform	ND	4.8	0.15	ug/kg	
74-83-9	Bromomethane	ND	4.8	0.26	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.6	2.3	ug/kg	
75-15-0	Carbon disulfide	ND	4.8	0.11	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.8	0.13	ug/kg	
108-90-7	Chlorobenzene	ND	4.8	0.10	ug/kg	
75-00-3	Chloroethane	ND	4.8	0.22	ug/kg	
67-66-3	Chloroform	ND	4.8	0.080	ug/kg	
74-87-3	Chloromethane	ND	4.8	0.18	ug/kg	
110-82-7	Cyclohexane	ND	4.8	0.12	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	9.6	0.86	ug/kg	
124-48-1	Dibromochloromethane	ND	4.8	0.16	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.96	0.12	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.18	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.18	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.17	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.8	0.22	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.8	0.13	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.96	0.13	ug/kg	
75-35-4	1,1-Dichloroethene	ND	4.8	0.25	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	4.8	0.18	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	4.8	0.23	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.8	0.15	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.8	0.13	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.8	0.15	ug/kg	
100-41-4	Ethylbenzene	ND	0.96	0.25	ug/kg	
76-13-1	Freon 113	ND	4.8	0.41	ug/kg	
591-78-6	2-Hexanone	ND	4.8	0.60	ug/kg	
98-82-8	Isopropylbenzene	ND	4.8	0.072	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-21 (1.5-2.0)
Lab Sample ID: JB7500-2
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/25/12
Date Received: 05/25/12
Percent Solids: 85.0

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	4.8	2.5	ug/kg	
108-87-2	Methylcyclohexane	ND	4.8	0.16	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.96	0.23	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.8	0.72	ug/kg	
75-09-2	Methylene chloride	ND	4.8	1.2	ug/kg	
100-42-5	Styrene	ND	4.8	0.088	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.8	0.13	ug/kg	
127-18-4	Tetrachloroethene	ND	4.8	0.17	ug/kg	
108-88-3	Toluene	ND	0.96	0.10	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.13	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.8	0.10	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.8	0.17	ug/kg	
79-01-6	Trichloroethene	ND	4.8	0.17	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.8	0.29	ug/kg	
75-01-4	Vinyl chloride	ND	4.8	0.14	ug/kg	
1330-20-7	Xylene (total)	ND	0.96	0.13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		70-130%
17060-07-0	1,2-Dichloroethane-D4	94%		70-122%
2037-26-5	Toluene-D8	102%		81-127%
460-00-4	4-Bromofluorobenzene	96%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-21 (1.5-2.0)**Lab Sample ID:** JB7500-2**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/25/12**Date Received:** 05/25/12**Percent Solids:** 85.0

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	13000	60	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Antimony	< 2.4	2.4	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Arsenic	3.4	2.4	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Barium	51.3	24	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Beryllium	0.73	0.24	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ³
Cadmium	< 0.60	0.60	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ³
Calcium	1940	600	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Chromium	25.5	1.2	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Cobalt	7.9	6.0	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Copper	101	3.0	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Iron	22700	60	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Lead	31.2	2.4	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Magnesium	3910	600	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Manganese	416	1.8	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Mercury	0.071	0.037	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹
Nickel	17.8	4.8	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Potassium	< 1200	1200	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Selenium	< 2.4	2.4	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Silver	0.74	0.60	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Sodium	< 1200	1200	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Thallium	< 1.2	1.2	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Vanadium	35.5	6.0	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Zinc	97.5	2.4	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28726

(3) Instrument QC Batch: MA28742

(4) Prep QC Batch: MP64693

(5) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	OU2-SB-22 (0.0-0.6)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-3	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	80.3
Method:	SW846 8260B		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A183995.D	1	05/30/12	CL	n/a	n/a	VA6875
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	62.0	11	1.8	ug/kg	
71-43-2	Benzene	ND	1.1	0.13	ug/kg	
75-27-4	Bromodichloromethane	ND	5.3	0.11	ug/kg	
75-25-2	Bromoform	ND	5.3	0.16	ug/kg	
74-83-9	Bromomethane	ND	5.3	0.29	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.5	ug/kg	
75-15-0	Carbon disulfide	ND	5.3	0.12	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.3	0.14	ug/kg	
108-90-7	Chlorobenzene	ND	5.3	0.11	ug/kg	
75-00-3	Chloroethane	ND	5.3	0.24	ug/kg	
67-66-3	Chloroform	ND	5.3	0.087	ug/kg	
74-87-3	Chloromethane	ND	5.3	0.20	ug/kg	
110-82-7	Cyclohexane	ND	5.3	0.13	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	0.94	ug/kg	
124-48-1	Dibromochloromethane	ND	5.3	0.17	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.13	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.3	0.20	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.3	0.20	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.3	0.19	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.3	0.24	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.3	0.14	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.14	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.3	0.27	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.3	0.19	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.3	0.25	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.3	0.16	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.3	0.15	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.3	0.16	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.28	ug/kg	
76-13-1	Freon 113	ND	5.3	0.45	ug/kg	
591-78-6	2-Hexanone	ND	5.3	0.66	ug/kg	
98-82-8	Isopropylbenzene	ND	5.3	0.078	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-22 (0.0-0.6)
Lab Sample ID: JB7500-3
Matrix: SO - Soil
Method: SW846 8260B
Project: Ramapo, NY

Date Sampled: 05/25/12
Date Received: 05/25/12
Percent Solids: 80.3

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.3	2.7	ug/kg	
108-87-2	Methylcyclohexane	ND	5.3	0.18	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.25	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.3	0.79	ug/kg	
75-09-2	Methylene chloride	ND	5.3	1.3	ug/kg	
100-42-5	Styrene	ND	5.3	0.097	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.3	0.14	ug/kg	
127-18-4	Tetrachloroethene	ND	5.3	0.18	ug/kg	
108-88-3	Toluene	0.87	1.1	0.11	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	0.15	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.3	0.11	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.3	0.18	ug/kg	
79-01-6	Trichloroethene	ND	5.3	0.18	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.3	0.31	ug/kg	
75-01-4	Vinyl chloride	ND	5.3	0.15	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
17060-07-0	1,2-Dichloroethane-D4	90%		70-122%
2037-26-5	Toluene-D8	106%		81-127%
460-00-4	4-Bromofluorobenzene	95%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
464-49-3	Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	18.68	20	ug/kg	JN
	1,3-Benzodioxole, 5-(propenyl)-	20.00	500	ug/kg	J
	Total TIC, Volatile		520	ug/kg	J

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	OU2-SB-22 (0.0-0.6)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-3	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	80.3
Method:	SW846 8270D SW846 3550C		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3M29595.D	1	05/31/12	ALS	05/30/12	OP57334	E3M1345
Run #2							

	Initial Weight	Final Volume
Run #1	33.5 g	1.0 ml
Run #2		

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	190	38	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	37	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	60	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	62	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	740	45	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	740	45	ug/kg	
95-48-7	2-Methylphenol	ND	74	42	ug/kg	
	3&4-Methylphenol	ND	74	47	ug/kg	
88-75-5	2-Nitrophenol	ND	190	39	ug/kg	
100-02-7	4-Nitrophenol	ND	370	63	ug/kg	
87-86-5	Pentachlorophenol	ND	370	64	ug/kg	
108-95-2	Phenol	ND	74	39	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	43	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	35	ug/kg	
83-32-9	Acenaphthene	ND	37	11	ug/kg	
208-96-8	Acenaphthylene	ND	37	12	ug/kg	
98-86-2	Acetophenone	ND	190	6.5	ug/kg	
120-12-7	Anthracene	ND	37	13	ug/kg	
1912-24-9	Atrazine	ND	190	7.3	ug/kg	
56-55-3	Benzo(a)anthracene	ND	37	12	ug/kg	
50-32-8	Benzo(a)pyrene	ND	37	11	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	37	12	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	37	14	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	37	14	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	74	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	74	22	ug/kg	
92-52-4	1,1'-Biphenyl	ND	74	4.3	ug/kg	
100-52-7	Benzaldehyde	ND	190	8.6	ug/kg	
91-58-7	2-Chloronaphthalene	ND	74	12	ug/kg	
106-47-8	4-Chloroaniline	ND	190	12	ug/kg	
86-74-8	Carbazole	ND	74	17	ug/kg	
105-60-2	Caprolactam	ND	74	12	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-22 (0.0-0.6)
Lab Sample ID: JB7500-3
Matrix: SO - Soil
Method: SW846 8270D SW846 3550C
Project: Ramapo, NY

Date Sampled: 05/25/12
Date Received: 05/25/12
Percent Solids: 80.3

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	37	13	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	74	15	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	74	11	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	74	11	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	74	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	74	16	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	74	14	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	190	9.4	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	37	13	ug/kg	
132-64-9	Dibenzofuran	ND	74	11	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	74	8.3	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	74	18	ug/kg	
84-66-2	Diethyl phthalate	ND	74	13	ug/kg	
131-11-3	Dimethyl phthalate	96.3	74	13	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	74	33	ug/kg	
206-44-0	Fluoranthene	ND	37	16	ug/kg	
86-73-7	Fluorene	ND	37	12	ug/kg	
118-74-1	Hexachlorobenzene	ND	74	12	ug/kg	
87-68-3	Hexachlorobutadiene	ND	37	10	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	370	38	ug/kg	
67-72-1	Hexachloroethane	ND	190	10	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	37	13	ug/kg	
78-59-1	Isophorone	ND	74	10	ug/kg	
91-57-6	2-Methylnaphthalene	ND	74	21	ug/kg	
88-74-4	2-Nitroaniline	ND	190	16	ug/kg	
99-09-2	3-Nitroaniline	ND	190	15	ug/kg	
100-01-6	4-Nitroaniline	ND	190	14	ug/kg	
91-20-3	Naphthalene	ND	37	10	ug/kg	
98-95-3	Nitrobenzene	ND	74	11	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	74	9.1	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	22	ug/kg	
85-01-8	Phenanthrene	ND	37	17	ug/kg	
129-00-0	Pyrene	ND	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	51%		21-116%
4165-62-2	Phenol-d5	53%		19-117%
118-79-6	2,4,6-Tribromophenol	72%		24-136%
4165-60-0	Nitrobenzene-d5	51%		21-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-22 (0.0-0.6)
Lab Sample ID: JB7500-3
Matrix: SO - Soil
Method: SW846 8270D SW846 3550C
Project: Ramapo, NY

Date Sampled: 05/25/12
Date Received: 05/25/12
Percent Solids: 80.3

ABN TCL List (CLP4.2 list)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	50%		30-117%
1718-51-0	Terphenyl-d14	92%		31-129%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	2.64	260	ug/kg	J
	system artifact/aldol-condensation	3.01	730	ug/kg	J
	Benzodioxole, propenyl	7.50	340	ug/kg	J
	unknown acid	12.45	350	ug/kg	J
	unknown acid	13.40	160	ug/kg	J
	Total TIC, Semi-Volatile		850	ug/kg	J

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	OU2-SB-22 (0.0-0.6)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-3	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	80.3
Method:	SW846 8081B SW846 3546		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G19417.D	1	06/11/12	DS	06/08/12	OP57573	G4G507
Run #2							

	Initial Weight	Final Volume
Run #1	16.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.76	0.38	ug/kg	
319-84-6	alpha-BHC	ND	0.76	0.57	ug/kg	
319-85-7	beta-BHC	ND	0.76	0.54	ug/kg	
319-86-8	delta-BHC	ND	0.76	0.45	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.76	0.35	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.76	0.50	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.76	0.39	ug/kg	
60-57-1	Dieldrin	ND	0.76	0.59	ug/kg	
72-54-8	4,4' -DDD	ND	0.76	0.39	ug/kg	
72-55-9	4,4' -DDE	ND	0.76	0.45	ug/kg	
50-29-3	4,4' -DDT	ND	0.76	0.56	ug/kg	
72-20-8	Endrin	ND	0.76	0.39	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.76	0.69	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.76	0.72	ug/kg	
959-98-8	Endosulfan-I	ND	0.76	0.37	ug/kg	
33213-65-9	Endosulfan-II	ND	0.76	0.50	ug/kg	
76-44-8	Heptachlor	ND	0.76	0.47	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.76	0.38	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.54	ug/kg	
53494-70-5	Endrin ketone	ND	0.76	0.50	ug/kg	
8001-35-2	Toxaphene	ND	19	9.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	82% ^a		23-137%
877-09-8	Tetrachloro-m-xylene	67% ^a		23-137%
2051-24-3	Decachlorobiphenyl	86% ^a		22-160%
2051-24-3	Decachlorobiphenyl	90% ^a		22-160%

(a) Surrogate double spiked; The recovery re-calculated based on the spike amount.

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RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	OU2-SB-22 (0.0-0.6)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-3	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	80.3
Method:	SW846 8082A SW846 3546		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX120345.D	1	06/01/12	AZ	05/30/12	OP57337	GXX4385
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	41	11	ug/kg	
11104-28-2	Aroclor 1221	ND	41	24	ug/kg	
11141-16-5	Aroclor 1232	ND	41	21	ug/kg	
53469-21-9	Aroclor 1242	ND	41	13	ug/kg	
12672-29-6	Aroclor 1248	ND	41	12	ug/kg	
11097-69-1	Aroclor 1254	ND	41	19	ug/kg	
11096-82-5	Aroclor 1260	ND	41	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		22-141%
877-09-8	Tetrachloro-m-xylene	91%		22-141%
2051-24-3	Decachlorobiphenyl	83%		18-163%
2051-24-3	Decachlorobiphenyl	92%		18-163%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-22 (0.0-0.6)

Lab Sample ID: JB7500-3

Matrix: SO - Soil

Project: Ramapo, NY

Date Sampled: 05/25/12

Date Received: 05/25/12

Percent Solids: 80.3

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	10900	63	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Antimony	< 2.5	2.5	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Arsenic	3.0	2.5	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Barium	56.2	25	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Beryllium	0.70	0.25	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ³
Cadmium	< 0.63	0.63	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ³
Calcium	2240	630	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Chromium	20.6	1.3	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Cobalt	6.6	6.3	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Copper	22.0	3.1	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Iron	21200	63	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Lead	16.8	2.5	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Magnesium	3510	630	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Manganese	406	1.9	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Mercury	0.055	0.038	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹
Nickel	15.0	5.0	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Potassium	1350	1300	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Selenium	< 2.5	2.5	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Silver	< 0.63	0.63	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Sodium	< 1300	1300	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Thallium	< 1.3	1.3	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Vanadium	33.0	6.3	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²
Zinc	50.2	2.5	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ²

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28726

(3) Instrument QC Batch: MA28742

(4) Prep QC Batch: MP64693

(5) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-22 (0.0-0.6)**Lab Sample ID:** JB7500-3**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/25/12**Date Received:** 05/25/12**Percent Solids:** 80.3**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.29	0.29	mg/kg	1	05/30/12 10:48	VA	SW846 9012 M/LACHAT
Solids, Percent	80.3		%	1	06/01/12	KP	SM18 2540G

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	OU2-SB-22 (1.5-2.0)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-4	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	SW846 8260B		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A183994.D	1	05/30/12	CL	n/a	n/a	VA6875
Run #2							

	Initial Weight
Run #1	6.6 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	8.8	1.5	ug/kg	
71-43-2	Benzene	ND	0.88	0.10	ug/kg	
75-27-4	Bromodichloromethane	ND	4.4	0.092	ug/kg	
75-25-2	Bromoform	ND	4.4	0.13	ug/kg	
74-83-9	Bromomethane	ND	4.4	0.24	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.8	2.1	ug/kg	
75-15-0	Carbon disulfide	ND	4.4	0.10	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.4	0.12	ug/kg	
108-90-7	Chlorobenzene	ND	4.4	0.095	ug/kg	
75-00-3	Chloroethane	ND	4.4	0.20	ug/kg	
67-66-3	Chloroform	ND	4.4	0.073	ug/kg	
74-87-3	Chloromethane	ND	4.4	0.16	ug/kg	
110-82-7	Cyclohexane	ND	4.4	0.11	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	8.8	0.78	ug/kg	
124-48-1	Dibromochloromethane	ND	4.4	0.14	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.88	0.11	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	4.4	0.17	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	4.4	0.16	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	4.4	0.15	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.4	0.20	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.4	0.12	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.88	0.12	ug/kg	
75-35-4	1,1-Dichloroethene	ND	4.4	0.23	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	4.4	0.16	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	4.4	0.21	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.4	0.14	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.4	0.12	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.4	0.14	ug/kg	
100-41-4	Ethylbenzene	ND	0.88	0.23	ug/kg	
76-13-1	Freon 113	ND	4.4	0.38	ug/kg	
591-78-6	2-Hexanone	ND	4.4	0.55	ug/kg	
98-82-8	Isopropylbenzene	ND	4.4	0.065	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-22 (1.5-2.0)
Lab Sample ID: JB7500-4
Matrix: SO - Soil
Method: SW846 8260B
Project: Ramapo, NY

Date Sampled: 05/25/12
Date Received: 05/25/12
Percent Solids: 86.3

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	4.4	2.3	ug/kg	
108-87-2	Methylcyclohexane	ND	4.4	0.15	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.88	0.21	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.4	0.66	ug/kg	
75-09-2	Methylene chloride	ND	4.4	1.1	ug/kg	
100-42-5	Styrene	ND	4.4	0.080	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.4	0.12	ug/kg	
127-18-4	Tetrachloroethene	ND	4.4	0.15	ug/kg	
108-88-3	Toluene	0.41	0.88	0.092	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	4.4	0.12	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.4	0.093	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.4	0.15	ug/kg	
79-01-6	Trichloroethene	ND	4.4	0.15	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.4	0.26	ug/kg	
75-01-4	Vinyl chloride	ND	4.4	0.13	ug/kg	
1330-20-7	Xylene (total)	ND	0.88	0.12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
17060-07-0	1,2-Dichloroethane-D4	89%		70-122%
2037-26-5	Toluene-D8	106%		81-127%
460-00-4	4-Bromofluorobenzene	94%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	OU2-SB-22 (1.5-2.0)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-4	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	SW846 8270D SW846 3550C		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3M29596.D	1	05/31/12	ALS	05/30/12	OP57334	E3M1345
Run #2							

	Initial Weight	Final Volume
Run #1	34.6 g	1.0 ml
Run #2		

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	170	34	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	33	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	54	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	56	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	670	41	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	670	41	ug/kg	
95-48-7	2-Methylphenol	ND	67	38	ug/kg	
	3&4-Methylphenol	ND	67	43	ug/kg	
88-75-5	2-Nitrophenol	ND	170	35	ug/kg	
100-02-7	4-Nitrophenol	ND	330	57	ug/kg	
87-86-5	Pentachlorophenol	ND	330	57	ug/kg	
108-95-2	Phenol	ND	67	35	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	39	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	31	ug/kg	
83-32-9	Acenaphthene	ND	33	9.7	ug/kg	
208-96-8	Acenaphthylene	ND	33	11	ug/kg	
98-86-2	Acetophenone	ND	170	5.9	ug/kg	
120-12-7	Anthracene	ND	33	12	ug/kg	
1912-24-9	Atrazine	ND	170	6.6	ug/kg	
56-55-3	Benzo(a)anthracene	ND	33	11	ug/kg	
50-32-8	Benzo(a)pyrene	ND	33	10	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	33	11	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	33	12	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	33	13	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	67	12	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	67	19	ug/kg	
92-52-4	1,1'-Biphenyl	ND	67	3.9	ug/kg	
100-52-7	Benzaldehyde	ND	170	7.7	ug/kg	
91-58-7	2-Chloronaphthalene	ND	67	10	ug/kg	
106-47-8	4-Chloroaniline	ND	170	11	ug/kg	
86-74-8	Carbazole	ND	67	16	ug/kg	
105-60-2	Caprolactam	ND	67	11	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-22 (1.5-2.0)
Lab Sample ID: JB7500-4
Matrix: SO - Soil
Method: SW846 8270D SW846 3550C
Project: Ramapo, NY

Date Sampled: 05/25/12
Date Received: 05/25/12
Percent Solids: 86.3

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	33	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	67	14	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	67	10	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	67	9.9	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	67	10	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	67	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	67	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	8.5	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	33	11	ug/kg	
132-64-9	Dibenzofuran	ND	67	9.9	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	67	7.4	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	67	16	ug/kg	
84-66-2	Diethyl phthalate	ND	67	11	ug/kg	
131-11-3	Dimethyl phthalate	186	67	12	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	67	30	ug/kg	
206-44-0	Fluoranthene	ND	33	15	ug/kg	
86-73-7	Fluorene	ND	33	11	ug/kg	
118-74-1	Hexachlorobenzene	ND	67	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	33	9.3	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	34	ug/kg	
67-72-1	Hexachloroethane	ND	170	9.3	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	33	12	ug/kg	
78-59-1	Isophorone	ND	67	9.0	ug/kg	
91-57-6	2-Methylnaphthalene	ND	67	19	ug/kg	
88-74-4	2-Nitroaniline	ND	170	15	ug/kg	
99-09-2	3-Nitroaniline	ND	170	13	ug/kg	
100-01-6	4-Nitroaniline	ND	170	13	ug/kg	
91-20-3	Naphthalene	ND	33	9.1	ug/kg	
98-95-3	Nitrobenzene	ND	67	9.7	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	67	8.2	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	20	ug/kg	
85-01-8	Phenanthrene	ND	33	15	ug/kg	
129-00-0	Pyrene	ND	33	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	44%		21-116%
4165-62-2	Phenol-d5	45%		19-117%
118-79-6	2,4,6-Tribromophenol	53%		24-136%
4165-60-0	Nitrobenzene-d5	43%		21-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID: OU2-SB-22 (1.5-2.0)
Lab Sample ID: JB7500-4
Matrix: SO - Soil
Method: SW846 8270D SW846 3550C
Project: Ramapo, NY

Date Sampled: 05/25/12
Date Received: 05/25/12
Percent Solids: 86.3

ABN TCL List (CLP4.2 list)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	43%		30-117%
1718-51-0	Terphenyl-d14	75%		31-129%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	2.64	180	ug/kg	J
	system artifact/aldol-condensation	3.01	570	ug/kg	J
	unknown acid	12.45	170	ug/kg	J
	Total TIC, Semi-Volatile		170	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	OU2-SB-22 (1.5-2.0)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-4	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	SW846 8081B SW846 3546		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G19418.D	1	06/11/12	DS	06/08/12	OP57573	G4G507
Run #2							

	Initial Weight	Final Volume
Run #1	16.6 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.70	0.35	ug/kg	
319-84-6	alpha-BHC	ND	0.70	0.52	ug/kg	
319-85-7	beta-BHC	ND	0.70	0.49	ug/kg	
319-86-8	delta-BHC	ND	0.70	0.41	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.70	0.32	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.70	0.45	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.70	0.36	ug/kg	
60-57-1	Dieldrin	ND	0.70	0.54	ug/kg	
72-54-8	4,4' -DDD	ND	0.70	0.36	ug/kg	
72-55-9	4,4' -DDE	ND	0.70	0.41	ug/kg	
50-29-3	4,4' -DDT	ND	0.70	0.51	ug/kg	
72-20-8	Endrin	ND	0.70	0.36	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.70	0.63	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.70	0.66	ug/kg	
959-98-8	Endosulfan-I	ND	0.70	0.34	ug/kg	
33213-65-9	Endosulfan-II	ND	0.70	0.46	ug/kg	
76-44-8	Heptachlor	ND	0.70	0.43	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.70	0.34	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.49	ug/kg	
53494-70-5	Endrin ketone	ND	0.70	0.45	ug/kg	
8001-35-2	Toxaphene	ND	17	8.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	84% ^a		23-137%
877-09-8	Tetrachloro-m-xylene	68% ^a		23-137%
2051-24-3	Decachlorobiphenyl	81% ^a		22-160%
2051-24-3	Decachlorobiphenyl	88% ^a		22-160%

(a) Surrogate double spiked; The recovery re-calculated based on the spike amount.

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	OU2-SB-22 (1.5-2.0)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-4	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	SW846 8082A SW846 3546		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX120384.D	1	06/01/12	AZ	05/30/12	OP57337	GXX4386
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	9.8	ug/kg	
11104-28-2	Aroclor 1221	ND	38	23	ug/kg	
11141-16-5	Aroclor 1232	ND	38	19	ug/kg	
53469-21-9	Aroclor 1242	ND	38	12	ug/kg	
12672-29-6	Aroclor 1248	ND	38	11	ug/kg	
11097-69-1	Aroclor 1254	ND	38	18	ug/kg	
11096-82-5	Aroclor 1260	ND	38	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	82%		22-141%
877-09-8	Tetrachloro-m-xylene	95%		22-141%
2051-24-3	Decachlorobiphenyl	86%		18-163%
2051-24-3	Decachlorobiphenyl	92%		18-163%

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Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-22 (1.5-2.0)**Lab Sample ID:** JB7500-4**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/25/12**Date Received:** 05/25/12**Percent Solids:** 86.3

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	8810	56	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Antimony	< 2.2	2.2	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Arsenic	2.4	2.2	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Barium	40.8	22	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Beryllium	0.63	0.22	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ³ SW846 3050B ⁴
Cadmium	< 0.56	0.56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ³ SW846 3050B ⁴
Calcium	2340	560	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Chromium	18.9	1.1	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Cobalt	5.7	5.6	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Copper	17.3	2.8	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Iron	18200	56	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Lead	7.3	2.2	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Magnesium	2950	560	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Manganese	296	1.7	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Mercury	< 0.038	0.038	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹ SW846 7471B ⁵
Nickel	13.8	4.5	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Potassium	< 1100	1100	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Selenium	< 2.2	2.2	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Silver	< 0.56	0.56	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Sodium	< 1100	1100	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Thallium	< 1.1	1.1	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Vanadium	28.3	5.6	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴
Zinc	38.6	2.2	mg/kg	1	05/30/12	06/06/12	ND	SW846 6010C ² SW846 3050B ⁴

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28726

(3) Instrument QC Batch: MA28742

(4) Prep QC Batch: MP64693

(5) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

Client Sample ID:	OU2-SB-22 (1.5-2.0)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-4	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	86.3
Project:	Ramapo, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.26	0.26	mg/kg	1	05/30/12 10:49	VA	SW846 9012 M/LACHAT
Solids, Percent	86.3		%	1	06/01/12	KP	SM18 2540G

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-23 (0.0-0.6)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-5	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A184003.D	1	05/30/12	CL	05/26/12 12:00	n/a	VA6875
Run #2							

	Initial Weight
Run #1	4.9 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	1.9	ug/kg	
71-43-2	Benzene	ND	1.1	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.7	0.12	ug/kg	
75-25-2	Bromoform	ND	5.7	0.17	ug/kg	
74-83-9	Bromomethane	ND	5.7	0.31	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.7	ug/kg	
75-15-0	Carbon disulfide	ND	5.7	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.7	0.15	ug/kg	
108-90-7	Chlorobenzene	ND	5.7	0.12	ug/kg	
75-00-3	Chloroethane	ND	5.7	0.26	ug/kg	
67-66-3	Chloroform	ND	5.7	0.094	ug/kg	
74-87-3	Chloromethane	ND	5.7	0.21	ug/kg	
110-82-7	Cyclohexane	ND	5.7	0.14	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.7	0.19	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.14	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.7	0.22	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.7	0.21	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.7	0.20	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.7	0.26	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.7	0.16	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.15	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.7	0.29	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.7	0.21	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.7	0.27	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.7	0.18	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.7	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.7	0.18	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.30	ug/kg	
76-13-1	Freon 113	ND	5.7	0.49	ug/kg	
591-78-6	2-Hexanone	ND	5.7	0.71	ug/kg	
98-82-8	Isopropylbenzene	ND	5.7	0.085	ug/kg	

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-23 (0.0-0.6)
Lab Sample ID: JB7500-5
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/25/12
Date Received: 05/25/12
Percent Solids: 89.7

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.7	3.0	ug/kg	
108-87-2	Methylcyclohexane	ND	5.7	0.19	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.27	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.7	0.85	ug/kg	
75-09-2	Methylene chloride	ND	5.7	1.4	ug/kg	
100-42-5	Styrene	ND	5.7	0.10	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.7	0.15	ug/kg	
127-18-4	Tetrachloroethene	ND	5.7	0.20	ug/kg	
108-88-3	Toluene	ND	1.1	0.12	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.7	0.16	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.7	0.12	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.7	0.20	ug/kg	
79-01-6	Trichloroethene	ND	5.7	0.20	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.7	0.34	ug/kg	
75-01-4	Vinyl chloride	ND	5.7	0.16	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
17060-07-0	1,2-Dichloroethane-D4	90%		70-122%
2037-26-5	Toluene-D8	106%		81-127%
460-00-4	4-Bromofluorobenzene	96%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-23 (0.0-0.6)**Lab Sample ID:** JB7500-5**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/25/12**Date Received:** 05/25/12**Percent Solids:** 89.7

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	6060	56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Antimony	< 2.3	2.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Arsenic	2.4	2.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Barium	31.8	23	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Beryllium	0.56	0.23	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Cadmium	< 0.56	0.56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Calcium	1620	560	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Chromium	26.6	1.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Cobalt	< 5.6	5.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Copper	16.1	2.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Iron	17000	56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Lead	26.1	2.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Magnesium	2520	560	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Manganese	429	1.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Mercury	0.055	0.035	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹
Nickel	11.0	4.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Potassium	< 1100	1100	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Selenium	< 2.3	2.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Silver	0.99	0.56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Sodium	< 1100	1100	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Thallium	< 1.1	1.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Vanadium	25.0	5.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Zinc	64.5	2.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28742

(3) Prep QC Batch: MP64693

(4) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-23 (1.5-2.0)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-6	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	90.0
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G148613.D	1	06/01/12	SJM	05/26/12 12:00	n/a	VG6894
Run #2							

	Initial Weight
Run #1	5.2 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	1.8	ug/kg	
71-43-2	Benzene	ND	1.1	0.13	ug/kg	
75-27-4	Bromodichloromethane	ND	5.3	0.11	ug/kg	
75-25-2	Bromoform	ND	5.3	0.16	ug/kg	
74-83-9	Bromomethane	ND	5.3	0.29	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.6	ug/kg	
75-15-0	Carbon disulfide	ND	5.3	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.3	0.14	ug/kg	
108-90-7	Chlorobenzene	ND	5.3	0.12	ug/kg	
75-00-3	Chloroethane	ND	5.3	0.24	ug/kg	
67-66-3	Chloroform	ND	5.3	0.088	ug/kg	
74-87-3	Chloromethane	ND	5.3	0.20	ug/kg	
110-82-7	Cyclohexane	ND	5.3	0.13	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	0.95	ug/kg	
124-48-1	Dibromochloromethane	ND	5.3	0.18	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.14	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.3	0.20	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.3	0.20	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.3	0.19	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.3	0.24	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.3	0.15	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.14	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.3	0.27	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.3	0.20	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.3	0.25	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.3	0.16	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.3	0.15	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.3	0.17	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.28	ug/kg	
76-13-1	Freon 113	ND	5.3	0.46	ug/kg	
591-78-6	2-Hexanone	ND	5.3	0.66	ug/kg	
98-82-8	Isopropylbenzene	ND	5.3	0.079	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-23 (1.5-2.0)
Lab Sample ID: JB7500-6
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/25/12
Date Received: 05/25/12
Percent Solids: 90.0

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.3	2.8	ug/kg	
108-87-2	Methylcyclohexane	ND	5.3	0.18	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.25	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.3	0.80	ug/kg	
75-09-2	Methylene chloride	ND	5.3	1.4	ug/kg	
100-42-5	Styrene	ND	5.3	0.098	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.3	0.14	ug/kg	
127-18-4	Tetrachloroethene	ND	5.3	0.18	ug/kg	
108-88-3	Toluene	ND	1.1	0.11	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	0.15	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.3	0.11	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.3	0.19	ug/kg	
79-01-6	Trichloroethene	ND	5.3	0.19	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.3	0.32	ug/kg	
75-01-4	Vinyl chloride	ND	5.3	0.15	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		70-130%
17060-07-0	1,2-Dichloroethane-D4	95%		70-122%
2037-26-5	Toluene-D8	100%		81-127%
460-00-4	4-Bromofluorobenzene	93%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-23 (1.5-2.0)**Lab Sample ID:** JB7500-6**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/25/12**Date Received:** 05/25/12**Percent Solids:** 90.0

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	5810	56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.2	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	< 2.2	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Barium	24.6	22	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.48	0.22	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.56	0.56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	1460	560	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	17.1	1.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	< 5.6	5.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Copper	14.4	2.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Iron	18300	56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Lead	97.4	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	2440	560	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	385	1.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	< 0.036	0.036	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	10.1	4.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1100	1100	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.2	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Silver	0.86	0.56	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1100	1100	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.1	1.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	27.2	5.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	43.3	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28742

(3) Prep QC Batch: MP64693

(4) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-24 (0.0-0.6)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-7	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	72.3
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A183999.D	1	05/30/12	CL	05/26/12 12:00	n/a	VA6875
Run #2							

	Initial Weight
Run #1	4.5 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	15	2.6	ug/kg	
71-43-2	Benzene	ND	1.5	0.18	ug/kg	
75-27-4	Bromodichloromethane	ND	7.7	0.16	ug/kg	
75-25-2	Bromoform	ND	7.7	0.23	ug/kg	
74-83-9	Bromomethane	ND	7.7	0.42	ug/kg	
78-93-3	2-Butanone (MEK)	ND	15	3.7	ug/kg	
75-15-0	Carbon disulfide	ND	7.7	0.18	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.7	0.20	ug/kg	
108-90-7	Chlorobenzene	ND	7.7	0.17	ug/kg	
75-00-3	Chloroethane	ND	7.7	0.35	ug/kg	
67-66-3	Chloroform	ND	7.7	0.13	ug/kg	
74-87-3	Chloromethane	ND	7.7	0.29	ug/kg	
110-82-7	Cyclohexane	ND	7.7	0.19	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	15	1.4	ug/kg	
124-48-1	Dibromochloromethane	ND	7.7	0.25	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.5	0.20	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	7.7	0.29	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	7.7	0.29	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	7.7	0.27	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	7.7	0.35	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.7	0.21	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.5	0.21	ug/kg	
75-35-4	1,1-Dichloroethene	ND	7.7	0.39	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	7.7	0.28	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	7.7	0.37	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.7	0.24	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.7	0.21	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.7	0.24	ug/kg	
100-41-4	Ethylbenzene	ND	1.5	0.40	ug/kg	
76-13-1	Freon 113	ND	7.7	0.66	ug/kg	
591-78-6	2-Hexanone	ND	7.7	0.96	ug/kg	
98-82-8	Isopropylbenzene	ND	7.7	0.11	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-24 (0.0-0.6)
Lab Sample ID: JB7500-7
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/25/12
Date Received: 05/25/12
Percent Solids: 72.3

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	7.7	4.0	ug/kg	
108-87-2	Methylcyclohexane	ND	7.7	0.26	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.5	0.36	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	7.7	1.2	ug/kg	
75-09-2	Methylene chloride	ND	7.7	2.0	ug/kg	
100-42-5	Styrene	ND	7.7	0.14	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.7	0.20	ug/kg	
127-18-4	Tetrachloroethene	ND	7.7	0.26	ug/kg	
108-88-3	Toluene	0.38	1.5	0.16	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	7.7	0.21	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.7	0.16	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.7	0.27	ug/kg	
79-01-6	Trichloroethene	ND	7.7	0.27	ug/kg	
75-69-4	Trichlorofluoromethane	ND	7.7	0.46	ug/kg	
75-01-4	Vinyl chloride	ND	7.7	0.22	ug/kg	
1330-20-7	Xylene (total)	ND	1.5	0.21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		70-130%
17060-07-0	1,2-Dichloroethane-D4	92%		70-122%
2037-26-5	Toluene-D8	106%		81-127%
460-00-4	4-Bromofluorobenzene	97%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-24 (0.0-0.6)**Lab Sample ID:** JB7500-7**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/25/12**Date Received:** 05/25/12**Percent Solids:** 72.3

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	12200	69	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.8	2.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	6.1	2.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Barium	79.9	28	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	1.1	0.28	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.69	0.69	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	2570	690	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	33.1	1.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	9.0	6.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Copper	38.7	3.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Iron	23600	69	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Lead	99.0	2.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	3370	690	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	1010	2.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	0.28	0.046	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	18.4	5.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1400	1400	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.8	2.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Silver	0.76	0.69	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1400	1400	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.4	1.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	43.0	6.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	104	2.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28750

(3) Prep QC Batch: MP64693

(4) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-24 (1.5-2.0)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-8	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	72.8
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A184038.D	1	05/31/12	CL	05/26/12 12:00	n/a	VA6876
Run #2							

	Initial Weight
Run #1	4.6 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	15	2.5	ug/kg	
71-43-2	Benzene	ND	1.5	0.18	ug/kg	
75-27-4	Bromodichloromethane	ND	7.5	0.16	ug/kg	
75-25-2	Bromoform	ND	7.5	0.23	ug/kg	
74-83-9	Bromomethane	ND	7.5	0.41	ug/kg	
78-93-3	2-Butanone (MEK)	ND	15	3.6	ug/kg	
75-15-0	Carbon disulfide	ND	7.5	0.17	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.5	0.20	ug/kg	
108-90-7	Chlorobenzene	ND	7.5	0.16	ug/kg	
75-00-3	Chloroethane	ND	7.5	0.34	ug/kg	
67-66-3	Chloroform	ND	7.5	0.12	ug/kg	
74-87-3	Chloromethane	ND	7.5	0.28	ug/kg	
110-82-7	Cyclohexane	ND	7.5	0.19	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	15	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	7.5	0.24	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.5	0.19	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	7.5	0.28	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	7.5	0.28	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	7.5	0.26	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	7.5	0.34	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.5	0.20	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.5	0.20	ug/kg	
75-35-4	1,1-Dichloroethene	ND	7.5	0.38	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	7.5	0.27	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	7.5	0.36	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.5	0.23	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.5	0.21	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.5	0.23	ug/kg	
100-41-4	Ethylbenzene	ND	1.5	0.39	ug/kg	
76-13-1	Freon 113	ND	7.5	0.64	ug/kg	
591-78-6	2-Hexanone	ND	7.5	0.93	ug/kg	
98-82-8	Isopropylbenzene	ND	7.5	0.11	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-24 (1.5-2.0)
Lab Sample ID: JB7500-8
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/25/12
Date Received: 05/25/12
Percent Solids: 72.8

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	7.5	3.9	ug/kg	
108-87-2	Methylcyclohexane	ND	7.5	0.25	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.5	0.35	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	7.5	1.1	ug/kg	
75-09-2	Methylene chloride	ND	7.5	1.9	ug/kg	
100-42-5	Styrene	ND	7.5	0.14	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.5	0.20	ug/kg	
127-18-4	Tetrachloroethene	ND	7.5	0.26	ug/kg	
108-88-3	Toluene	0.45	1.5	0.16	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	7.5	0.21	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.5	0.16	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.5	0.26	ug/kg	
79-01-6	Trichloroethene	ND	7.5	0.26	ug/kg	
75-69-4	Trichlorofluoromethane	ND	7.5	0.44	ug/kg	
75-01-4	Vinyl chloride	ND	7.5	0.22	ug/kg	
1330-20-7	Xylene (total)	ND	1.5	0.21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
17060-07-0	1,2-Dichloroethane-D4	90%		70-122%
2037-26-5	Toluene-D8	107%		81-127%
460-00-4	4-Bromofluorobenzene	95%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-24 (1.5-2.0)**Lab Sample ID:** JB7500-8**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/25/12**Date Received:** 05/25/12**Percent Solids:** 72.8**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	12300	67	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.7	2.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	7.0	2.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Barium	80.5	27	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	1.2	0.27	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.67	0.67	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	2570	670	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	32.2	1.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	9.5	6.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Copper	40.2	3.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Iron	24100	67	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Lead	110	2.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	3410	670	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	1030	2.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	0.30	0.045	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	19.4	5.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1300	1300	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.7	2.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Silver	1.5	0.67	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1300	1300	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.3	1.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	40.0	6.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	112	2.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28750

(3) Prep QC Batch: MP64693

(4) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-25 (0.0-0.6)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-9	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	69.8
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A184039.D	1	05/31/12	CL	05/26/12 12:00	n/a	VA6876
Run #2							

	Initial Weight
Run #1	5.5 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	36.5	13	2.2	ug/kg	
71-43-2	Benzene	ND	1.3	0.15	ug/kg	
75-27-4	Bromodichloromethane	ND	6.5	0.14	ug/kg	
75-25-2	Bromoform	ND	6.5	0.20	ug/kg	
74-83-9	Bromomethane	ND	6.5	0.36	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.1	ug/kg	
75-15-0	Carbon disulfide	ND	6.5	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.5	0.17	ug/kg	
108-90-7	Chlorobenzene	ND	6.5	0.14	ug/kg	
75-00-3	Chloroethane	ND	6.5	0.30	ug/kg	
67-66-3	Chloroform	ND	6.5	0.11	ug/kg	
74-87-3	Chloromethane	ND	6.5	0.24	ug/kg	
110-82-7	Cyclohexane	ND	6.5	0.16	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	13	1.2	ug/kg	
124-48-1	Dibromochloromethane	ND	6.5	0.21	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.3	0.17	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.5	0.25	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.5	0.24	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.5	0.23	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.5	0.30	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.5	0.18	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.5	0.33	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.5	0.24	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.5	0.31	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.5	0.20	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.5	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.5	0.20	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.34	ug/kg	
76-13-1	Freon 113	ND	6.5	0.56	ug/kg	
591-78-6	2-Hexanone	ND	6.5	0.81	ug/kg	
98-82-8	Isopropylbenzene	ND	6.5	0.097	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-25 (0.0-0.6)
Lab Sample ID: JB7500-9
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/25/12
Date Received: 05/25/12
Percent Solids: 69.8

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	6.5	3.4	ug/kg	
108-87-2	Methylcyclohexane	ND	6.5	0.22	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.31	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.5	0.98	ug/kg	
75-09-2	Methylene chloride	ND	6.5	1.7	ug/kg	
100-42-5	Styrene	ND	6.5	0.12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.5	0.17	ug/kg	
127-18-4	Tetrachloroethene	ND	6.5	0.22	ug/kg	
108-88-3	Toluene	0.35	1.3	0.14	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	6.5	0.18	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.5	0.14	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.5	0.23	ug/kg	
79-01-6	Trichloroethene	ND	6.5	0.23	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.5	0.39	ug/kg	
75-01-4	Vinyl chloride	ND	6.5	0.19	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		70-130%
17060-07-0	1,2-Dichloroethane-D4	91%		70-122%
2037-26-5	Toluene-D8	107%		81-127%
460-00-4	4-Bromofluorobenzene	97%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-25 (0.0-0.6)**Lab Sample ID:** JB7500-9**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/25/12**Date Received:** 05/25/12**Percent Solids:** 69.8

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	21000	74	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 3.0	3.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	7.1	3.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Barium	74.9	30	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.62	0.30	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.74	0.74	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	1010	740	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	31.2	1.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	7.8	7.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Copper	31.1	3.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Iron	24600	74	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Lead	91.6	3.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	3590	740	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	180	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	0.11	0.044	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	20.5	5.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1500	1500	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 3.0	3.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Silver	1.0	0.74	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1500	1500	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.5	1.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	50.6	7.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	53.6	3.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28750

(3) Prep QC Batch: MP64693

(4) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-25 (1.5-2.0)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-10	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	65.2
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G148622.D	1	06/01/12	SJM	05/26/12 12:00	n/a	VG6894
Run #2							

	Initial Weight
Run #1	4.3 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	97.1	18	3.0	ug/kg	
71-43-2	Benzene	ND	1.8	0.21	ug/kg	
75-27-4	Bromodichloromethane	ND	8.9	0.19	ug/kg	
75-25-2	Bromoform	ND	8.9	0.27	ug/kg	
74-83-9	Bromomethane	ND	8.9	0.49	ug/kg	
78-93-3	2-Butanone (MEK)	ND	18	4.3	ug/kg	
75-15-0	Carbon disulfide	ND	8.9	0.21	ug/kg	
56-23-5	Carbon tetrachloride	ND	8.9	0.24	ug/kg	
108-90-7	Chlorobenzene	ND	8.9	0.19	ug/kg	
75-00-3	Chloroethane	ND	8.9	0.40	ug/kg	
67-66-3	Chloroform	ND	8.9	0.15	ug/kg	
74-87-3	Chloromethane	ND	8.9	0.33	ug/kg	
110-82-7	Cyclohexane	ND	8.9	0.22	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	18	1.6	ug/kg	
124-48-1	Dibromochloromethane	ND	8.9	0.29	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.8	0.23	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	8.9	0.34	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	8.9	0.33	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	8.9	0.31	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	8.9	0.41	ug/kg	
75-34-3	1,1-Dichloroethane	ND	8.9	0.24	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.8	0.24	ug/kg	
75-35-4	1,1-Dichloroethene	ND	8.9	0.46	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	8.9	0.33	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	8.9	0.42	ug/kg	
78-87-5	1,2-Dichloropropane	ND	8.9	0.27	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	8.9	0.25	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	8.9	0.28	ug/kg	
100-41-4	Ethylbenzene	ND	1.8	0.47	ug/kg	
76-13-1	Freon 113	ND	8.9	0.77	ug/kg	
591-78-6	2-Hexanone	ND	8.9	1.1	ug/kg	
98-82-8	Isopropylbenzene	ND	8.9	0.13	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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3.10

3

Client Sample ID: OU2-SB-25 (1.5-2.0)
Lab Sample ID: JB7500-10
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/25/12**Date Received:** 05/25/12**Percent Solids:** 65.2

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	8.9	4.6	ug/kg	
108-87-2	Methylcyclohexane	ND	8.9	0.30	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.8	0.42	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	8.9	1.3	ug/kg	
75-09-2	Methylene chloride	ND	8.9	2.3	ug/kg	
100-42-5	Styrene	ND	8.9	0.16	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	8.9	0.24	ug/kg	
127-18-4	Tetrachloroethene	ND	8.9	0.31	ug/kg	
108-88-3	Toluene	ND	1.8	0.19	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	8.9	0.25	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	8.9	0.19	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	8.9	0.31	ug/kg	
79-01-6	Trichloroethene	ND	8.9	0.31	ug/kg	
75-69-4	Trichlorofluoromethane	ND	8.9	0.53	ug/kg	
75-01-4	Vinyl chloride	ND	8.9	0.26	ug/kg	
1330-20-7	Xylene (total)	ND	1.8	0.25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-130%
17060-07-0	1,2-Dichloroethane-D4	95%		70-122%
2037-26-5	Toluene-D8	98%		81-127%
460-00-4	4-Bromofluorobenzene	102%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-25 (1.5-2.0)**Lab Sample ID:** JB7500-10**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/25/12**Date Received:** 05/25/12**Percent Solids:** 65.2**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	34000	75	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Antimony	< 3.0	3.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Arsenic	7.8	3.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Barium	89.4	30	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Beryllium	0.84	0.30	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Cadmium	< 0.75	0.75	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Calcium	< 750	750	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Chromium	44.3	1.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Cobalt	13.6	7.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Copper	38.9	3.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Iron	30300	75	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Lead	42.8	3.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Magnesium	3540	750	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Manganese	225	2.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Mercury	0.10	0.048	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹
Nickel	30.7	6.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Potassium	< 1500	1500	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Selenium	< 3.0	3.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Silver	1.2	0.75	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Sodium	< 1500	1500	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Thallium	< 1.5	1.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Vanadium	60.1	7.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Zinc	73.1	3.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28750

(3) Prep QC Batch: MP64693

(4) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-26 (0.0-0.6)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-11	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	74.6
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A184040.D	1	05/31/12	CL	05/26/12 12:00	n/a	VA6876
Run #2							

	Initial Weight
Run #1	5.1 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	2.2	ug/kg	
71-43-2	Benzene	ND	1.3	0.16	ug/kg	
75-27-4	Bromodichloromethane	ND	6.6	0.14	ug/kg	
75-25-2	Bromoform	ND	6.6	0.20	ug/kg	
74-83-9	Bromomethane	ND	6.6	0.36	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.1	ug/kg	
75-15-0	Carbon disulfide	ND	6.6	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.6	0.17	ug/kg	
108-90-7	Chlorobenzene	ND	6.6	0.14	ug/kg	
75-00-3	Chloroethane	ND	6.6	0.30	ug/kg	
67-66-3	Chloroform	ND	6.6	0.11	ug/kg	
74-87-3	Chloromethane	ND	6.6	0.24	ug/kg	
110-82-7	Cyclohexane	ND	6.6	0.16	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	13	1.2	ug/kg	
124-48-1	Dibromochloromethane	ND	6.6	0.22	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.3	0.17	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.6	0.25	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.6	0.25	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.6	0.23	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.6	0.30	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.6	0.18	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.6	0.34	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.6	0.24	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.6	0.31	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.6	0.20	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.6	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.6	0.20	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.35	ug/kg	
76-13-1	Freon 113	ND	6.6	0.57	ug/kg	
591-78-6	2-Hexanone	ND	6.6	0.82	ug/kg	
98-82-8	Isopropylbenzene	ND	6.6	0.098	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OU2-SB-26 (0.0-0.6)
Lab Sample ID: JB7500-11
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/25/12
Date Received: 05/25/12
Percent Solids: 74.6

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	6.6	3.4	ug/kg	
108-87-2	Methylcyclohexane	ND	6.6	0.22	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.31	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.6	0.99	ug/kg	
75-09-2	Methylene chloride	4.2	6.6	1.7	ug/kg	J
100-42-5	Styrene	ND	6.6	0.12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.6	0.17	ug/kg	
127-18-4	Tetrachloroethene	ND	6.6	0.23	ug/kg	
108-88-3	Toluene	2.0	1.3	0.14	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.6	0.18	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.6	0.14	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.6	0.23	ug/kg	
79-01-6	Trichloroethene	ND	6.6	0.23	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.6	0.39	ug/kg	
75-01-4	Vinyl chloride	ND	6.6	0.19	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		70-130%
17060-07-0	1,2-Dichloroethane-D4	91%		70-122%
2037-26-5	Toluene-D8	107%		81-127%
460-00-4	4-Bromofluorobenzene	97%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-26 (0.0-0.6)**Lab Sample ID:** JB7500-11**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/25/12**Date Received:** 05/25/12**Percent Solids:** 74.6**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	30000	66	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.7	2.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	6.0	2.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Barium	54.5	27	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.60	0.27	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.66	0.66	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	< 660	660	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	30.1	1.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	9.0	6.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Copper	20.9	3.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Iron	26300	66	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Lead	12.5	2.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	2580	660	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	128	2.0	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	0.12	0.044	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	23.7	5.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	< 1300	1300	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.7	2.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Silver	0.76	0.66	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1300	1300	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.3	1.3	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	50.4	6.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	56.6	2.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28750

(3) Prep QC Batch: MP64693

(4) Prep QC Batch: MP64786

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-26 (1.5-2.0)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-12	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	70.8
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G148614.D	1	06/01/12	SJM	05/26/12 12:00	n/a	VG6894
Run #2							

	Initial Weight
Run #1	5.2 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	14	2.3	ug/kg	
71-43-2	Benzene	ND	1.4	0.16	ug/kg	
75-27-4	Bromodichloromethane	ND	6.8	0.14	ug/kg	
75-25-2	Bromoform	ND	6.8	0.21	ug/kg	
74-83-9	Bromomethane	ND	6.8	0.37	ug/kg	
78-93-3	2-Butanone (MEK)	ND	14	3.2	ug/kg	
75-15-0	Carbon disulfide	ND	6.8	0.16	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.8	0.18	ug/kg	
108-90-7	Chlorobenzene	ND	6.8	0.15	ug/kg	
75-00-3	Chloroethane	ND	6.8	0.31	ug/kg	
67-66-3	Chloroform	ND	6.8	0.11	ug/kg	
74-87-3	Chloromethane	ND	6.8	0.25	ug/kg	
110-82-7	Cyclohexane	ND	6.8	0.17	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	14	1.2	ug/kg	
124-48-1	Dibromochloromethane	ND	6.8	0.22	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.4	0.17	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.8	0.26	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.8	0.25	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.8	0.24	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.8	0.31	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.8	0.19	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.4	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.8	0.35	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.8	0.25	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.8	0.32	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.8	0.21	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.8	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.8	0.21	ug/kg	
100-41-4	Ethylbenzene	ND	1.4	0.36	ug/kg	
76-13-1	Freon 113	ND	6.8	0.58	ug/kg	
591-78-6	2-Hexanone	ND	6.8	0.84	ug/kg	
98-82-8	Isopropylbenzene	ND	6.8	0.10	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-26 (1.5-2.0)
Lab Sample ID: JB7500-12
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/25/12

Date Received: 05/25/12

Percent Solids: 70.8

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	6.8	3.5	ug/kg	
108-87-2	Methylcyclohexane	ND	6.8	0.23	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.4	0.32	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.8	1.0	ug/kg	
75-09-2	Methylene chloride	ND	6.8	1.7	ug/kg	
100-42-5	Styrene	ND	6.8	0.12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.8	0.18	ug/kg	
127-18-4	Tetrachloroethene	ND	6.8	0.23	ug/kg	
108-88-3	Toluene	ND	1.4	0.14	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.8	0.19	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.8	0.14	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.8	0.24	ug/kg	
79-01-6	Trichloroethene	ND	6.8	0.24	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.8	0.40	ug/kg	
75-01-4	Vinyl chloride	ND	6.8	0.20	ug/kg	
1330-20-7	Xylene (total)	ND	1.4	0.19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-130%
17060-07-0	1,2-Dichloroethane-D4	96%		70-122%
2037-26-5	Toluene-D8	102%		81-127%
460-00-4	4-Bromofluorobenzene	99%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-26 (1.5-2.0)**Lab Sample ID:** JB7500-12**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/25/12**Date Received:** 05/25/12**Percent Solids:** 70.8**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	32400	72	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Antimony	< 2.9	2.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Arsenic	6.3	2.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Barium	110	29	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Beryllium	0.62	0.29	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cadmium	< 0.72	0.72	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Calcium	< 720	720	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Chromium	37.6	1.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Cobalt	9.7	7.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Copper	20.7	3.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Iron	30000	72	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Lead	16.3	2.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Magnesium	4630	720	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Manganese	136	2.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Mercury	0.11	0.046	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹ SW846 7471B ⁴
Nickel	24.4	5.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Potassium	3010	1400	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Selenium	< 2.9	2.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Silver	< 0.72	0.72	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Sodium	< 1400	1400	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Thallium	< 1.4	1.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Vanadium	78.2	7.2	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³
Zinc	67.3	2.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ² SW846 3050B ³

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28750

(3) Prep QC Batch: MP64693

(4) Prep QC Batch: MP64734

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-27 (0.0-0.6)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-13	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	72.8
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A184041.D	1	05/31/12	CL	05/26/12 12:00	n/a	VA6876
Run #2							

	Initial Weight
Run #1	4.8 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	14	2.4	ug/kg	
71-43-2	Benzene	ND	1.4	0.17	ug/kg	
75-27-4	Bromodichloromethane	ND	7.2	0.15	ug/kg	
75-25-2	Bromoform	ND	7.2	0.22	ug/kg	
74-83-9	Bromomethane	ND	7.2	0.39	ug/kg	
78-93-3	2-Butanone (MEK)	ND	14	3.4	ug/kg	
75-15-0	Carbon disulfide	ND	7.2	0.17	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.2	0.19	ug/kg	
108-90-7	Chlorobenzene	ND	7.2	0.15	ug/kg	
75-00-3	Chloroethane	ND	7.2	0.32	ug/kg	
67-66-3	Chloroform	ND	7.2	0.12	ug/kg	
74-87-3	Chloromethane	ND	7.2	0.27	ug/kg	
110-82-7	Cyclohexane	ND	7.2	0.18	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	14	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	7.2	0.23	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.4	0.18	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	7.2	0.27	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	7.2	0.27	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	7.2	0.25	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	7.2	0.33	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.2	0.20	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.4	0.19	ug/kg	
75-35-4	1,1-Dichloroethene	ND	7.2	0.37	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	7.2	0.26	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	7.2	0.34	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.2	0.22	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.2	0.20	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.2	0.22	ug/kg	
100-41-4	Ethylbenzene	ND	1.4	0.38	ug/kg	
76-13-1	Freon 113	ND	7.2	0.62	ug/kg	
591-78-6	2-Hexanone	ND	7.2	0.89	ug/kg	
98-82-8	Isopropylbenzene	ND	7.2	0.11	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: OU2-SB-27 (0.0-0.6)
Lab Sample ID: JB7500-13
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/25/12
Date Received: 05/25/12
Percent Solids: 72.8

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	7.2	3.7	ug/kg	
108-87-2	Methylcyclohexane	ND	7.2	0.24	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.4	0.34	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	7.2	1.1	ug/kg	
75-09-2	Methylene chloride	ND	7.2	1.8	ug/kg	
100-42-5	Styrene	ND	7.2	0.13	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.2	0.19	ug/kg	
127-18-4	Tetrachloroethene	ND	7.2	0.25	ug/kg	
108-88-3	Toluene	0.34	1.4	0.15	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	7.2	0.20	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.2	0.15	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.2	0.25	ug/kg	
79-01-6	Trichloroethene	ND	7.2	0.25	ug/kg	
75-69-4	Trichlorofluoromethane	ND	7.2	0.43	ug/kg	
75-01-4	Vinyl chloride	ND	7.2	0.21	ug/kg	
1330-20-7	Xylene (total)	ND	1.4	0.20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		70-130%
17060-07-0	1,2-Dichloroethane-D4	89%		70-122%
2037-26-5	Toluene-D8	107%		81-127%
460-00-4	4-Bromofluorobenzene	96%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: OU2-SB-27 (0.0-0.6)**Lab Sample ID:** JB7500-13**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/25/12**Date Received:** 05/25/12**Percent Solids:** 72.8**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	15100	71	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Antimony	< 2.8	2.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Arsenic	3.4	2.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Barium	33.7	28	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Beryllium	0.54	0.28	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Cadmium	< 0.71	0.71	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Calcium	875	710	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Chromium	23.9	1.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Cobalt	< 7.1	7.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Copper	15.3	3.5	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Iron	19300	71	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Lead	26.0	2.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Magnesium	2960	710	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Manganese	92.9	2.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Mercury	0.25	0.045	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹
Nickel	12.9	5.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Potassium	< 1400	1400	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Selenium	< 2.8	2.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Silver	< 0.71	0.71	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Sodium	< 1400	1400	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Thallium	< 1.4	1.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Vanadium	38.4	7.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Zinc	46.4	2.8	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28750

(3) Prep QC Batch: MP64693

(4) Prep QC Batch: MP64734

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	OU2-SB-27 (1.5-2.0)	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-14	Date Received:	05/25/12
Matrix:	SO - Soil	Percent Solids:	71.4
Method:	SW846 8260B SW846 5035		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G148620.D	1	06/01/12	SJM	05/26/12 12:00	n/a	VG6894
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	14	2.4	ug/kg	
71-43-2	Benzene	ND	1.4	0.17	ug/kg	
75-27-4	Bromodichloromethane	ND	7.0	0.15	ug/kg	
75-25-2	Bromoform	ND	7.0	0.21	ug/kg	
74-83-9	Bromomethane	ND	7.0	0.38	ug/kg	
78-93-3	2-Butanone (MEK)	ND	14	3.3	ug/kg	
75-15-0	Carbon disulfide	ND	7.0	0.16	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.0	0.19	ug/kg	
108-90-7	Chlorobenzene	ND	7.0	0.15	ug/kg	
75-00-3	Chloroethane	ND	7.0	0.32	ug/kg	
67-66-3	Chloroform	ND	7.0	0.12	ug/kg	
74-87-3	Chloromethane	ND	7.0	0.26	ug/kg	
110-82-7	Cyclohexane	ND	7.0	0.17	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	14	1.2	ug/kg	
124-48-1	Dibromochloromethane	ND	7.0	0.23	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.4	0.18	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	7.0	0.26	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	7.0	0.26	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	7.0	0.25	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	7.0	0.32	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.0	0.19	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.4	0.19	ug/kg	
75-35-4	1,1-Dichloroethene	ND	7.0	0.36	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	7.0	0.26	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	7.0	0.33	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.0	0.22	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.0	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.0	0.22	ug/kg	
100-41-4	Ethylbenzene	ND	1.4	0.37	ug/kg	
76-13-1	Freon 113	ND	7.0	0.60	ug/kg	
591-78-6	2-Hexanone	ND	7.0	0.87	ug/kg	
98-82-8	Isopropylbenzene	ND	7.0	0.10	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: OU2-SB-27 (1.5-2.0)
Lab Sample ID: JB7500-14
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Ramapo, NY

Date Sampled: 05/25/12
Date Received: 05/25/12
Percent Solids: 71.4

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	7.0	3.6	ug/kg	
108-87-2	Methylcyclohexane	ND	7.0	0.24	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.4	0.33	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	7.0	1.1	ug/kg	
75-09-2	Methylene chloride	ND	7.0	1.8	ug/kg	
100-42-5	Styrene	ND	7.0	0.13	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.0	0.18	ug/kg	
127-18-4	Tetrachloroethene	ND	7.0	0.24	ug/kg	
108-88-3	Toluene	ND	1.4	0.15	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	7.0	0.19	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.0	0.15	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.0	0.24	ug/kg	
79-01-6	Trichloroethene	ND	7.0	0.24	ug/kg	
75-69-4	Trichlorofluoromethane	ND	7.0	0.42	ug/kg	
75-01-4	Vinyl chloride	ND	7.0	0.20	ug/kg	
1330-20-7	Xylene (total)	ND	1.4	0.19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		70-130%
17060-07-0	1,2-Dichloroethane-D4	96%		70-122%
2037-26-5	Toluene-D8	101%		81-127%
460-00-4	4-Bromofluorobenzene	97%		66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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3.14

3

Client Sample ID: OU2-SB-27 (1.5-2.0)**Lab Sample ID:** JB7500-14**Matrix:** SO - Soil**Project:** Ramapo, NY**Date Sampled:** 05/25/12**Date Received:** 05/25/12**Percent Solids:** 71.4

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	14600	71	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Antimony	< 2.9	2.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Arsenic	< 2.9	2.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Barium	41.2	29	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Beryllium	0.50	0.29	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Cadmium	< 0.71	0.71	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Calcium	1200	710	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Chromium	22.8	1.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Cobalt	< 7.1	7.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Copper	10.7	3.6	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Iron	14900	71	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Lead	11.8	2.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Magnesium	3180	710	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Manganese	86.6	2.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Mercury	0.074	0.045	mg/kg	1	06/05/12	06/05/12	JW	SW846 7471B ¹
Nickel	12.6	5.7	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Potassium	< 1400	1400	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Selenium	< 2.9	2.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Silver	0.74	0.71	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Sodium	< 1400	1400	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Thallium	< 1.4	1.4	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Vanadium	34.3	7.1	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²
Zinc	48.1	2.9	mg/kg	1	05/30/12	06/07/12	ND	SW846 6010C ²

(1) Instrument QC Batch: MA28720

(2) Instrument QC Batch: MA28750

(3) Prep QC Batch: MP64693

(4) Prep QC Batch: MP64734

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	FB20120525	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-15	Date Received:	05/25/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A116582.D	1	06/01/12	CC	n/a	n/a	V1A5011
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.21	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.26	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.21	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.35	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	0.54	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.20	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.27	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.11	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.19	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.19	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.48	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.23	ug/l	
76-13-1	Freon 113	ND	5.0	0.53	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.45	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	FB20120525	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-15	Date Received:	05/25/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Ramapo, NY		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.2	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.26	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.16	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.70	ug/l	
100-42-5	Styrene	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.27	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		81-121%
17060-07-0	1,2-Dichloroethane-D4	98%		74-127%
2037-26-5	Toluene-D8	93%		80-122%
460-00-4	4-Bromofluorobenzene	91%		78-116%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	FB20120525	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-15	Date Received:	05/25/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F14498.D	1	05/31/12	NAP	05/30/12	OP57339	EF4837
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	0.98	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	1.8	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.1	1.2	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	1.5	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	17	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	1.0	ug/l	
95-48-7	2-Methylphenol	ND	2.0	1.1	ug/l	
	3&4-Methylphenol	ND	2.0	0.93	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	1.5	ug/l	
100-02-7	4-Nitrophenol	ND	10	5.3	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
108-95-2	Phenol	ND	2.0	1.3	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	1.6	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	1.3	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.27	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.23	ug/l	
98-86-2	Acetophenone	ND	2.0	0.29	ug/l	
120-12-7	Anthracene	ND	1.0	0.29	ug/l	
1912-24-9	Atrazine	ND	5.1	0.49	ug/l	
100-52-7	Benzaldehyde	ND	5.1	3.3	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.23	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.23	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.46	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.33	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.51	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.36	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.29	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.31	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.30	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	0.53	ug/l	
86-74-8	Carbazole	ND	1.0	0.36	ug/l	
105-60-2	Caprolactam	ND	2.0	0.70	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB20120525	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-15	Date Received:	05/25/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	Ramapo, NY		

ABN TCL List (CLP4.2 list)

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	1.0	0.29	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.46	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.32	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.43	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.47	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.1	0.36	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.38	ug/l	
132-64-9	Dibenzofuran	ND	5.1	0.27	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.56	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.31	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.33	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.29	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.59	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.32	ug/l	
86-73-7	Fluorene	ND	1.0	0.28	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.34	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.52	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	7.2	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.56	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.38	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.39	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	1.1	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	1.7	ug/l	
91-20-3	Naphthalene	ND	1.0	0.26	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.31	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	0.31	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.29	ug/l	
129-00-0	Pyrene	ND	1.0	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		10-83%
4165-62-2	Phenol-d5	31%		10-74%
118-79-6	2,4,6-Tribromophenol	84%		24-148%
4165-60-0	Nitrobenzene-d5	104%		38-129%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	FB20120525	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-15	Date Received:	05/25/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	Ramapo, NY		

ABN TCL List (CLP4.2 list)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	96%		42-117%
1718-51-0	Terphenyl-d14	112%		14-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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Report of Analysis

Page 1 of 1

Client Sample ID:	FB20120525	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-15	Date Received:	05/25/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8081B SW846 3510C		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G18990.D	1	05/30/12	DS	05/29/12	OP57321	G4G499
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.011	0.0099	ug/l	
319-84-6	alpha-BHC	ND	0.011	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.011	0.0039	ug/l	
319-86-8	delta-BHC	ND	0.011	0.0065	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.011	0.0043	ug/l	
5103-71-9	alpha-Chlordane	ND	0.011	0.0052	ug/l	
5103-74-2	gamma-Chlordane	ND	0.011	0.0025	ug/l	
60-57-1	Dieldrin	ND	0.011	0.0035	ug/l	
72-54-8	4,4' -DDD	ND	0.011	0.0038	ug/l	
72-55-9	4,4' -DDE	ND	0.011	0.0031	ug/l	
50-29-3	4,4' -DDT	ND	0.011	0.0063	ug/l	
72-20-8	Endrin	ND	0.011	0.0067	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.011	0.0068	ug/l	
7421-93-4	Endrin aldehyde	ND	0.011	0.0030	ug/l	
53494-70-5	Endrin ketone	ND	0.011	0.0043	ug/l	
959-98-8	Endosulfan-I	ND	0.011	0.0032	ug/l	
33213-65-9	Endosulfan-II	ND	0.011	0.0029	ug/l	
76-44-8	Heptachlor	ND	0.011	0.0088	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.011	0.0040	ug/l	
72-43-5	Methoxychlor	ND	0.021	0.0086	ug/l	
8001-35-2	Toxaphene	ND	0.26	0.15	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	105%		26-145%
877-09-8	Tetrachloro-m-xylene	95%		26-145%
2051-24-3	Decachlorobiphenyl	32%		10-141%
2051-24-3	Decachlorobiphenyl	39%		10-141%

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Report of Analysis

Page 1 of 1

Client Sample ID:	FB20120525	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-15	Date Received:	05/25/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	Ramapo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF109977.D	1	06/01/12	GAD	05/29/12	OP57320	GEF4504
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.13	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.29	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.41	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.091	ug/l	
12672-29-6	Aroclor 1248	ND	0.53	0.15	ug/l	
11097-69-1	Aroclor 1254	ND	0.53	0.15	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		27-144%
877-09-8	Tetrachloro-m-xylene	93%		27-144%
2051-24-3	Decachlorobiphenyl	28%		10-139%
2051-24-3	Decachlorobiphenyl	32%		10-139%

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RL = Reporting Limit

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J = Indicates an estimated value

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Report of Analysis

Page 1 of 1

Client Sample ID: FB20120525

Lab Sample ID: JB7500-15

Matrix: AQ - Field Blank Soil

Project: Ramapo, NY

Date Sampled: 05/25/12

Date Received: 05/25/12

Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 200	200	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Antimony	< 6.0	6.0	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Arsenic	< 3.0	3.0	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Beryllium	< 1.0	1.0	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Cadmium	< 3.0	3.0	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Calcium	< 5000	5000	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Cobalt	< 50	50	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Copper	< 10	10	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Iron	< 100	100	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Lead	< 3.0	3.0	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Magnesium	< 5000	5000	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Manganese	< 15	15	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	06/04/12	06/04/12 JW	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 10	10	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Potassium	< 10000	10000	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Silver	< 10	10	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Sodium	< 10000	10000	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Thallium	< 2.0	2.0	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Vanadium	< 50	50	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	05/30/12	06/07/12 GT	SW846 6010C ²	SW846 3010A ³

(1) Instrument QC Batch: MA28719

(2) Instrument QC Batch: MA28738

(3) Prep QC Batch: MP64684

(4) Prep QC Batch: MP64764

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FB20120525	Date Sampled:	05/25/12
Lab Sample ID:	JB7500-15	Date Received:	05/25/12
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Project:	Ramapo, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.010	0.010	mg/l	1	05/30/12 16:02	VA	EPA 335.4/LACHAT

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)												Matrix Codes	
Company Name: ARCADIS-US		Project Name: OVA-SOIL Sampling Work Plan Site 3-44-064														DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	
Street Address: 17-17 Route 208 North 2nd Floor		Street: Ramapo NY															
City: Fair Lawn NJ State: NJ Zip: 07410		City: Ramapo NY															
Project Contact: JON ROCKLIN E-mail: jon.rocklin@arcadis-us.com		CLAIM ADJUSTER CONTACT NAME:															
Phone #: 201-797-7400 Fax #: 201-797-7400		CLAIMS NUMBER #															
Sampler(s) Name(s): ANGEUS BALLE Phone #: 201-611-3172		CHARTIS PRICING NEEDED: ☐															
Accutest Sample #	Field ID / Point of Collection	MED/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEDH	ENCORE	LAB USE ONLY	
1	002-SB-21(0.0-0.6)		5/25/12	0900	AS	SO	5					X					
2	002-SB-21(1.5-2.0)			0930	AS	SO	5					X					
3	002-SB-22(0.0-0.6)			1000	AS	SO	6					X					
4	002-SB-22(1.5-2.0)			1030	AS	SO	6					X					
5	002-SB-23(0.0-0.6)			1100	AS	SO	5					X					
6	002-SB-23(1.5-2.0)			1130	AS	SO	5					X					
7	002-SB-24(0.0-0.6)			1200	AS	SO	5					X					
8	002-SB-24(1.5-2.0)			1230	AS	SO	5					X					
9	002-SB-25(0.0-0.6)			1300	AS	SO	5					X					
10	002-SB-25(1.5-2.0)			1330	AS	SO	5					X					
11	002-SB-26(0.0-0.6)			1400	AS	SO	5					X					
12	002-SB-26(1.5-2.0)			1430	AS	SO	5					X					
Turnaround Time (Business days)		Approved By (Accutest PM): / Date:		Data Deliverable Information												Comments / Special Instructions	
☐ Std. 10 Business Days ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ other		☐ Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☐ FULLT1 (Level 3+4) ☐ NJ Reduced ☐ Commercial "C"		☐ NYASP Category A ☐ NYASP Category B ☐ State Forms ☐ EDD Format ☐ Other												3 ENCORES REC'D 5/25/12	
Emergency & Rush T/A data available VIA Lablink		Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data															
Sample Custody must be documented below each time samples change possession, including courier delivery.																	
Relinquished by Sampler:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:										
1		1x [Signature]	5/25/12	2x [Signature]	5/25/12	2											
3		3		4		4											
5		5		Custody Seal #		Intact		Preserved where applicable		On Ice		Cooler Temp.					
						☒ Intact				☒		1.0°C, 2.0°C					

JB7500: Chain of Custody

Page 1 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB7500 Client: _____ Project: _____
 Date / Time Received: 5/25/2012 Delivery Method: _____ Airbill #'s: _____
 Cooler Temps (Initial/Adjusted): #1: (1/1); #2: (2/2); 0

Cooler Security

Y or N	Y or N
1. Custody Seals Present: ☒ ☐	3. COC Present: ☒ ☐
2. Custody Seals Intact: ☒ ☐	4. Smpl Dates/Time OK ☒ ☐

Cooler Temperature

Y or N
1. Temp criteria achieved: ☒ ☐
2. Cooler temp verification: <u>Bar Therm</u>
3. Cooler media: <u>Ice (Bag)</u>
4. No. Coolers: <u>2</u>

Quality Control Preservation

Y or N	N/A
1. Trip Blank present / cooler: ☐ ☒ ☐	
2. Trip Blank listed on COC: ☐ ☒ ☐	
3. Samples preserved properly: ☒ ☐ ☐	
4. VOCs headspace free: ☒ ☐ ☐	

Sample Integrity - Documentation

Y or N
1. Sample labels present on bottles: ☒ ☐
2. Container labeling complete: ☒ ☐
3. Sample container label / COC agree: ☒ ☐

Sample Integrity - Condition

Y or N
1. Sample recvd within HT: ☒ ☐
2. All containers accounted for: ☒ ☐
3. Condition of sample: <u>Intact</u>

Sample Integrity - Instructions

Y or N	N/A
1. Analysis requested is clear: ☒ ☐	
2. Bottles received for unspecified tests: ☐ ☒	
3. Sufficient volume recvd for analysis: ☒ ☐	
4. Compositing instructions clear: ☐ ☐ ☒	
5. Filtering instructions clear: ☐ ☐ ☒	

Comments